

North Norfolk Landscape Character Assessment

15th October 2018



This presentation - aims

- Provide a brief introduction to landscape character assessment and why it is useful
- Our brief/need for the work
- How we approached the task in North Norfolk
- The classification and what the report contains
- How to use the information in the report

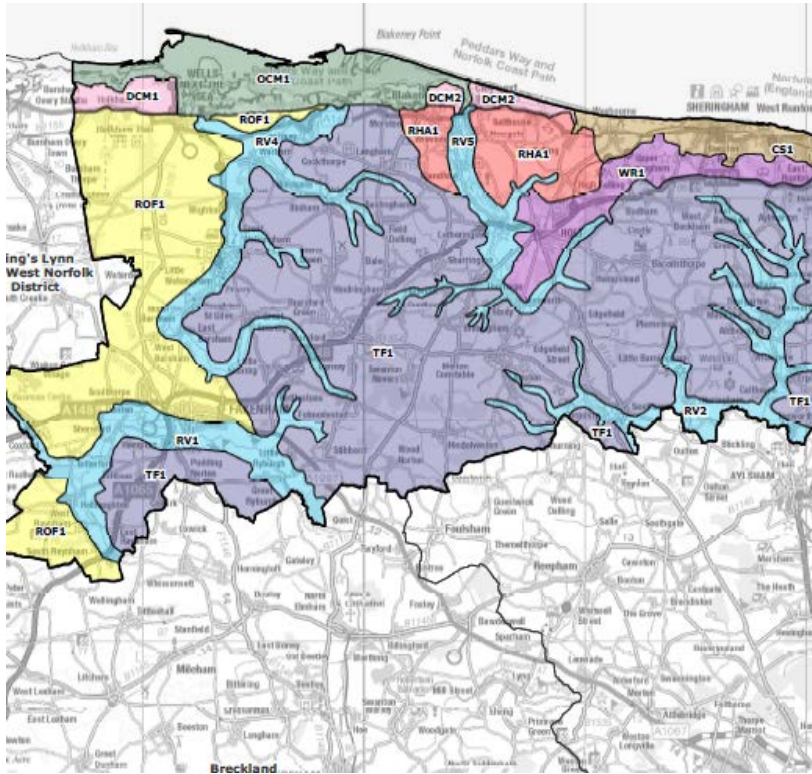
What is landscape character assessment?



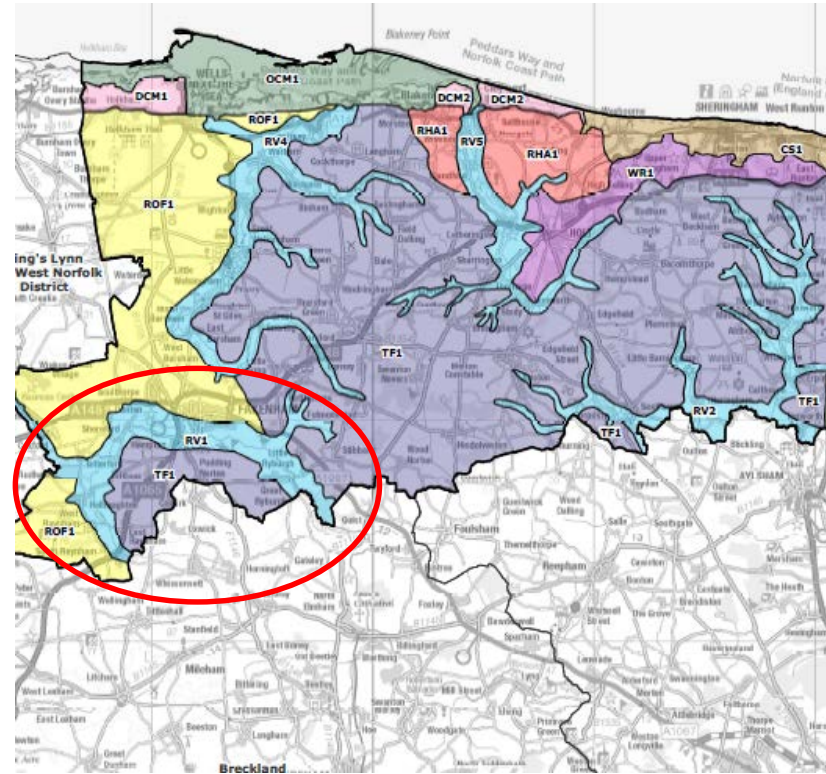
Landscape Character Assessment is the accepted process for understanding landscape.

Landscape Character is: the distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse

What is landscape character assessment?



Landscape Character Types = types of landscape that may occur in different areas, but wherever they occur they share broadly similar characteristics e.g. River Valleys



Landscape Character Areas = single unique areas which are discrete geographical areas of a particular type e.g. Wensum River Valley

Why undertake landscape character assessment?

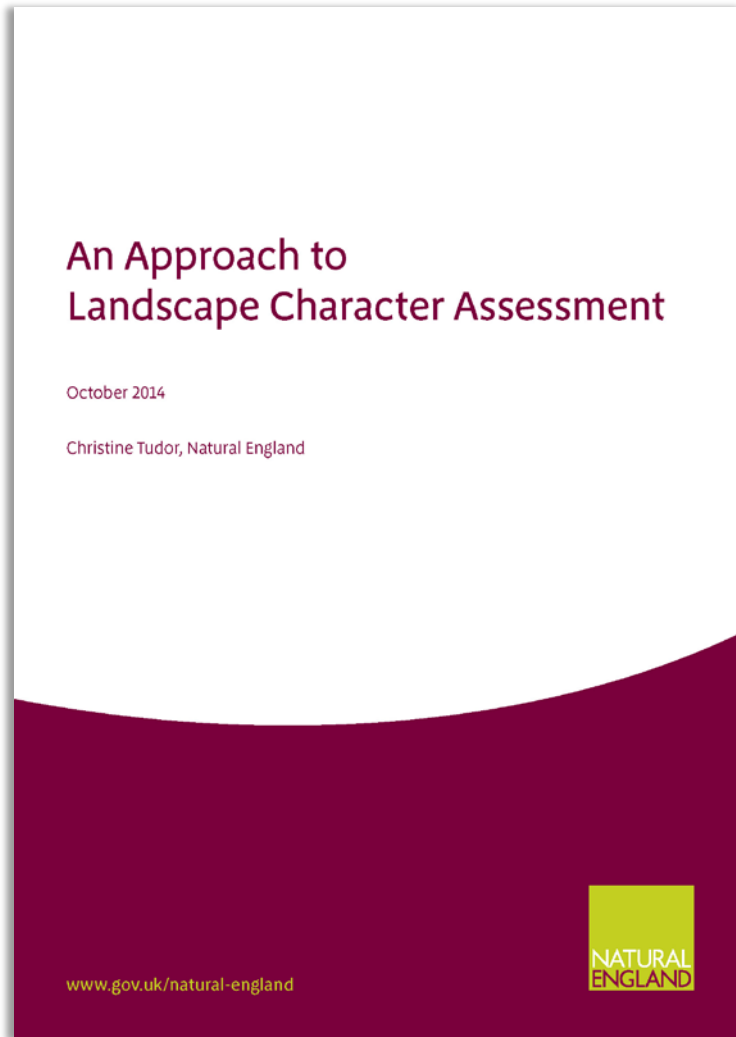


LCA is an established technique to:

- Analyse and describe the character and qualities of an area;
- Consider issues affecting that area; and;
- Develop recommendations for its future management.

LCA provides a spatial framework within which decisions can be made.

The Process of Landscape Character Assessment



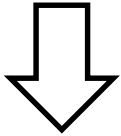
The process of landscape character assessment follows an accepted method.

- Maps
- Classifies
- Describes
- Assesses

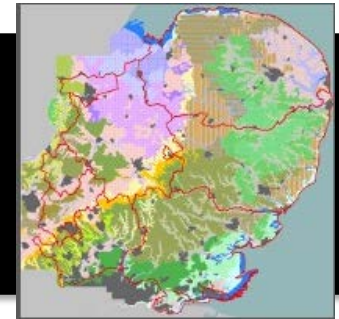
Landscape Character Assessment Guidance published by Natural England (2014)

Sits within an established framework

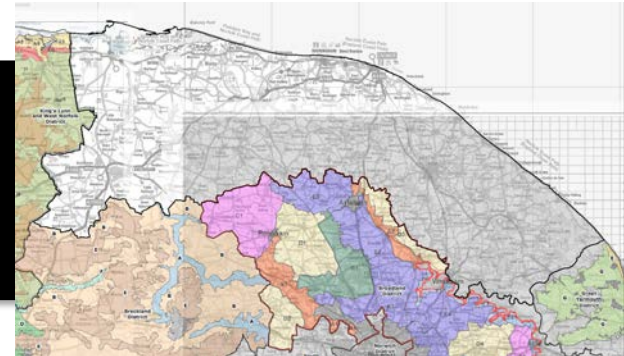
National level: National Character Areas



**Regional level:
East of England Landscape Typology**



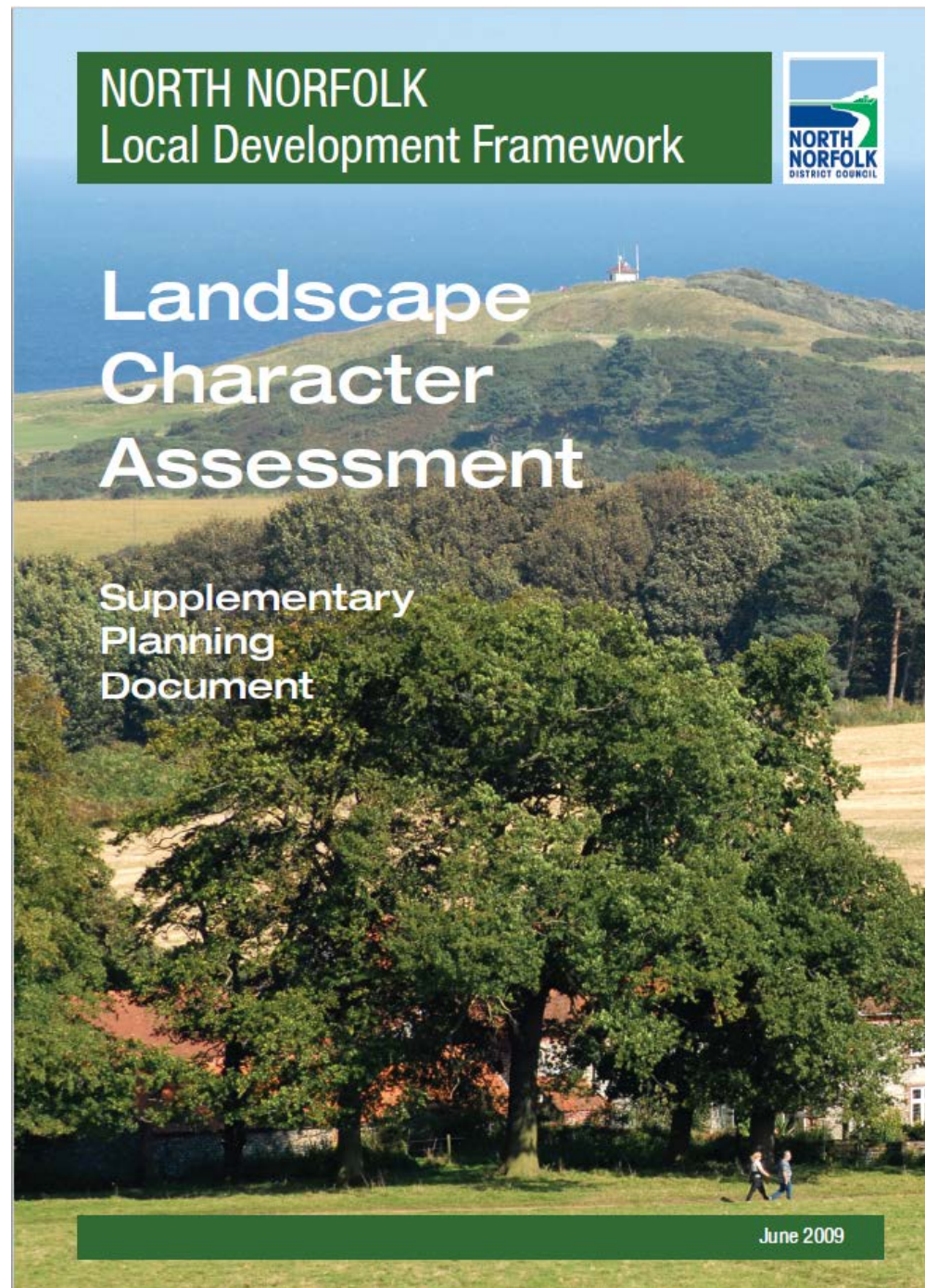
**Local level:
Neighbouring Authorities**



Uses of a landscape character assessment

- to inform work on policy development as part of emerging Development Plans;
- to guide development and land management that is sympathetic to local character and special qualities;
- to promote an understanding of how landscapes are changing and how they can be strengthened.

Our brief/need for
the work



Approach in North Norfolk

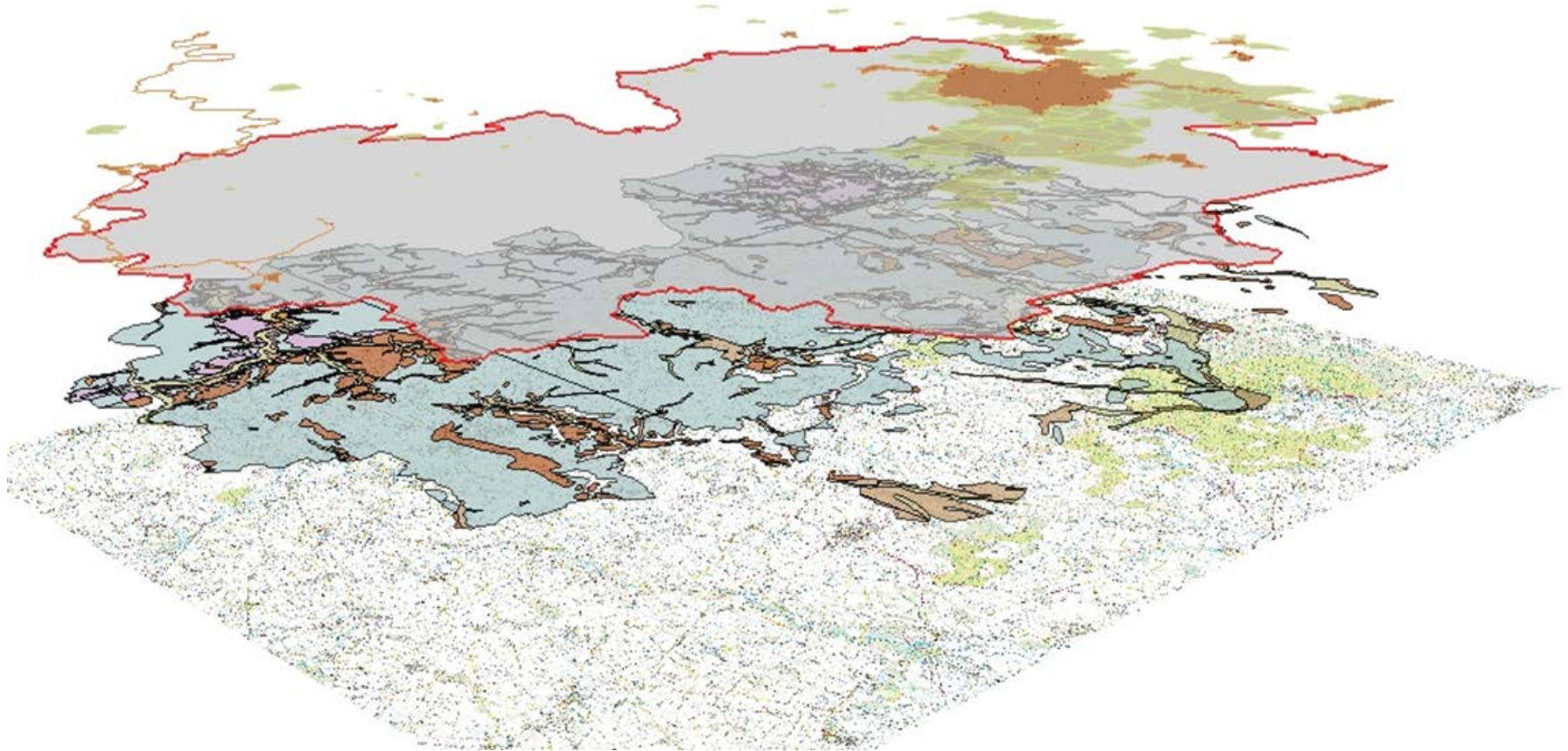


Key tasks were:

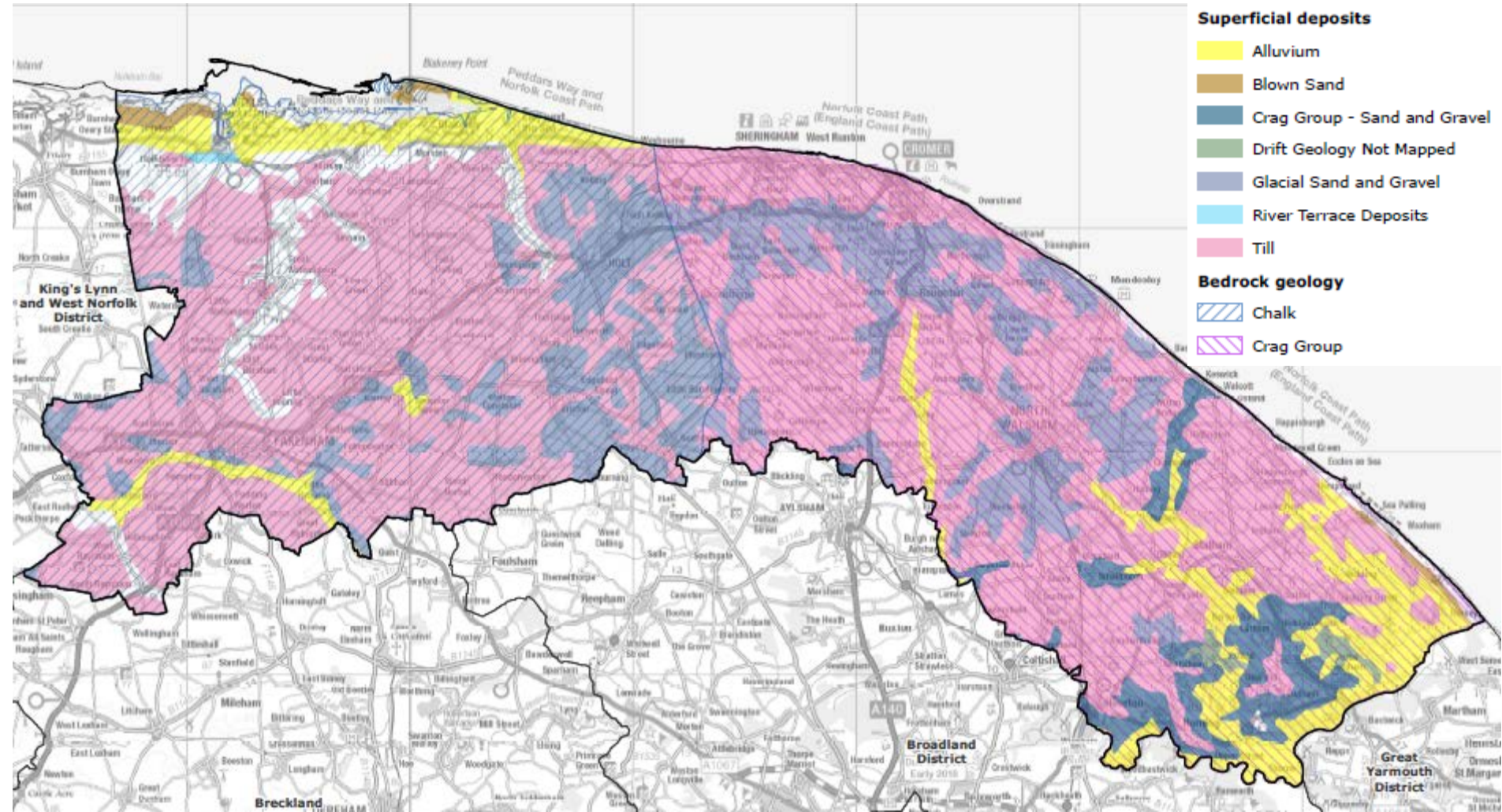
- ‘Sense check’ of the existing classification;
- Describe landscape character;
- Identify key sensitivities and valued attributes;
- Identify forces for change;
- Provide a landscape strategy and guidance.

Approach in North Norfolk

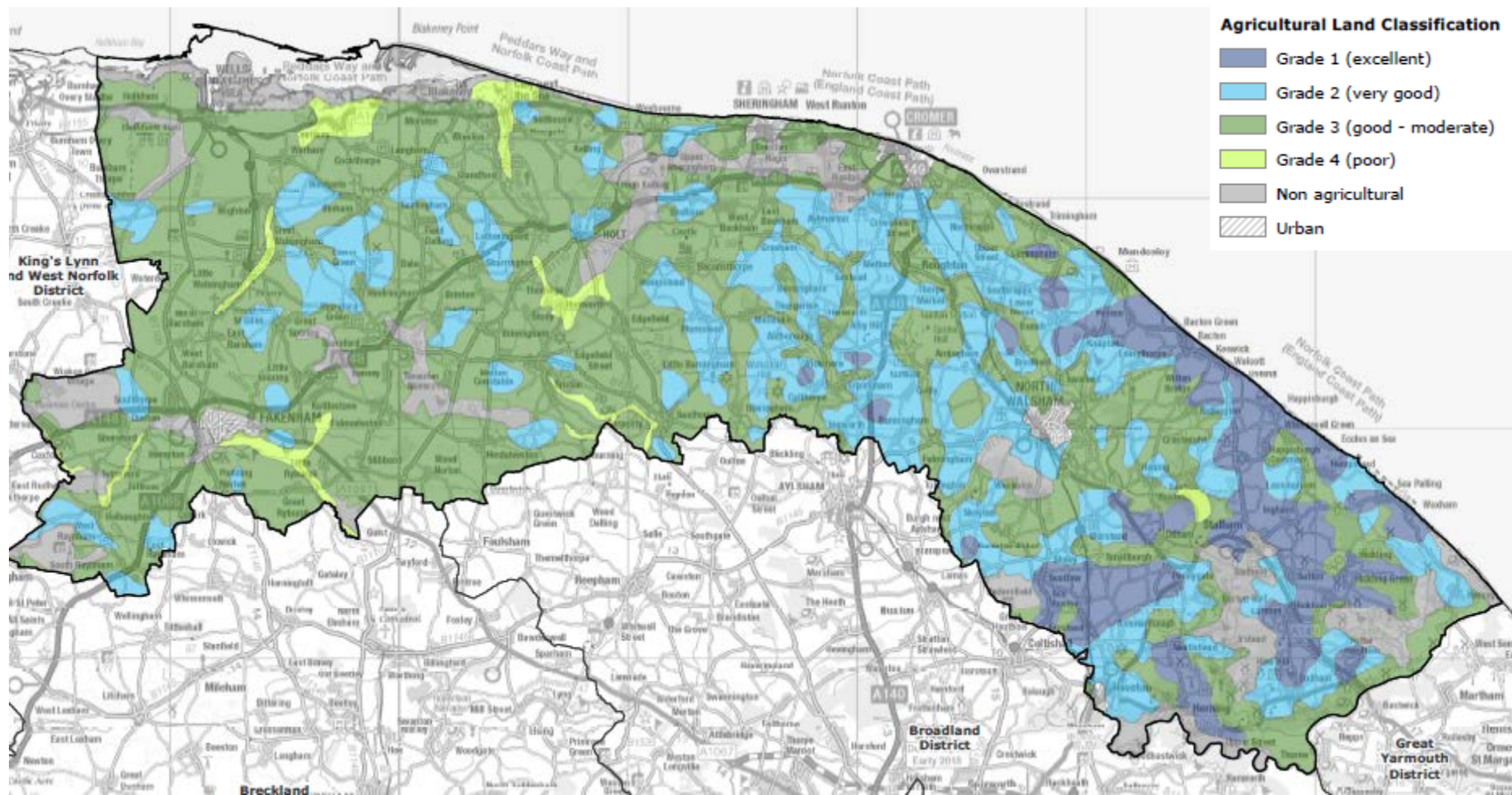
Use of GIS



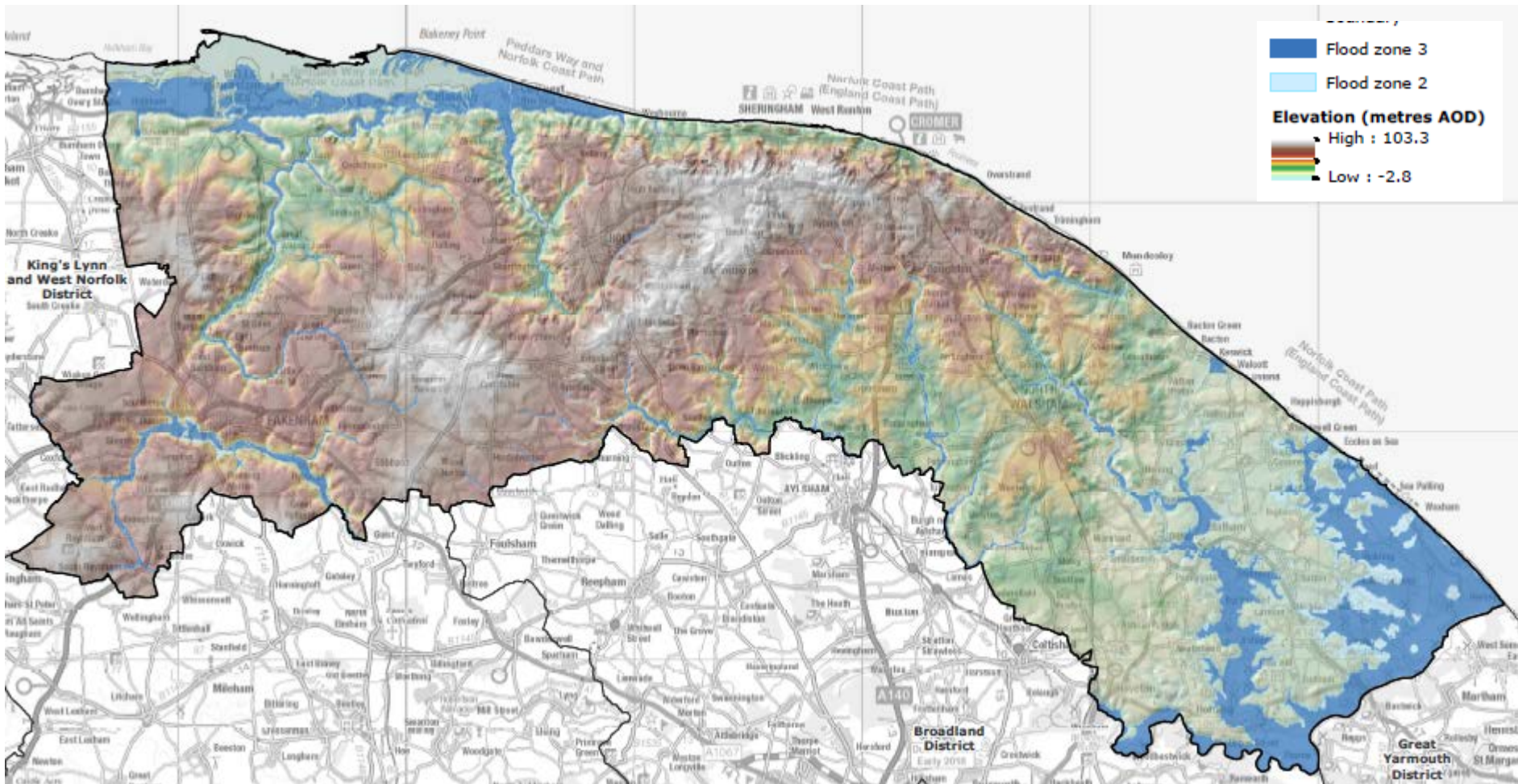
Desk study - geology



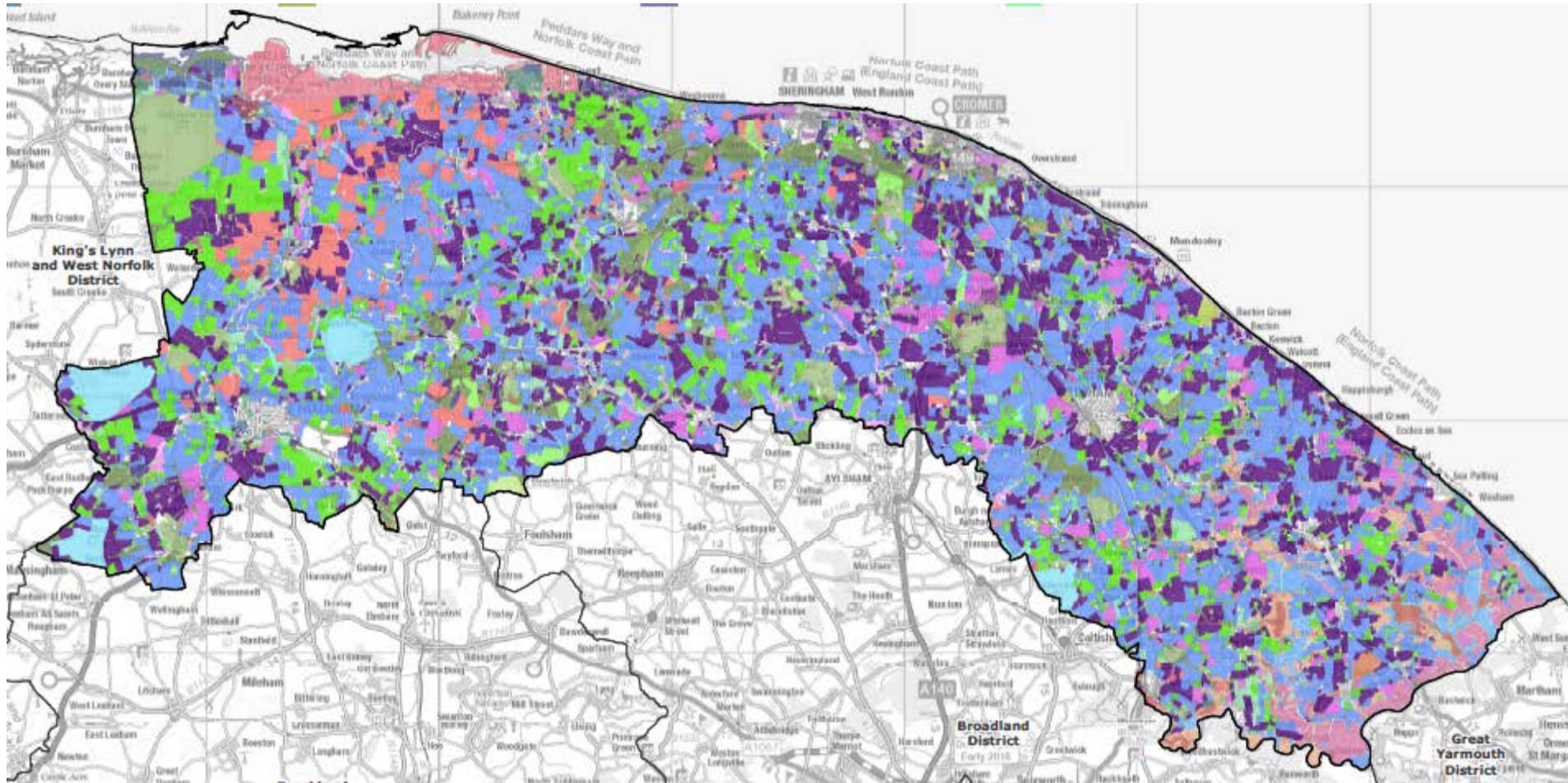
Desk study – agricultural land classification



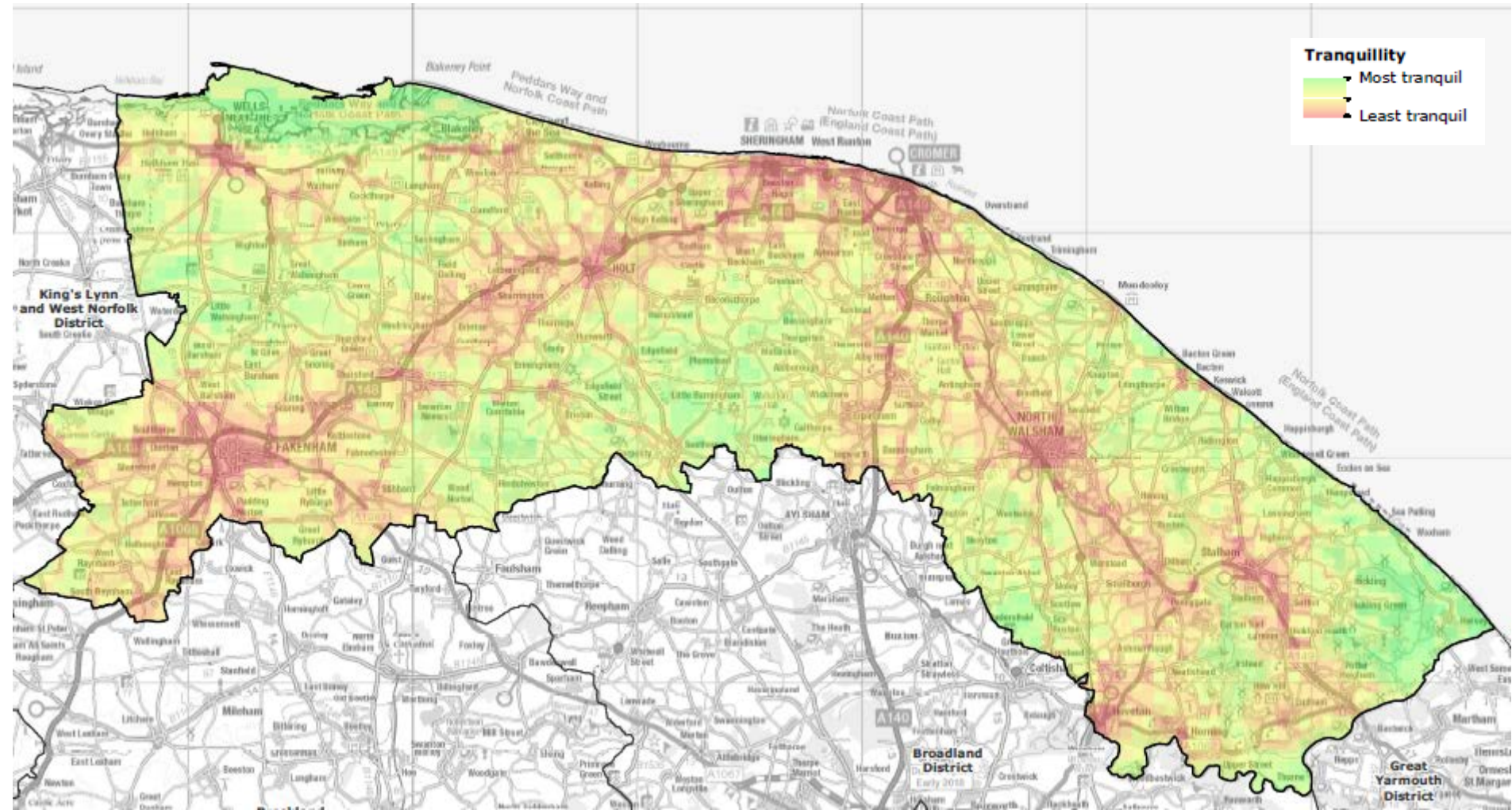
Desk study – topography & drainage



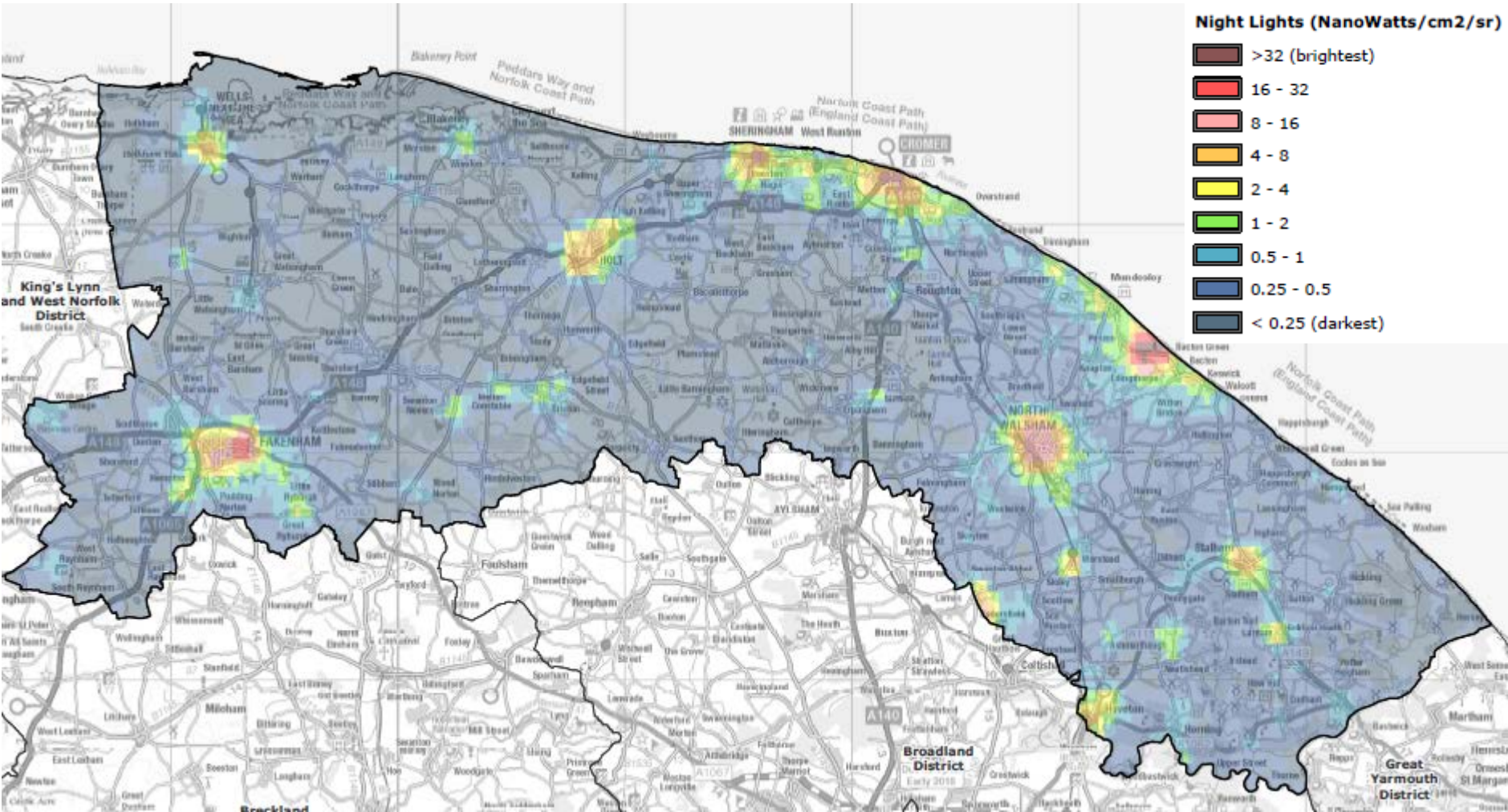
Desk study – historic landscape

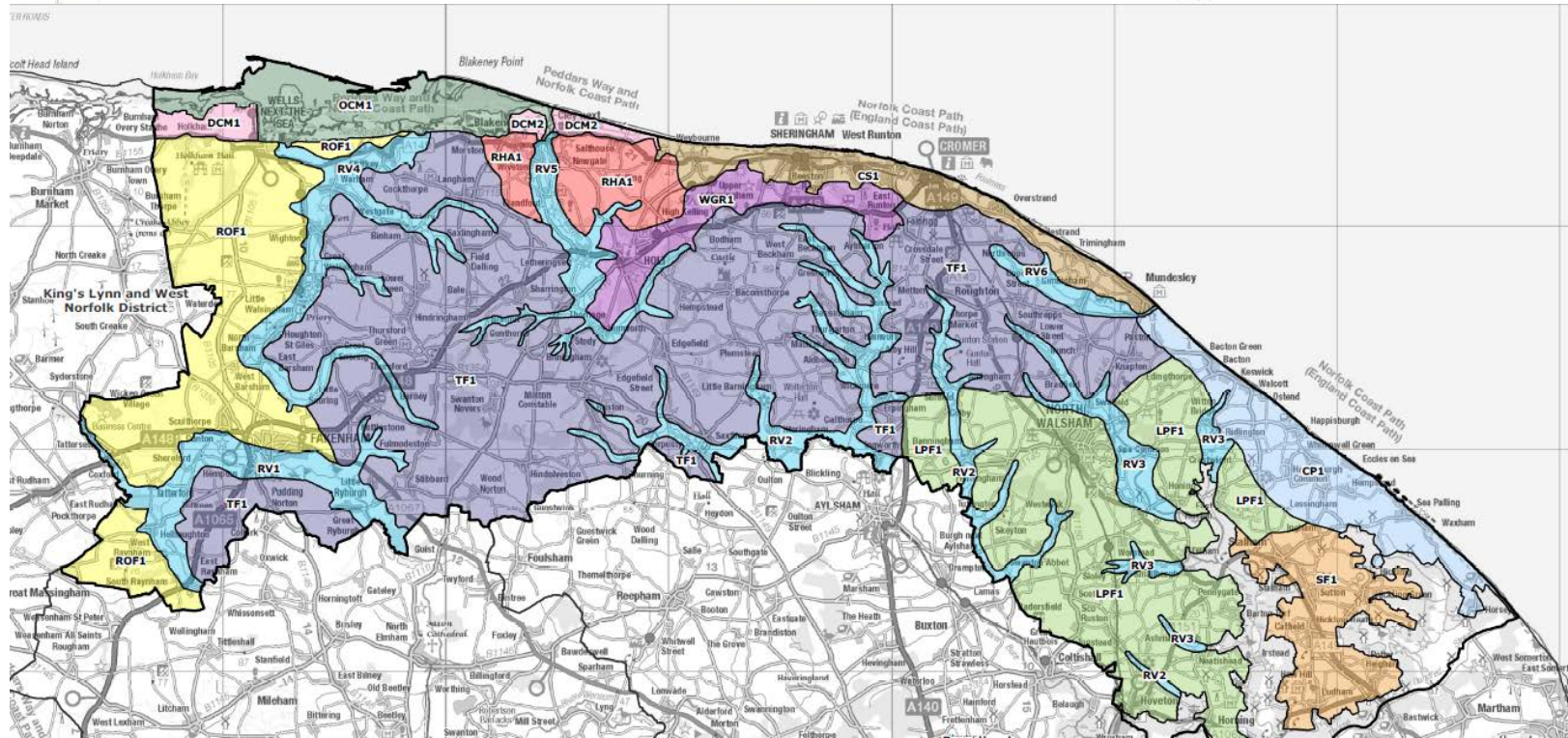
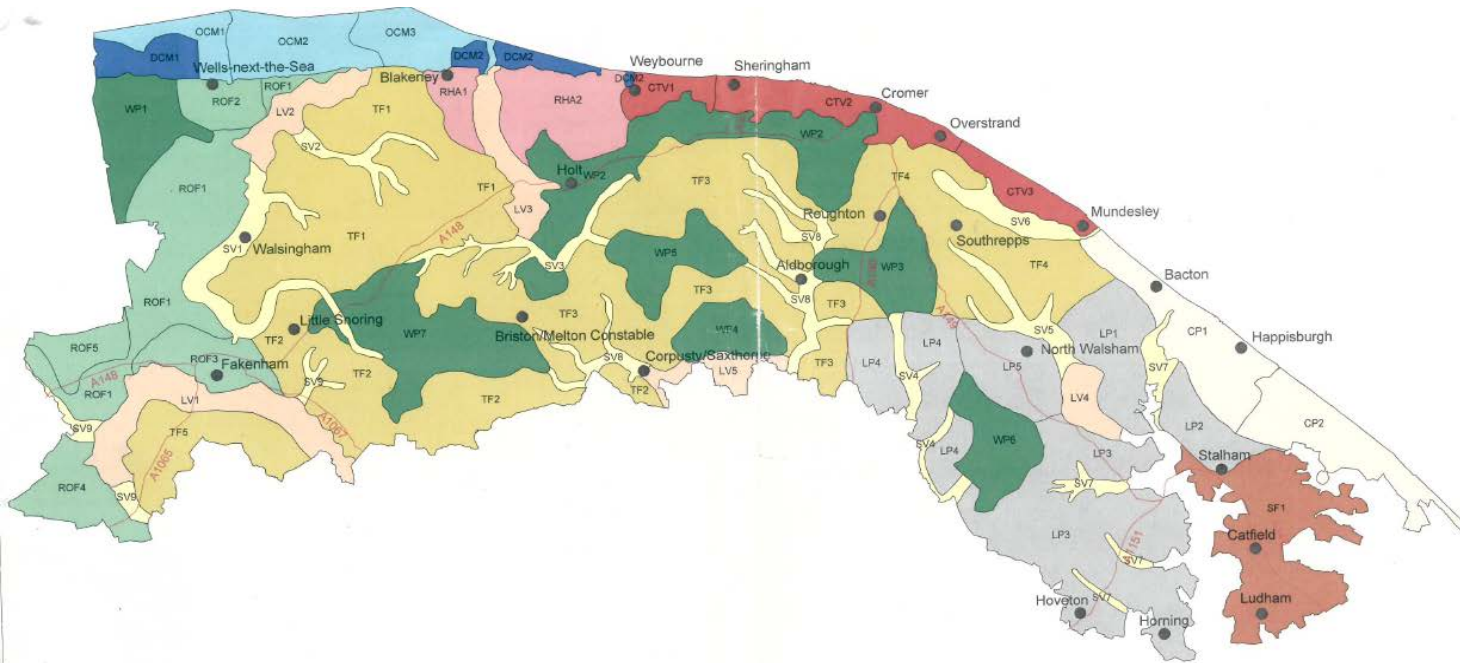


Desk study - tranquillity



Desk study – dark skies





Ref	Type	Area (s)
ROF	Rolling Open Farmland	ROF1 Holkham to Raynham
TF	Tributary Farmland	TF1 North Norfolk Tributary Farmland
LPF	Low Plains Farmland	LPF1 North Norfolk Low Plains Farmland
RV	River Valleys	RV1 River Wensum and tributaries
		RV2 River Bure and tributaries
		RV3 River Ant and tributaries
		RV4 River Stiffkey and tributaries
		RV5 River Glaven and tributaries
		RV6 Mundesley Beck
SF	Settled Farmland	SF1 Stalham, Ludham and Potter Heigham
CP	Coastal Plain	CP1 Bacton to Waxham
CS	Coastal Shelf	CS1 Weybourne to Mundesley
WGR	Wooded Glacial Ridge	WGR1 Wooded Glacial Cromer Ridge
RHA	Rolling Heath and Arable	RHA1 Blakeney, Salthouse & Kelling
DCM	Drained Coastal Marshes	DCM1 Holkham Drained Marshes
		DCM2 Blakeney, Wiveton, Cley and Salthouse Drained Marshes
OCM	Open Coastal Marshes	OCM1 Wells to Morston Marshes

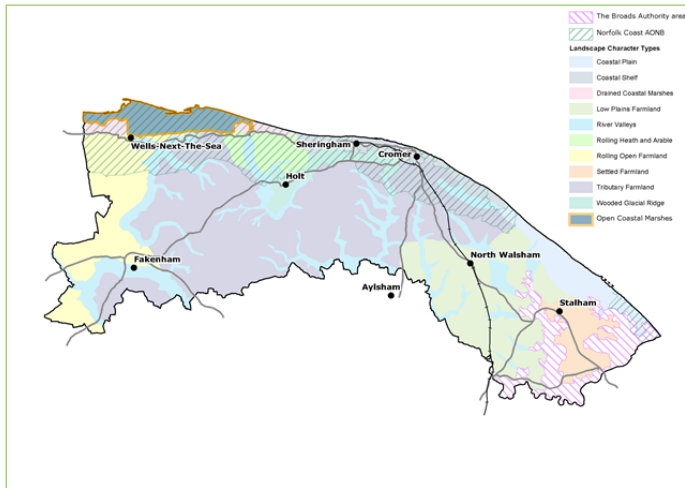
The report and how to use the information



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ROF: Rolling Open Farmland	tbc
TF: Tributary Farmland	tbc
LPF: Low Plains Farmland	tbc
RV: River Valleys	tbc
SF: Settled Farmland	tbc
CP: Coastal Plain	tbc
GR: Glacial Ridge	tbc
DCM: Drained Coastal Marshes	tbc
OCM: Open Coastal Marshes	tbc
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The report and how to use the information

Open Coastal Marshes (OCM)



Open Coastal Marshes (OCM)

SUMMARY

The Open Coastal Marshes Type is characterised by an open, low-lying and naturally dynamic coastal barrier beach system with one of the largest single areas of undrained saltmarsh in Europe. Extensive areas of saltmarsh, with characteristic creek patterns, have formed behind a protective barrier of sand and shingle bars, which in some areas have led to the formation of significant areas of dune habitat. The marine and coastal habitats form a complex mosaic of shallow seas, intertidal sand and mud flats, coastal vegetated shingle, saline lagoons, salt marsh and creeks, largely devoid of any settlement and dominated by natural dynamic processes. All of this landscape carries the highest designations in relation to its landscape and ecological value.

The mean low water mark, or the channel entrances at Wells and Blakeney, delineates the northern boundary beyond which is the open sea. At its western end, the Open Coastal Marsh meets Drained Coastal Marsh at Wells-next-the-Sea, the boundary clearly marked by The Bank (Beach Road). At its eastern end, the Open Coastal Marshes meet more Drained Coastal Marshes at Blakeney. The southern (inland) boundary of the Type is defined by rising land associated with the Rolling Open Farmland and Tributary Farmland Types, and a series of intermittent sea defences (lengthy earth embankments and the hard quayside defences at Wells Quay, Blakeney and Cley).

Component Areas

There is one area of Open Coastal Marsh in North Norfolk, in the north-west of the District:

OCM1 - Wells to Morston Marshes



Holkham bay and beach with coastal pine woods in the background

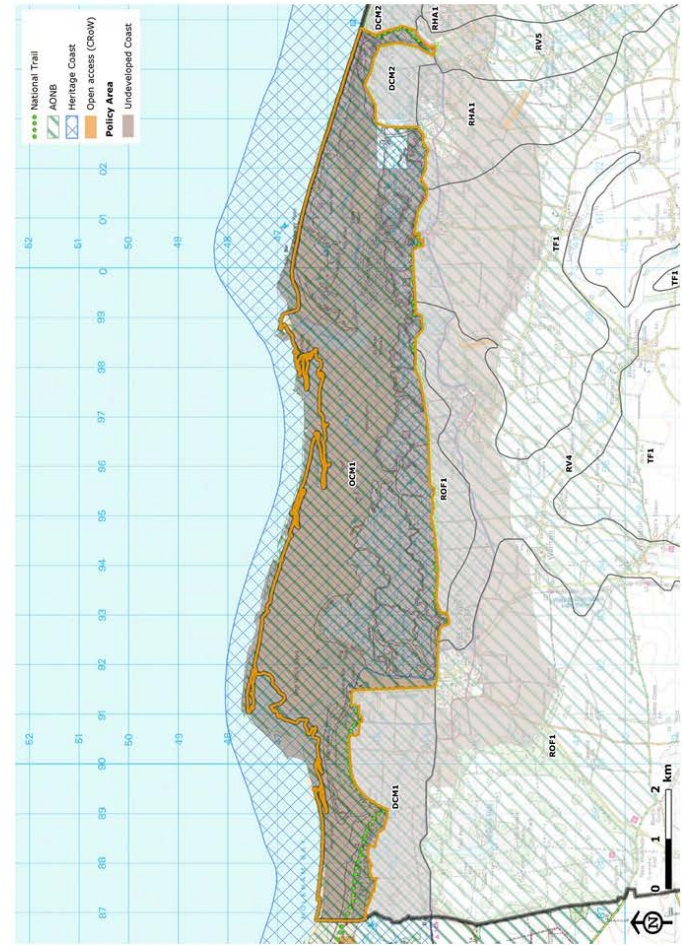
The report and how to use the information

Open Coastal Marshes (OCM)



Location of OCM1

Open Coastal Marshes (OCM)



Landscape designations and policy area – OCM1

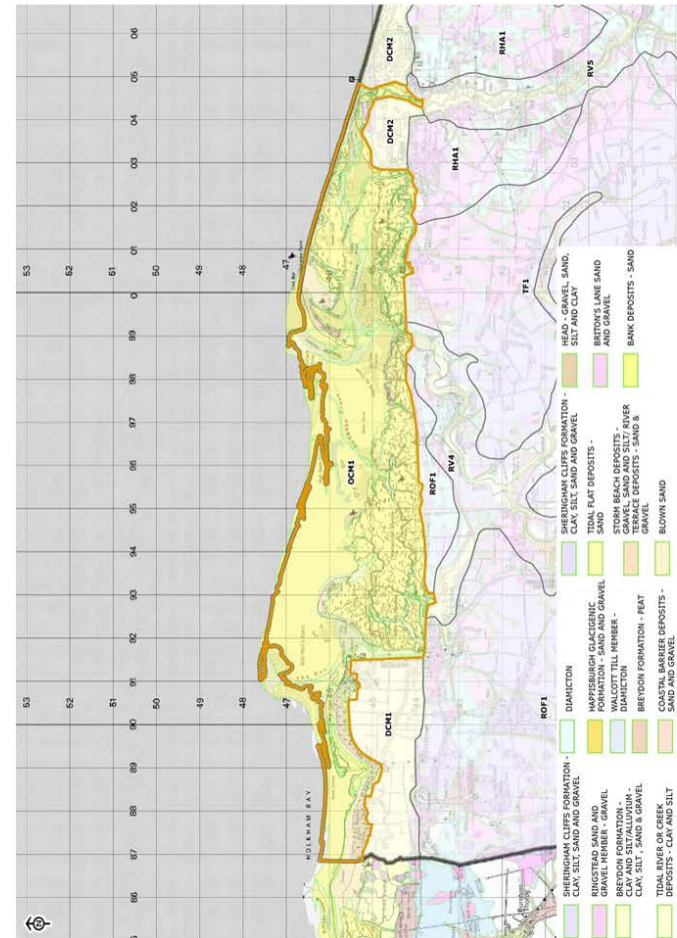
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Open Coastal Marshes (OCM)



Topography and hydrology – OCM1

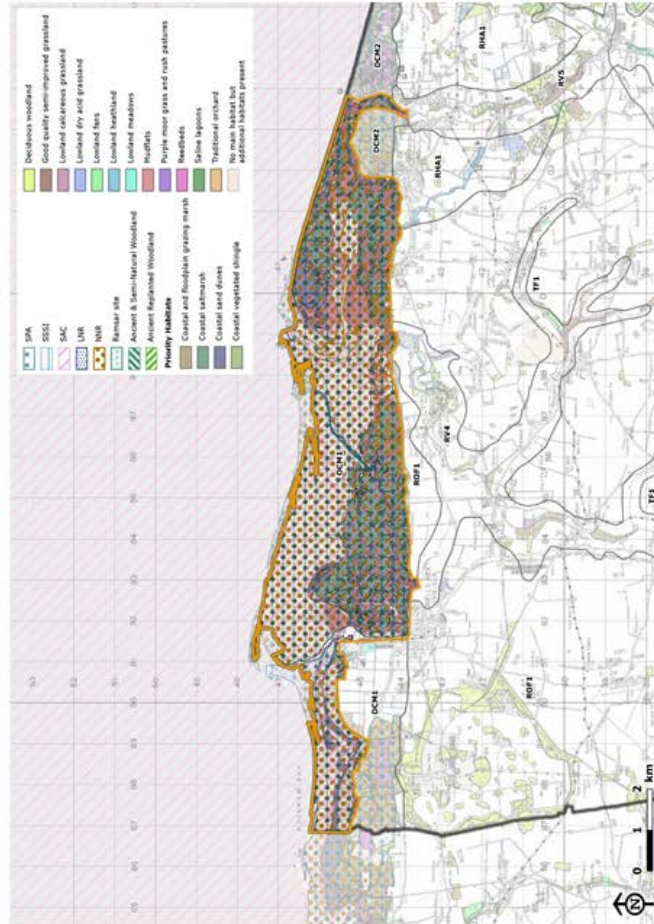
Open Coastal Marshes (OCM)



Superficial geology – OCM1

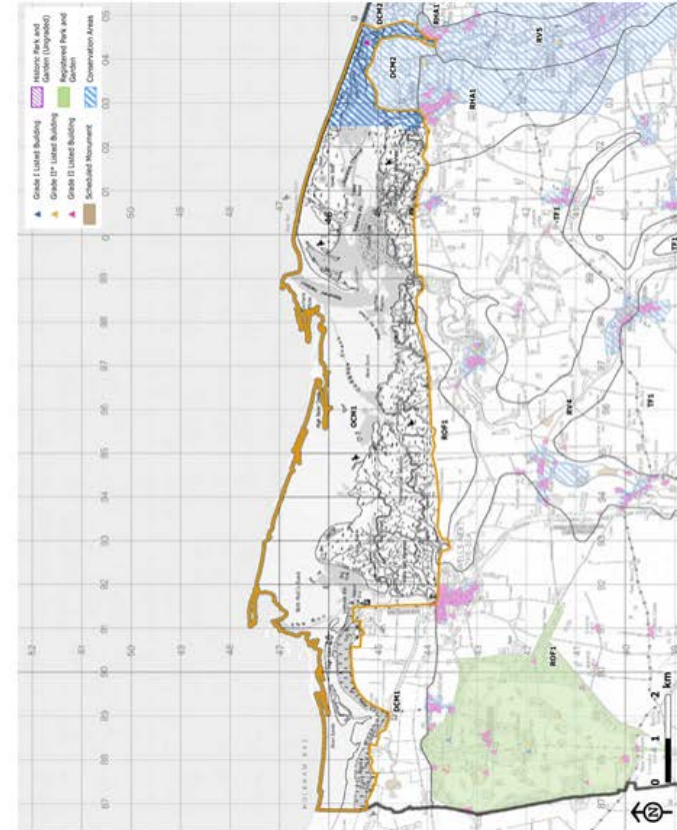
The report and how to use the information

Open Coastal Marshes (OCM)



Nature conservation designations and priority habitats

Open Coastal Marshes (OCM)



Cultural heritage designations

The report and how to use the information

Open Coastal Marshes (OCM)

KEY CHARACTERISTICS

1) Flat, open landscape of saltmarshes, creeks, sand bars and mudflats

The low lying coast is one of the few examples of a barrier system in Europe. The whole is a valuable complex of saltmarshes generally developing behind sand dunes and shingle structures, together with extensive areas of intertidal sand and mudflats. Some sandbars have formed sand dune complexes (in one instance with Corsican Pines).

The topography is generally very flat except for small rises where dunes have formed on the seaward side of the marsh (rising no more than 7m). The creeks within the marsh are a significant element throughout the Type, and vary greatly in width from less than 1m to over 60m. The large sandy lagoon at Blakeney (3 miles long) is a major feature of the Type.

2) A constantly changing natural landscape

The whole dynamic of the marsh, creeks and dunes is constantly changing, both with the tides and through growth / shrinkage over longer timescales. The salt marshes are relatively stable with gradually changing communities of plants in some places. The mud flats and sandbanks are liable to change location, species content and extent more readily. The middle and upper levels of Holkham's saltmarshes are home to Sea Aster and Sea Lavender which form a misty-blue haze when in flower.

3) Holkham Meals sand dune system and pine woods

The sand dune systems contain a great diversity of plant species and important transitions from pioneer to mature. The 'Holkham Meals' have distinctive Corsican and Black pines and are valued for their distinctive skyline and unusual ecological system (part of the NNR).

4) Little human interference and absence of settlement

Some human intervention has altered the line of creeks (Blakeney Cut, Wells-next-the-Sea Harbour, Stiffkey Harbour and several other similar re-directions), but natural forces have created the majority of the landscape and the area remains a natural landscape. Settlement is largely absent, except for a few individual buildings (e.g. Morston look out, Blakeney Point former RNLI station and Wells RNLI station, beach huts and hides). At Wells, an outer harbour has been developed that now hosts maintenance vessels that service the offshore wind farms. The maintenance boats and dredging vessel is now a prominent detracting feature.

5) Great nature conservation interest and a haven for breeding birds

The area contains many priority habitats including mud flats, coastal salt marsh, coastal sand dunes, coastal vegetated shingle and reedbeds. The muddy creeks, flooded daily by the tide, are a perfect place for breeding birds and the marshes are of international importance, reflected through the many designations (part of the Wash and North Norfolk Coast European Marine Site, a Special Protection Area (SPA), Special Area of Conservation (SAC), SSSI, National Nature Reserve and Ramsar site).

6) Boats are a feature, their masts prominent in the flat landscape

Moored boats are within the creeks (at Wells-next-the-Sea, Stiffkey, Morston and Blakeney) and within the large lagoon at Blakeney. Different sizes of boat tend to inhabit comparably sized creeks. Most of the boating activity now comprises leisure use with dinghies and small craft, although at Wells-next-the-Sea and Blakeney, larger yachts are present. There are boat parks at Blakeney and Morston and smaller more ad hoc boat parks at Stiffkey Freshes and at Stiffkey marsh

7) Absence of roads but many footpaths and trackways

Footpaths and trackways provide access to the harbours / creeks and bird hides. A footpath follows the southern edge of the Type to form a continuous long distance path (Peddars Way and Norfolk Coast Path National Trail). There are two large car parks associated with the villages of Morston and Blakeney on the boundary of the Type, which are very prominent, especially in the

Open Coastal Marshes (OCM)

summer when many cars are present and due to window glare.

8) Long, uninterrupted views

Long views across the open marshes to rising dune lands on the seaward side of the Type and to rising land in inland areas to the south. There is an open and expansive skyline in which boat masts are a characteristic feature.



Sunset at Freshers Creek, Stiffkey

VALUED FEATURES AND QUALITIES

1) Natural character and nature conservation value

Extensive natural and semi-natural habitats including coastal saltmarsh, coastal sand dunes and mud flats are relatively rare and provide internationally important biodiversity and geodiversity, reflected in the high number of statutory designations. The natural character provides a contrast to the intensely managed farmland which occupies the inland areas.

2) Relative absence of human settlement and intervention

The general absence of settlement and human intervention provides a strong sense of remoteness, tranquillity and wildness (and dark skies at night).

3) The sense of openness, large skies, and quality of coastal light

These characteristics provide a sense of space and long views.

4) Recreational value

The beaches, footpaths, bird hides and boat moorings provide significant recreational value and enable managed enjoyment of the landscape by visitors.

The report and how to use the information

Open Coastal Marshes (OCM)

Many of the Valued Features and Qualities of the Open Coastal Marshes are considered to contribute positively to Key Qualities of Natural Beauty of the Norfolk Coast AONB, as set out within the current AONB Management Plan. These Key Qualities include:

- Dynamic character and geomorphology of the coast
- Strong and distinctive links between land and sea
- Exceptionally important, varied and distinctive biodiversity, based on locally distinctive habitats
- Sense of remoteness, tranquillity and wildness.



The Open Coastal Marsh has a strong natural character, sense of remoteness and tranquillity



FORCES FOR CHANGE / DETRACTORS

1) Recreational pressure from boating activities including organised boat trips

Increases in boating activity over the years has created significant numbers of moorings for yachts and other craft at Blakeney ('The Cut' near the Village and 'The Pit' near Blakeney Point) and at Wells-next-the-Sea and Morston.

The development of boat trips (to Blakeney Point and the seal grounds) has encouraged large numbers of cars to Morston. The parking of cars on the hard is highly visible from this Type. These effects can detract from the wild/ natural character of the Type.

2) Changes in neighbouring areas inland affecting views

The open character of this area means that any changes on the rising land to the south can affect views and the character of the open coastal marshes. Development in adjacent areas has the potential to increase light pollution. This limits the capacity for new development in land adjacent to this Type.

Open Coastal Marshes (OCM)

3) Changes in water management / sea levels

The imposition of different water management processes (natural or man-made) can affect vegetation height / colour / texture. Sea level change could also affect this finely balanced ecosystem.

4) Recreation-related development

Features such as hides, lighting, small car parks, golf courses, camping and glamping facilities and other human related interventions can have an adverse impact on the 'wild' and natural character of the landscape, as can large numbers of people in the landscape which can cause erosion of habitats and disturbance to species.

5) Climate change

Climate change could affect the delicate ecosystem of the marshes by through sea-level rise resulting in 'coastal squeeze' and loss of the marshes. Marshes may accrete vertically over longer time periods, but be vulnerable with rapid rises.

6) Renewable energy development

Sheringham Shoal wind farm and other new off shore wind farms (e.g. Dudgeon) are visible from this remote landscape and have the potential to affect its perception of remoteness and/or create a 'limit' to the skyline and horizon.

7) Coastal change

Coastal change is likely to comprise a continuing increase in sediment along the coast, with the barrier beach at Blakeney Spit moving towards the west by up to 3.5m a year, and a general movement of beaches towards the land during storms, including dunes at Blakeney Point. Other areas such as Holkham fore-dunes have grown in recent years. The rollback of barriers is causing a gradual overall loss of saltmarsh area, although this has been offset by the development of some new saltmarsh behind newly-formed barriers.

LANDSCAPE VISION

The vision for this landscape type is a naturally dynamic landscape comprising a mosaic of salt-marsh, mud and sandflats, shingle and dunes, which is shaped by the tides where natural forces predominate. An area which prioritises the conservation and enhancement of the highly valued coastal ecosystem and its wilderness qualities, including dark skies at night and scenic unspoilt views, and with sensitively managed recreational access.

LANDSCAPE GUIDELINES

1) Conserve the natural character and nature conservation value

Conserve the intertidal mudflats and saltmarshes as important winter-feeding areas for waders and wildfowl, protect the dune systems along the coast as habitats for a rich diversity of flora, protect, restore degraded areas of coastal vegetated shingle beaches and maximise the nature conservation value of saltmarsh vegetation on The Wash through re-introduction of grazing where appropriate and where there is an historical tradition of grazing. Retain small transitional areas of heathland and grassland where these buffer agricultural land at the edge of the marsh.

2) Protect and enhance the wild and remote character

Avoid built structures generally, but where small structures (such as hides) are considered essential, ensure that they are designed to exceptionally high standards using natural materials and avoid invasive lighting so that they do not detract from the inherent 'wild' character of the landscape.

The report and how to use the information

Open Coastal Marshes (OCM)

Consider the location and design of built development in adjacent inland landscape types (including consideration of lighting at night), ensuring that development does not detract from the sense of naturalness and remoteness in the Open Coastal Marshes.

Consider opportunities to address existing light pollution by means of replacement downlighting or complete removal of lighting where possible both in and close to the marshes.

3) Maintain the sense of openness, large skies, and quality of coastal light

Conserve open views across the sea, marshes and adjacent coastal slopes. Provide opportunities for visitors to stop and appreciate these views. Avoid introduction of vertical elements which would interrupt the skyline and distract from open views.

4) Manage recreational access sensitively, prioritising nature conservation

Develop coordinated management of recreation throughout the Open Coastal Marshes to protect sensitive habitats and species. Consider careful screening or restricting / relocating car parking from the foreshore whilst ensuring that recreational access to the landscape at suitable locations (existing footpaths / trails) is maintained and enhanced. Any facilities which seek to accommodate the needs of visitors to the area and recreational activities should be designed to manage and ideally limit the impacts of recreational visitor pressure on the sensitive features of this landscape.

5) Prepare for climate change

Enable the natural coastal processes to continually develop coastal habitats as long as this does not conflict with the Shoreline Management Plan.



The Open Coastal Marsh beyond Wells-next-the-Sea harbour



North Norfolk Landscape Sensitivity Assessment

with particular reference to renewable energy
and low carbon development

15th October 2018

This presentation - aims

- Provide a brief introduction to landscape sensitivity assessment and why it is useful
- Our brief/ need for the work
- How we approached the sensitivity assessment
- Results – in maps
- The content of the report
- How to use the information in the report – getting the right development in the right place

What is landscape sensitivity assessment?

The image shows the cover of a report. At the top left is the logo for Scottish Natural Heritage, and at the top right is the logo for The Countryside Agency. The central part of the cover features a map of a rural landscape with a river and various fields. Overlaid on the map is the title 'Landscape Character Assessment' in large blue letters, with 'Guidance for England and Scotland' in smaller blue letters below it. A large blue banner at the bottom of the map area contains the text 'TOPIC PAPER 6: Techniques and Criteria for Judging Capacity and Sensitivity' in white. Below the banner, on a white background, is a paragraph of text in blue: 'An exploration of current thinking about landscape sensitivity and landscape capacity, to stimulate debate and encourage the development of common approaches.'

SCOTTISH NATURAL HERITAGE

The Countryside Agency

Landscape Character Assessment
Guidance for England and Scotland

**TOPIC PAPER 6:
Techniques and Criteria
for Judging Capacity and Sensitivity**

An exploration of current thinking about landscape sensitivity and landscape capacity, to stimulate debate and encourage the development of common approaches.

What is landscape sensitivity assessment?

'Judging landscape character sensitivity requires professional judgement about the degree to which the landscape in question is robust, in that it is able to accommodate change without adverse impacts on character. This involves making decisions about whether or not significant characteristic elements of the landscape will be liable to loss... and whether important aesthetic aspects of character will be liable to change'.

Paragraph 4.2 of Topic Paper 6

Need for the work

NPPF 2018:

151. To help increase the use and supply of renewable and low carbon energy and heat, plans should:
 - a) provide a positive strategy for energy from these sources, that maximises the potential for suitable development, while ensuring that adverse impacts are addressed satisfactorily (including cumulative landscape and visual impacts);
 - b) consider identifying suitable areas for renewable and low carbon energy sources, and supporting infrastructure, where this would help secure their development; and

Our approach in North Norfolk

**Aim:**

To maximise renewable energy generation and achieve the greatest contribution towards our energy needs, while ensuring landscape character and values are respected.

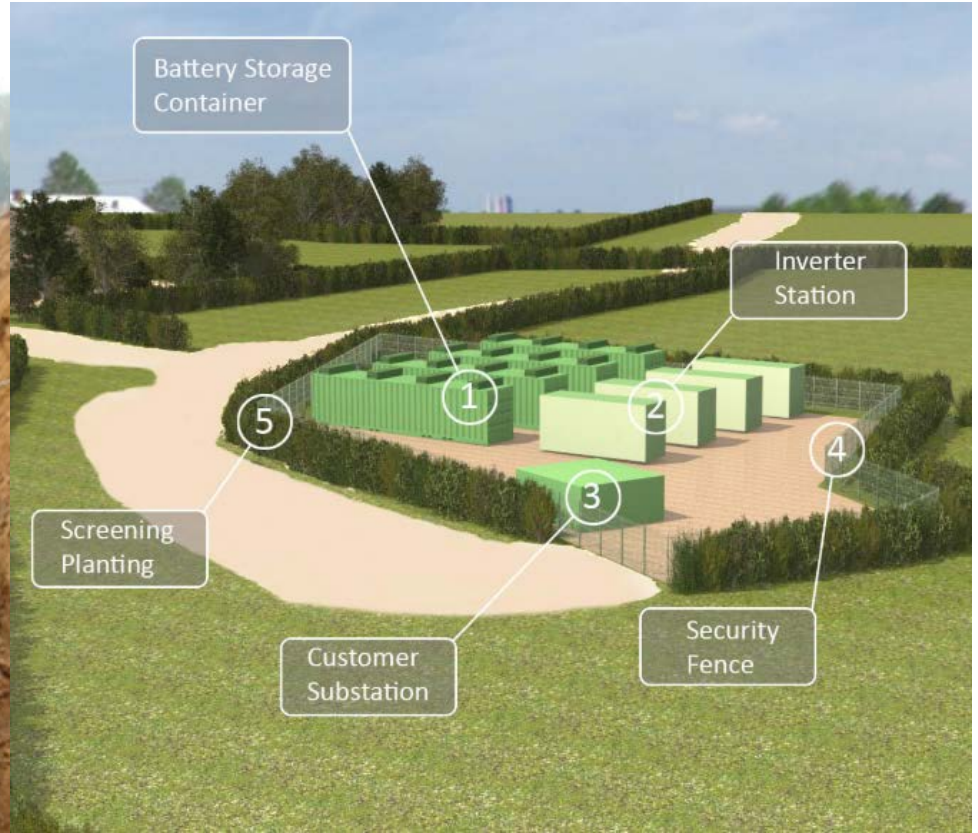
Our approach in North Norfolk

Types of development assessed



Our approach in North Norfolk

Types of development assessed



Our approach in North Norfolk

Types of development assessed



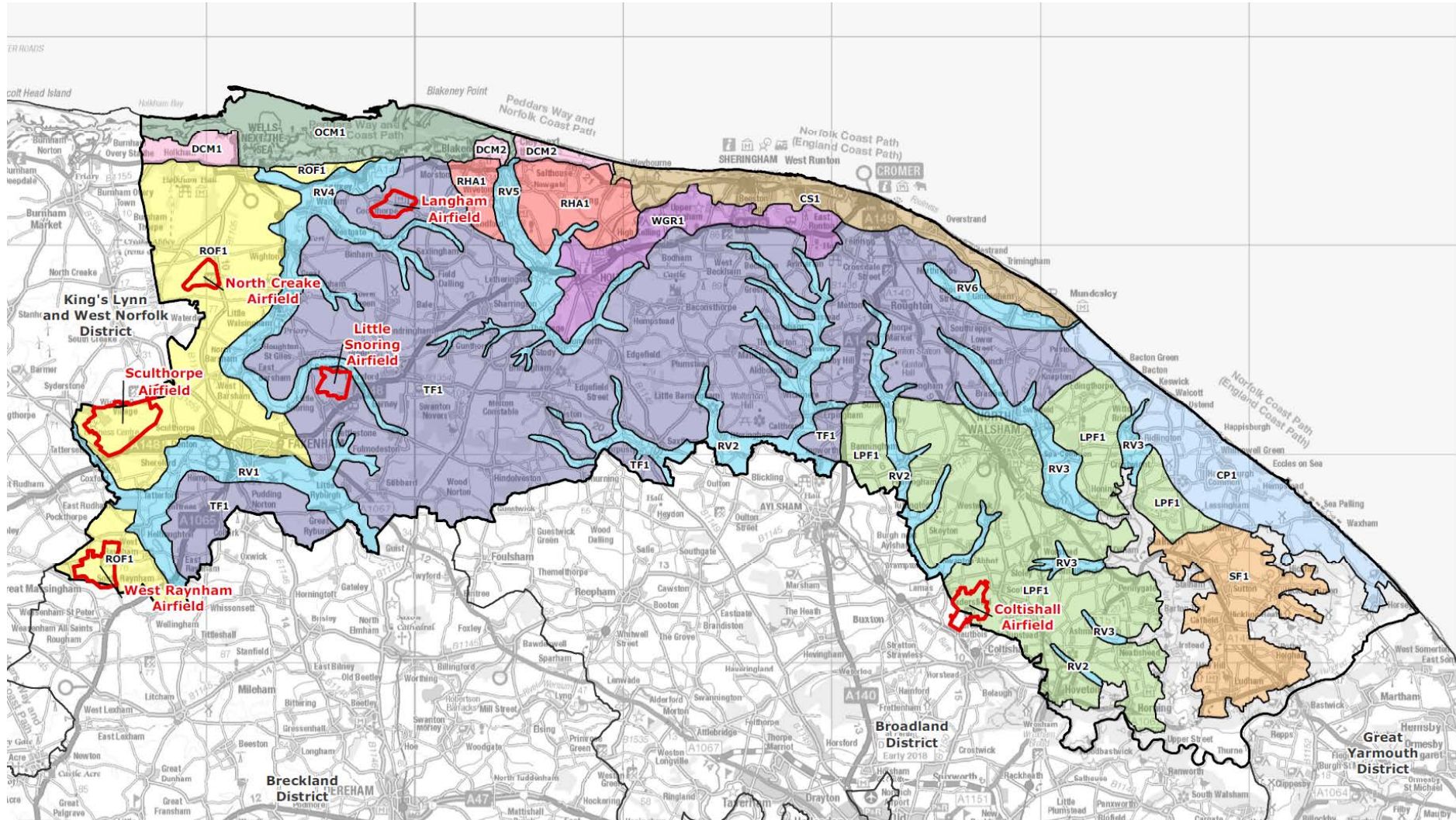
Our approach in North Norfolk

Types of development assessed

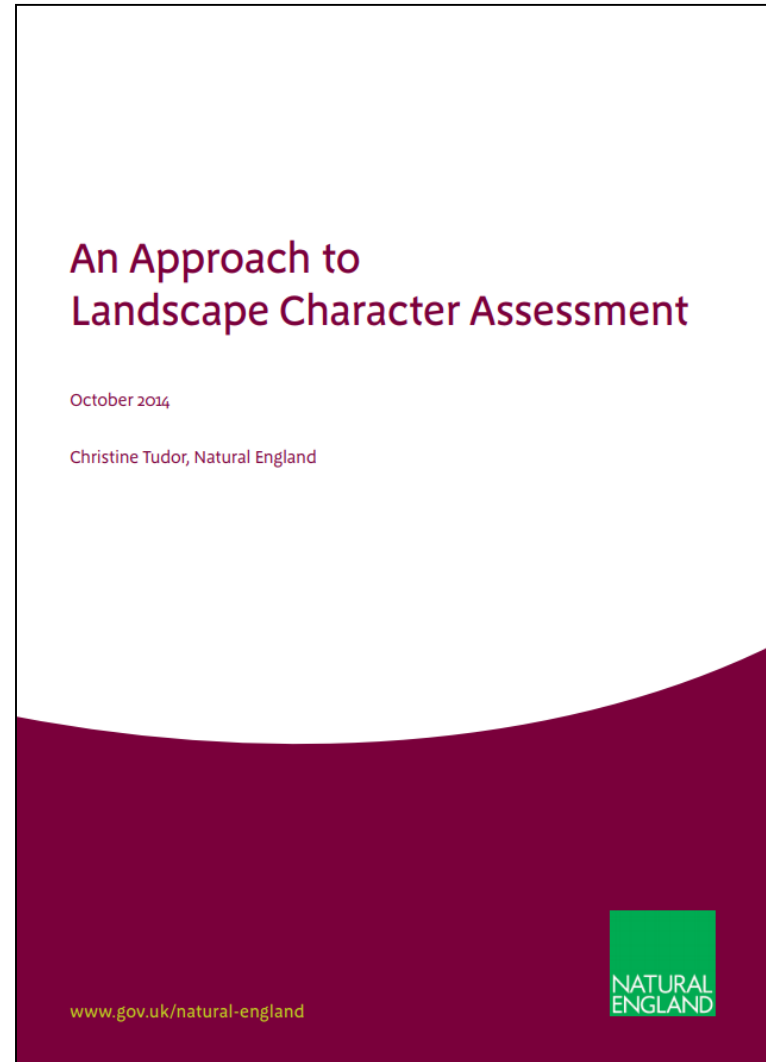
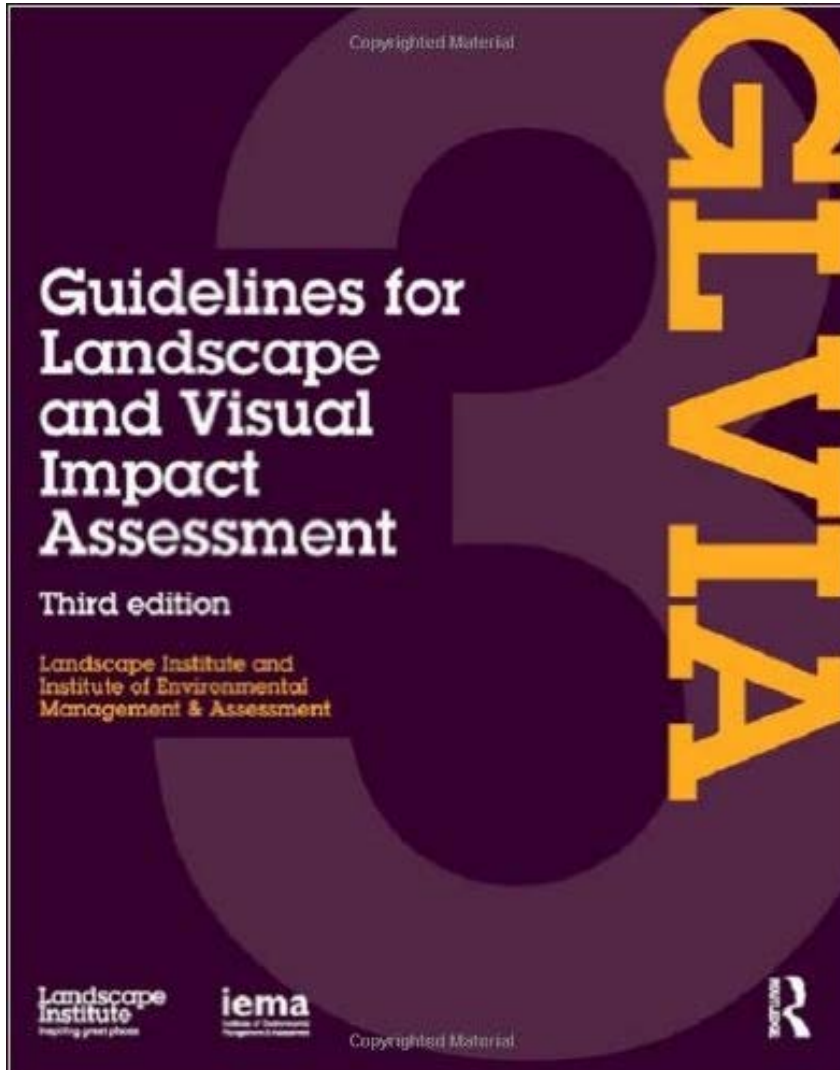


Our approach in North Norfolk

Spatial framework:



Our approach in North Norfolk



Our approach in North Norfolk

Assessment criteria:

Susceptibility criteria

- Topography and skylines
- Landcover
- Sense of openness/ enclosure
- Scale and landscape pattern/ complexity
- Sense of tranquillity, remoteness and rurality; current level of human influence/ development
- Time depth / historical continuity

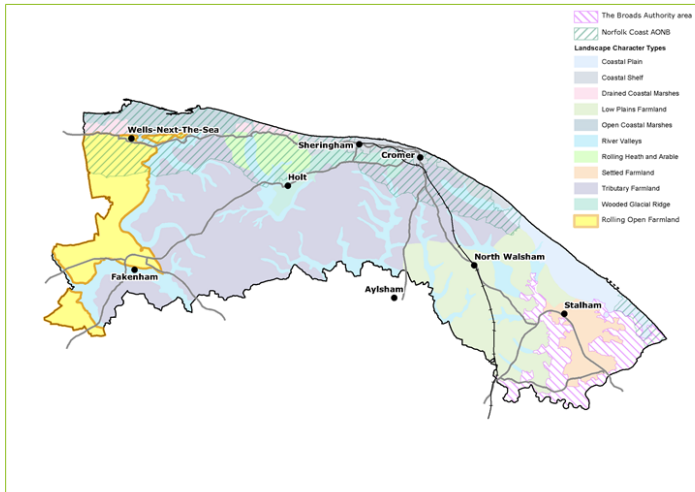
Value criteria

- Presence of landscape designations and extent to which their special qualities could be affected
- Other indicators of value: scenic quality, rarity, intactness, representativeness, nature conservation and cultural heritage interests, recreational value, and associations with artists or writers

Our approach in North Norfolk

Sensitivity Level	Definition
High (H)	The key characteristics and values of the landscape are highly sensitive to change from the type and scale of development being assessed.
Moderate-High (M-H)	The key characteristics and values of the landscape are sensitive to change from the type and scale of development being assessed.
Moderate (M)	Some of the key characteristics and values of the landscape are sensitive to change from the type and scale of development being assessed.
Low-Moderate (L-M)	Few of the key characteristics and values of the landscape are sensitive to change from the type and scale of development being assessed.
Low (L)	Key characteristics and values of the landscape are robust and are less likely to be adversely affected by the type and scale of development being assessed.

Rolling Open Farmland (ROF)



Rolling Open Farmland (ROF)

Baseline Landscape

Introduction to the Landscape Character Type

The Rolling Open Farmland Type extends from the coast to the southern edge of the District and is characterised by high level open, gently rolling arable farmland with relatively large, geometric fields enclosed by hedgerows. With the exception of the Holkham estate there is limited woodland cover and relatively few field/hedgerow trees. Flatter plateau areas are associated with former airfield sites. Settlement is focused principally on river valleys that pass through and alongside the Rolling Open Farmland – the Stiffkey Valley to the east and the Wensum Valley which cuts through the southern part of the area – which are assessed as a separate Landscape Type. There is little habitation within the Type other than farmsteads, small hamlets, development associated with airfields and two towns: Wells-next-the-Sea and Fakenham.

The northern part of the LCT falls within the Norfolk Coast AONB and the area that surrounds Wells-Next-the-Sea also forms part of North Norfolk's Undeveloped Coast policy area. The North Norfolk Heritage Coast lies outside the LCT but adjoins its northern boundary.

Component Character Areas

There is one area of Rolling Open Farmland in North Norfolk, in the west of the District:

ROF1 - Holkham to Raynham

Key Characteristics¹

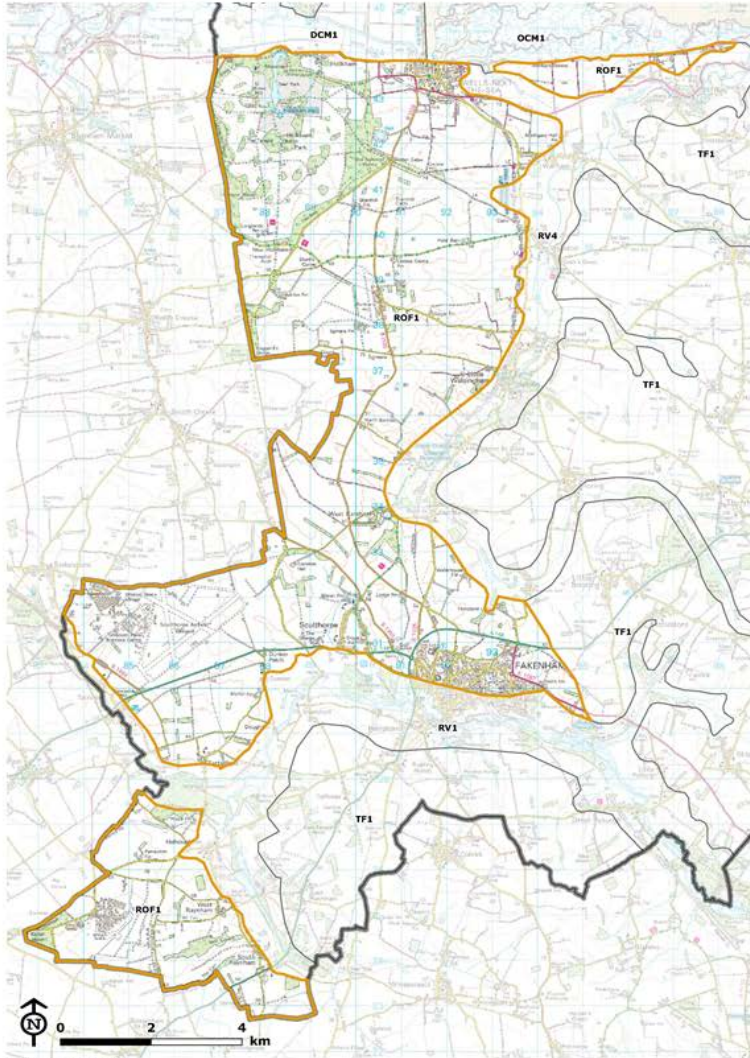
- Gently rolling terrain sloping down to river valleys and the coast
- Arable land use with large, geometric fields and low hedges
- Relatively low level of woodland cover
- Holkham Hall parkland
- Former airfields are prominent features
- An open, homogeneous character with expansive views
- Sparse, strongly nucleated settlement pattern
- Modern development at Fakenham
- Wells-next-the-Sea is a major tourist attraction
- Limited habitat diversity

Valued features and qualities

- Open, expansive, rural character with a sense of remoteness and tranquillity
- Undeveloped coastal character
- Holkham Park
- Managed, ordered character
- Remnant semi-natural habitats
- Other valued features include the abandoned medieval village of Egmere (a Scheduled Monument), with its ruined church; the historic interest of the former airfields, and views of Fakenham church tower from across the Wensum Valley.

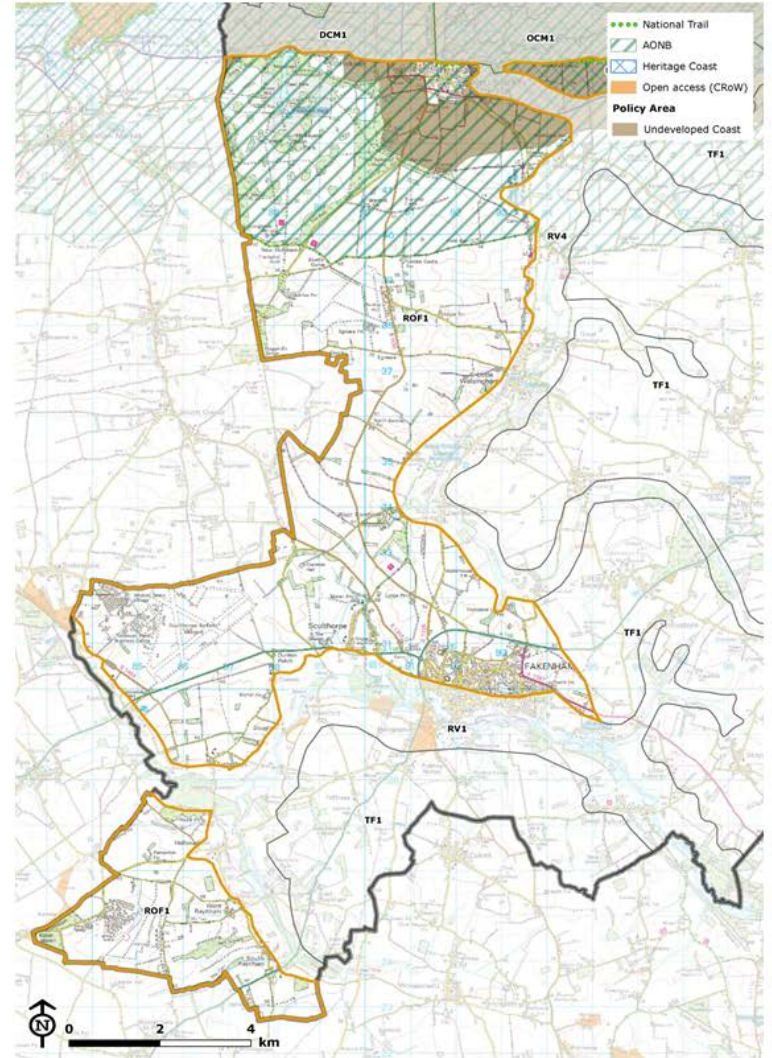
¹ Detailed information about landscape character and valued features is set out in the North Norfolk Landscape Character Assessment (2018)

Rolling Open Farmland (ROF)



Location of ROF1

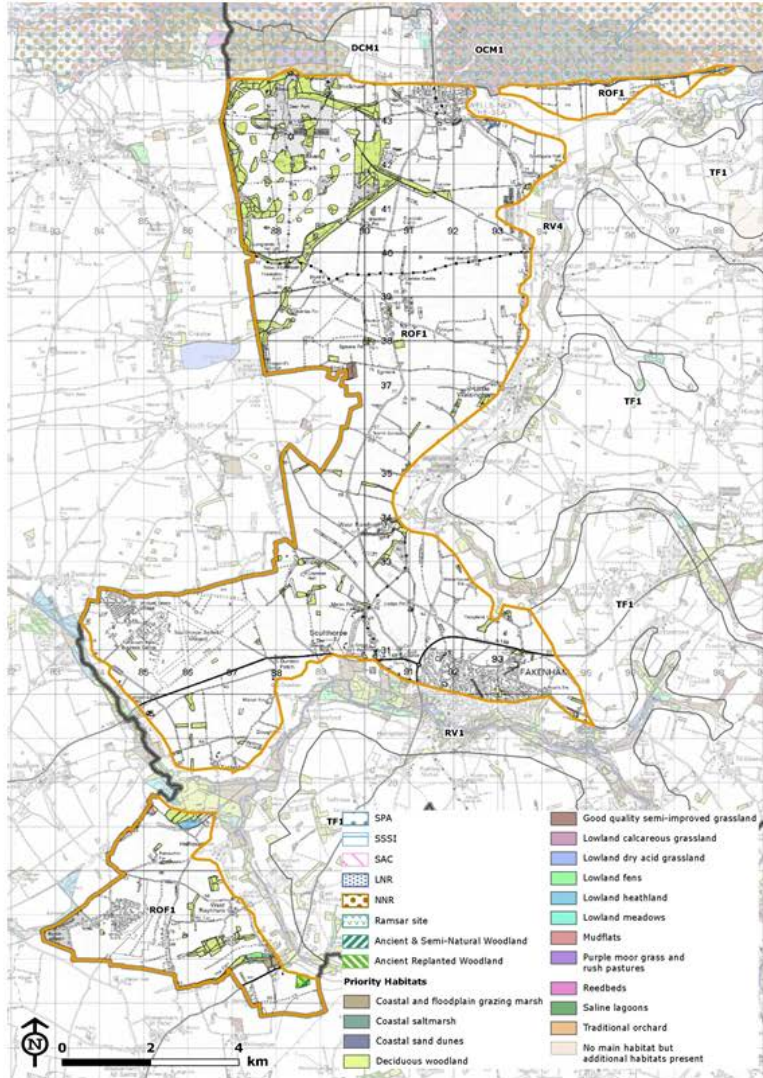
Rolling Open Farmland (ROF)



Landscape Designations and Policy Area

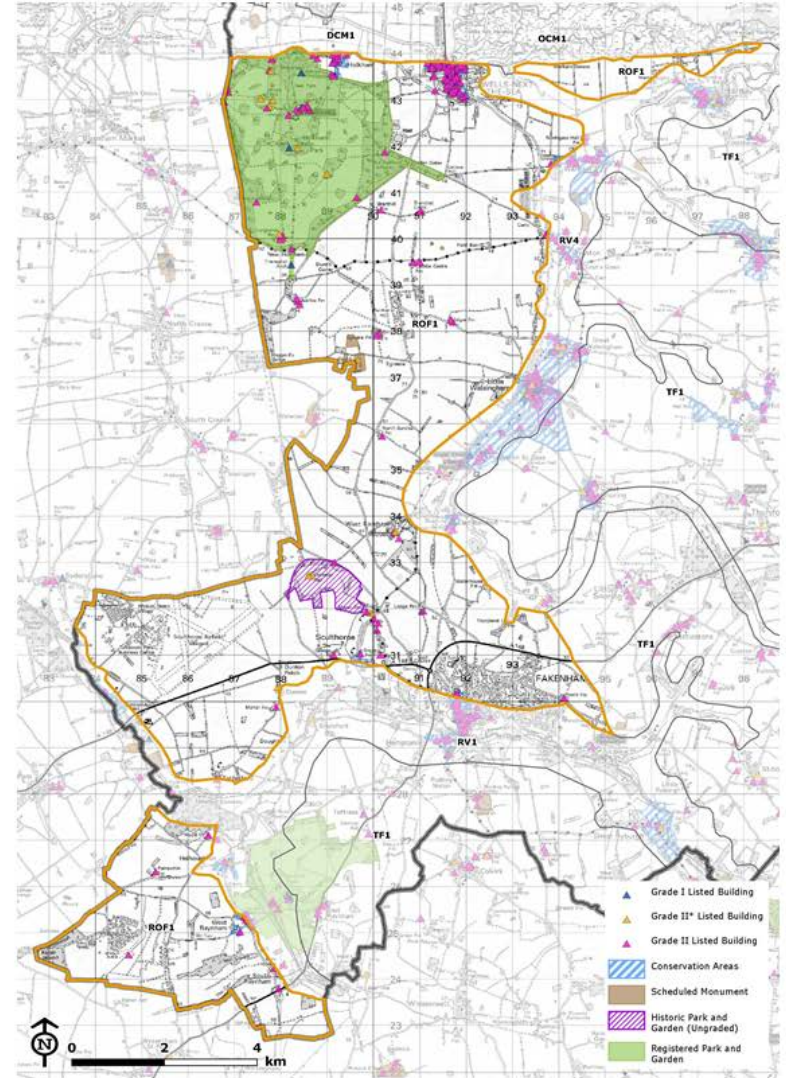
The report

Rolling Open Farmland (ROF)



Nature Conservation Interests

Rolling Open Farmland (ROF)



Cultural Heritage Interests

Rolling Open Farmland (ROF)

Landscape Sensitivity Evaluation

Criteria Appraisal

The following table illustrates the appraisal of the Rolling Open Farmland LCT against the sensitivity criteria which have been predetermined for the development types.

KEY	Attributes generally increase sensitivity to the development type ↑	Attributes generally decrease sensitivity to the development type ↓	Attributes do not strongly influence sensitivity in either direction =	Criterion/development type not applicable ✕						
Sensitivity Criteria	Characteristics of the LCT		Indicators of higher/lower susceptibility and value for each development type							
			Large scale Wind Turbines	Medium scale wind turbines	Small scale wind turbines	Field scale solar PV	Onshore cable routes	Cable relay stations & sub-stations	Commercial battery storage schemes	Anaerobic digestion plants
Susceptibility Criteria										
Topography & skylines	Gently rolling terrain with an elevated domed plateau sloping down to river valleys and generally undeveloped skylines occasionally punctuated by historic landmark features, such as church towers. The undeveloped skylines and the steeper slopes, particularly those on the boundaries with the River Valleys LCT, generally increase susceptibility to all development types.	↑	↑	↑	↑	↑	↑	↑	↑	↑
Landcover	Predominantly arable farmland with low level of woodland relative to other LCTs. Woodland cover is higher around Holkham Park and in the far south around West Raynham. The registered parkland at Holkham is in contrast to the typical arable landcover of the LCT and will increase susceptibility to all development types in that area.	=	=	=	=	↓	=	=	=	=
Sense of openness/enclosure	Landscape has a very open and exposed character due to the combination of arable landcover and lack of woodland, large field sizes, low hedges and gently sloping elevated plateau landform. This lack of visual screening/containment generally increases susceptibility to most types of new development.	↑	↑	↑	↑	↑	↑	↑	↑	↑
Scale (landform and component)	Typically a large scale landscape due to large, geometric fields, low hedges and sparse settlement lending an ordered, simple and regulated character. This scale,	↓	↓	↓	↓	✕	=	=	=	↓

Rolling Open Farmland (ROF)

KEY	Attributes generally increase sensitivity to the development type ↑	Attributes generally decrease sensitivity to the development type ↓	Attributes do not strongly influence sensitivity in either direction =	Criterion/development type not applicable ✕						
Sensitivity Criteria	Characteristics of the LCT		Indicators of higher/lower susceptibility and value for each development type							
			Large scale Wind Turbines	Medium scale wind turbines	Small scale wind turbines	Field scale solar PV	Onshore cable routes	Cable relay stations & sub-stations	Commercial battery storage schemes	Anaerobic digestion plants
features), landscape pattern & complexity	simplicity and consistency of landscape pattern generally reduces susceptibility to the more expansive and larger scale developments. It has less influence on the smaller scale developments.									
Sense of tranquility/remoteness/rurality & level of human influence	Strong sense of tranquility, remoteness and traditional rurality in large areas of quiet farmland, which reduces in the vicinity of the few settlements (particularly Fakenham and to a lesser extent Wells) and main roads (in particular the A149 coast road and in busy tourist seasons). This general absence of modern human influence and development on the landscape increases susceptibility to all types of built form, relative to more 'developed' landscapes.	↑	↑	↑	↑	↑	↑	↑	↑	↑
Time depth / historical continuity	Historic landscape types within the LCT are dominated by extensive 18th – 19th century enclosures, together with 20th century agriculture and areas of informal parkland associated with historic estates (Holkham Hall, Cranmer Hall and West Barsham Hall). This typically does not strongly influence susceptibility, except in the vicinity of the historic parklands, where susceptibility will be locally increased to all development types.	=	=	=	=	=	=	=	=	=
Value Criteria										
Presence of landscape designations and extent to which their special qualities could be affected	The coastal part of this LCT falls within the designated Norfolk Coast AONB. The presence of the AONB increases the overall sensitivity of the landscape, as generally all forms of development under consideration are likely to affect the AONB's defined special qualities to some extent, in particular the undeveloped coastal character,	↑	↑	↑	↑	↑	↑	↑	↑	↑

Rolling Open Farmland (ROF)

NB Airfields within ROF are specifically excluded from the sensitivity assessment at Landscape Character Type level, as these are subject to their own individual assessments within Appendix 2.

Overall sensitivity to different development types

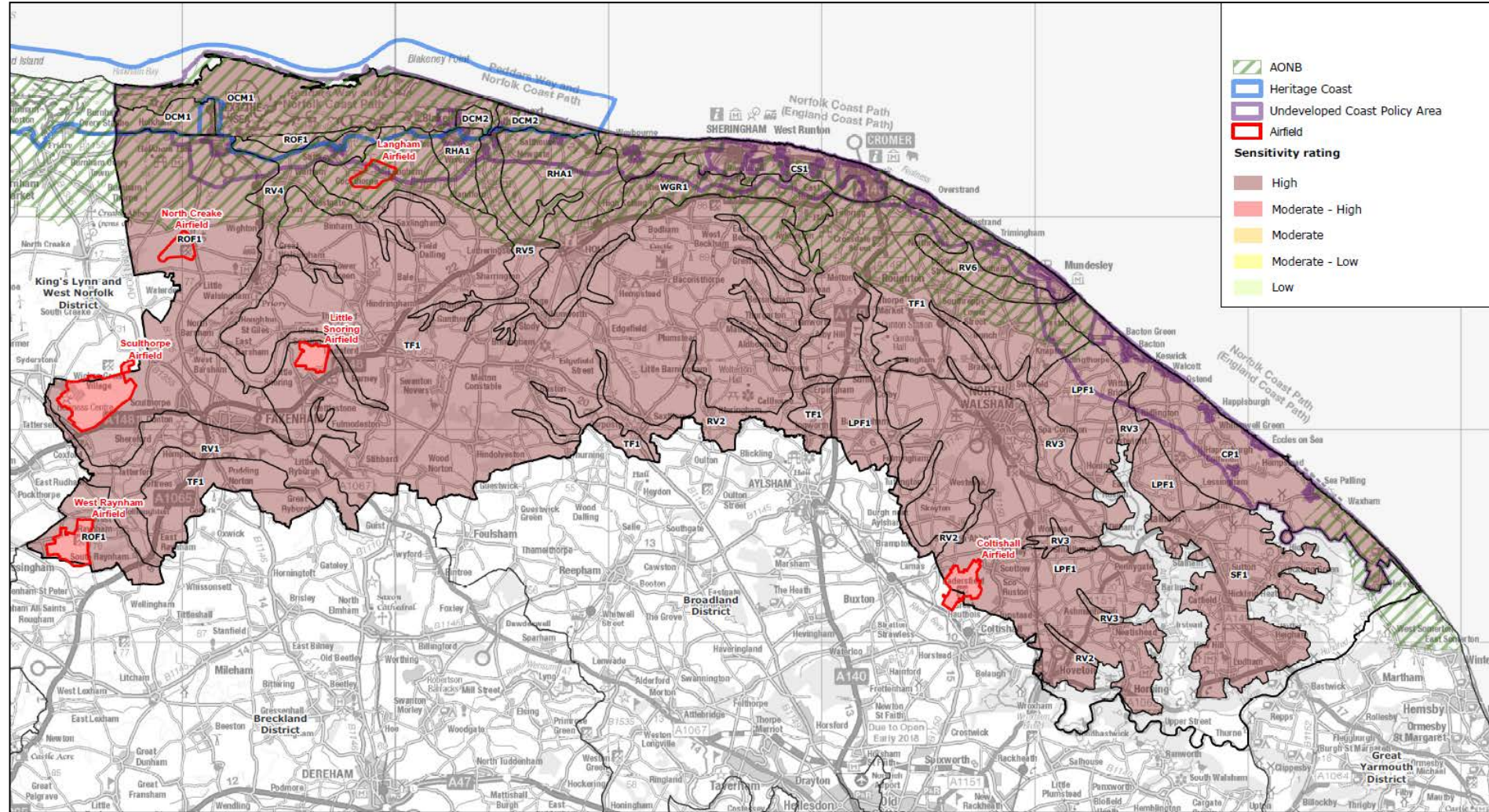
The following table provides an overall sensitivity rating, and justification for that rating, in relation to the relevant development types, based on the LCT sensitivity evaluation table above. It should be emphasised that the overall rating represents the typical sensitivity across the entire LCT, reflecting the strategic nature of this study. Notable areas where sensitivity is higher or lower than typical are outlined within the table, however there may be more localised variations in sensitivity within this.

Development Type	A O N B	Reason for judgement	Overall Sensitivity
Large scale wind turbines, (up to 80m hub height)	OUT	Although the gently rolling landform, relatively large landscape scale, regular landscape pattern of arable fields and relatively low density of wildlife, earth science or cultural designations might reduce sensitivity to large scale wind turbines in some situations, in this case the open, elevated, exposed and strongly rural character, prominent and undeveloped skylines, and relatively high scenic quality with long uninterrupted views all increase sensitivity to the extent that overall, typical sensitivity to this scale of turbine is considered to be high.	High
	IN	The landscape characteristics and attributes outlined above apply equally within the AONB; however, in addition the AONB is nationally valued for its scenic qualities and natural beauty which ensure the highest level of sensitivity. The Grade I Registered parkland at Holkham Hall and the Conservation Areas of Holkham and Wells-next-the-Sea (and their associated clusters of listed buildings) also have sensitivities associated with them.	High
Medium scale wind turbines, (up to 60m hub height)	OUT	The gently rolling landform, relatively large landscape scale, regular landscape pattern of arable fields and relatively low density of wildlife, earth science or cultural designations reduce sensitivity to medium scale wind turbines. However, the open, exposed and strongly rural character, prominent and undeveloped skylines, and relatively high scenic quality with long uninterrupted views, all increase sensitivity. Overall, typical sensitivity to this scale of turbine is considered to be moderate-high.	Moderate-High
	IN	The landscape characteristics and attributes outlined above apply equally within the AONB; however, sensitivity is increased further due to the nationally valued scenic qualities and natural beauty of the landscape. Overall, typical sensitivity to this scale of turbine is considered to be high in the area of ROF that falls within the AONB. In addition, the Grade I Registered parkland at Holkham Hall, the Conservation Areas of Holkham and Wells-next-the-Sea (and their associated clusters of listed buildings) have additional cultural heritage sensitivities.	High

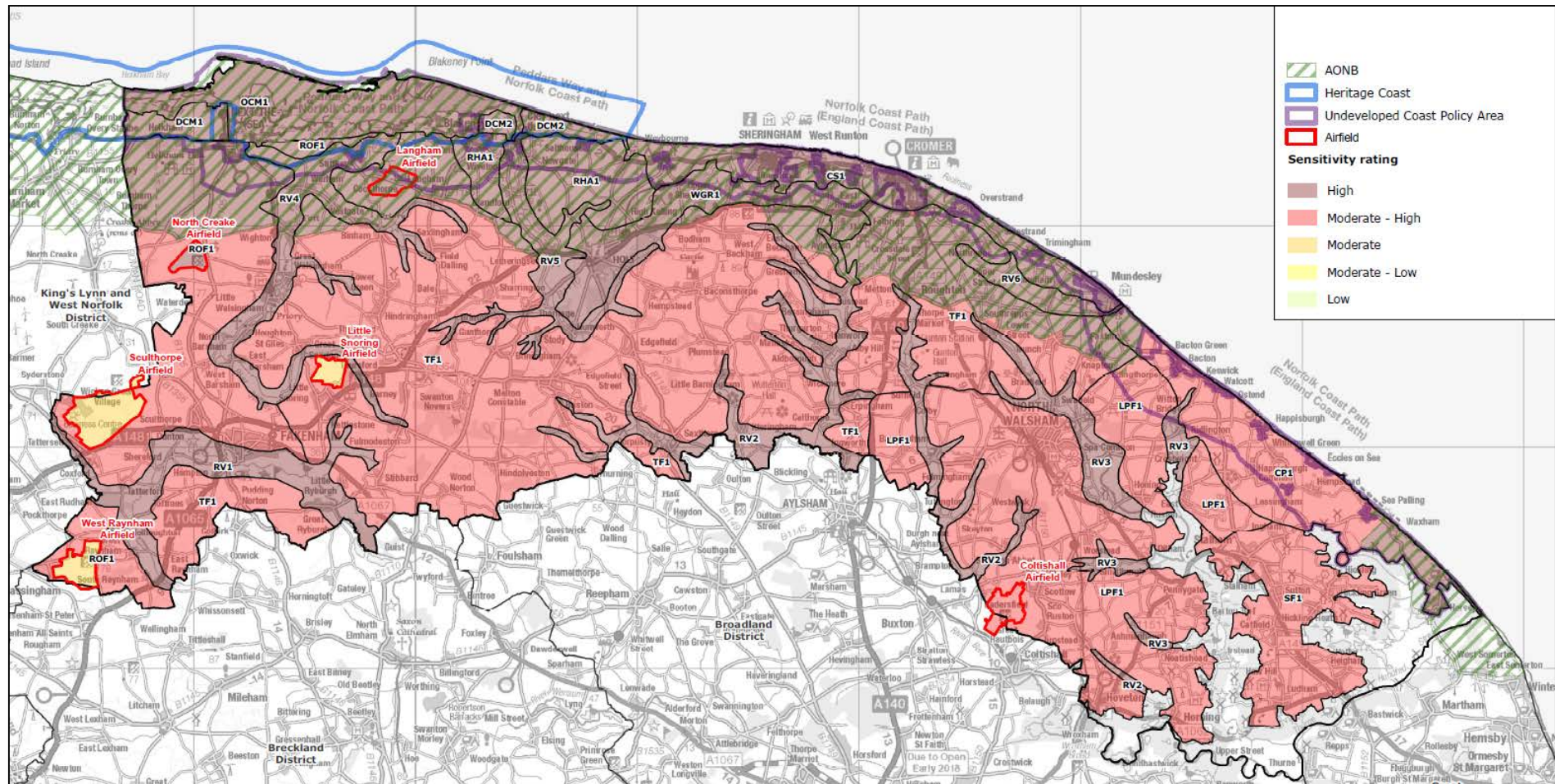
Rolling Open Farmland (ROF)

Small scale wind turbines, (up to 30m hub height)	OUT	The gently rolling landform, relatively large landscape scale, regular landscape pattern of arable fields and relatively low density of wildlife, earth science or cultural designations reduce sensitivity to small scale wind turbines. However, the open, exposed and strongly rural character, prominent and undeveloped skylines, and relatively high scenic quality with long uninterrupted views, all increase sensitivity. Overall, typical sensitivity to this scale of turbine is considered to be moderate. Localised areas of lower sensitivity include those where the strongly rural character diminishes and modern human influence is greater; notably around parts of the urban fringe of Fakenham, which has a busier character and larger-scale development is also visible on the skyline. Localised areas of higher sensitivity relate to the Scheduled Monuments at Egmere and Crabb's Castle, Sculthorpe and West Raynham Conservation Areas, areas close to landmark skyline features such as the church towers of St Mary and All Saints, Sculthorpe and St Peter, Dunton, and areas that are visible from the adjacent River Valleys LCT.	Moderate
	IN	The landscape characteristics and attributes outlined above apply equally within the AONB; however, sensitivity is increased further due to the nationally valued scenic qualities and natural beauty associated with the AONB. Overall, typical sensitivity to this scale of turbine is considered to be high in the area of ROF that falls within the AONB, due to proximity to the exposed coastline where the visibility of even small scale turbines on the skyline would be extensive, affecting its special qualities including the undeveloped coastal character, distinctive visual links between land and sea, and the sense of remoteness, tranquility and wildness. In addition to the above, the Grade I Registered parkland at Holkham Hall, the Conservation Areas of Holkham and Wells-next-the-Sea (and their associated clusters of listed buildings) have additional cultural heritage sensitivities.	High
Field-scale solar PV development (above 10 hectares site area)	OUT	The gently rolling landform, relatively large landscape scale, regular landscape pattern of arable fields and relatively low density of wildlife, earth science or cultural designations reduce sensitivity to field-scale solar PV development. However, the open, exposed and strongly rural character, with areas of visually prominent slopes and undeveloped skylines, low managed hedgerow field boundaries affording limited opportunities for localised screening, and relatively high scenic quality, all increase sensitivity. Overall, typical sensitivity to this type of development is considered to be moderate-high and any development would need to be sited with care. Localised areas of lower sensitivity include those where flatter landform in combination with existing mature linear shelter belts, woodland blocks and higher hedgerows may afford greater visual screening and containment of solar panels.	Moderate-High
	IN	The landscape characteristics and attributes outlined above apply equally within the AONB; however, sensitivity is increased further due to the nationally valued scenic qualities and natural beauty of the landscape (the presence of PV panels could conflict with the undeveloped and naturalistic qualities of the AONB). Overall, typical sensitivity to this scale of turbine is considered to be high in the area of ROF that falls within the AONB. In addition, the Grade I Registered parkland at Holkham Hall, the Conservation Areas of Holkham and Wells-next-the-Sea (and their associated clusters of listed buildings) have additional cultural heritage sensitivities.	High
Onshore cable routes for offshore wind farms (30m – 80m clearance)	OUT	The relatively large landscape scale, regular landscape pattern and predominant landcover of arable fields and relatively low density of wildlife, earth science or cultural designations, reduce sensitivity to onshore cable routes. However, the presence of visible slopes, exposed and strongly rural character with long uninterrupted views increase sensitivity. Overall, typical sensitivity to this type of development is considered to be moderate. Localised areas of higher sensitivity relate to the Scheduled Monuments at Egmere and Crabb's Castle, Sculthorpe and West Raynham Conservation Areas, parkland at Cranmer and West Barsham, ancient woodland at Raby's Wood, and upper visible slopes.	Moderate

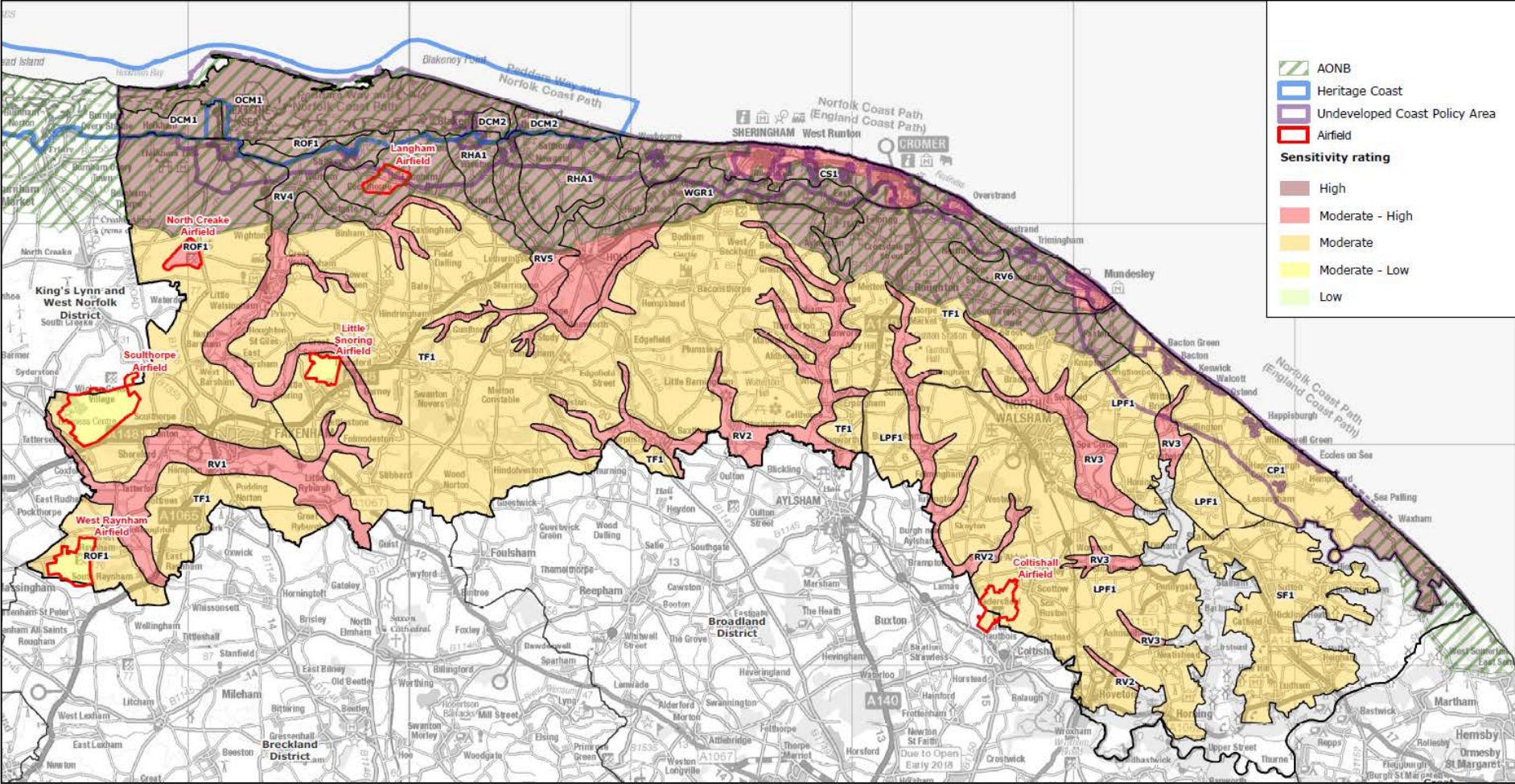
Results – large wind turbines (130m to tip)



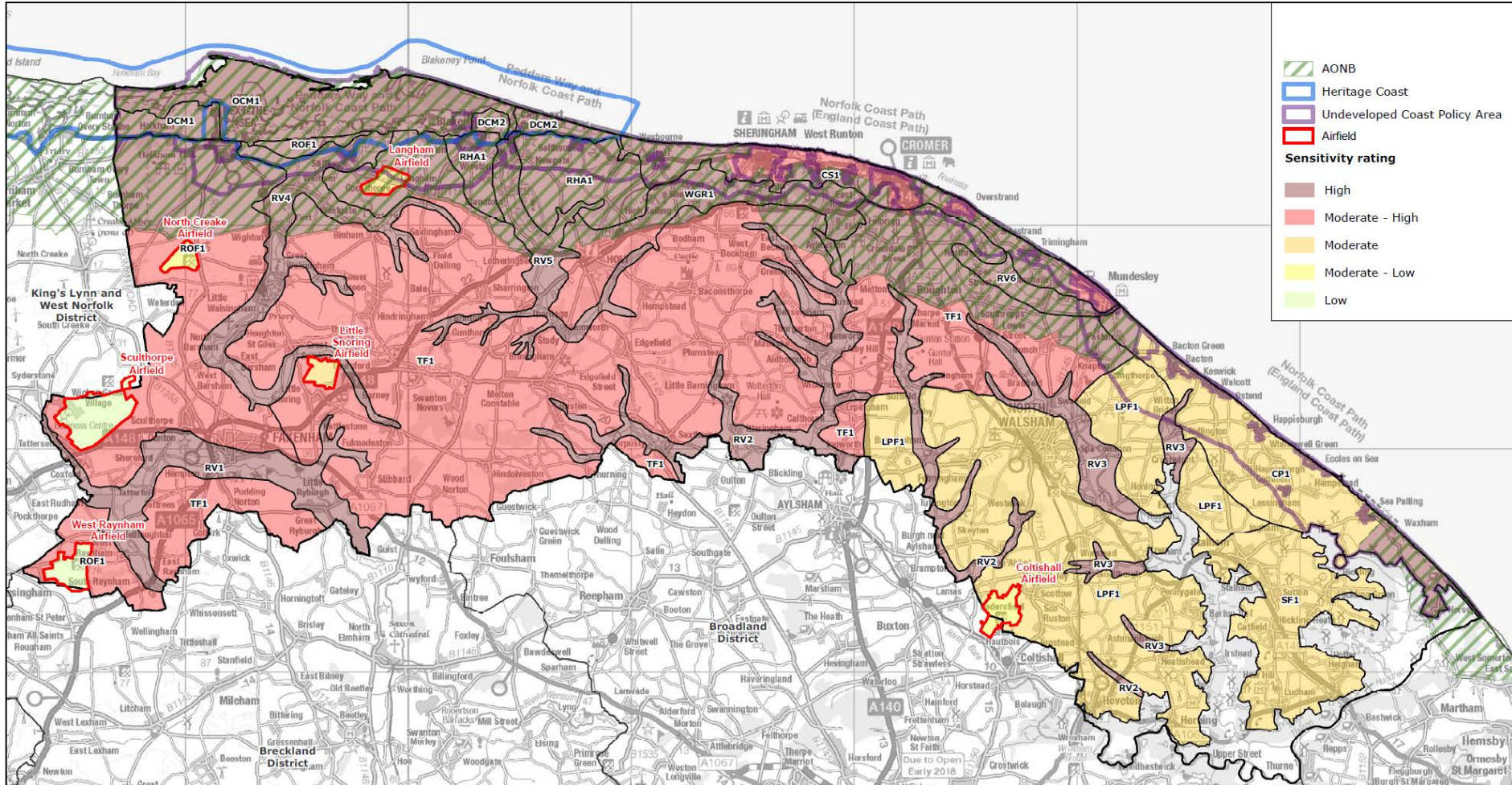
Results – medium wind turbines (100m to tip)



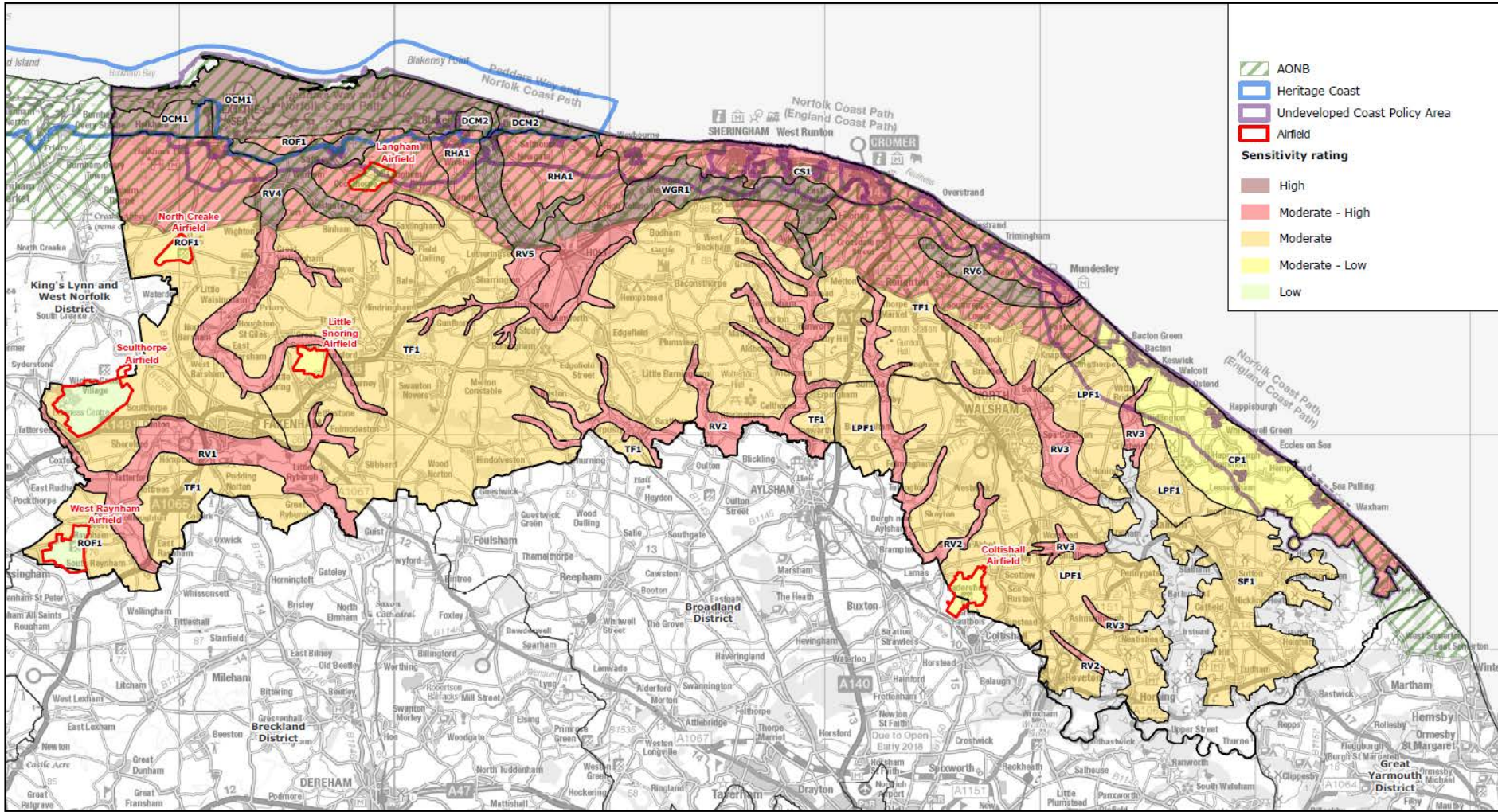
Results – small wind turbines



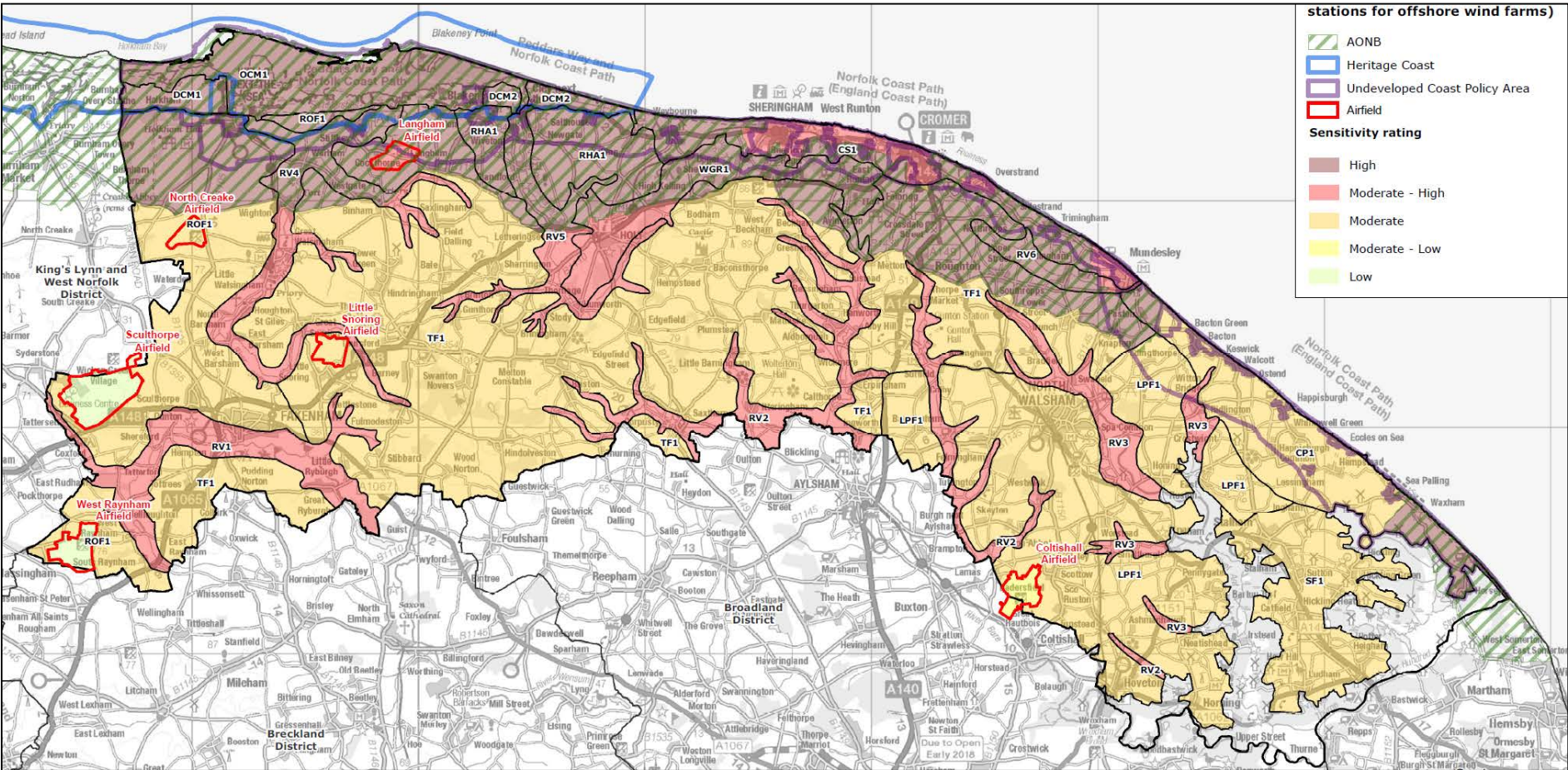
Results – solar PV



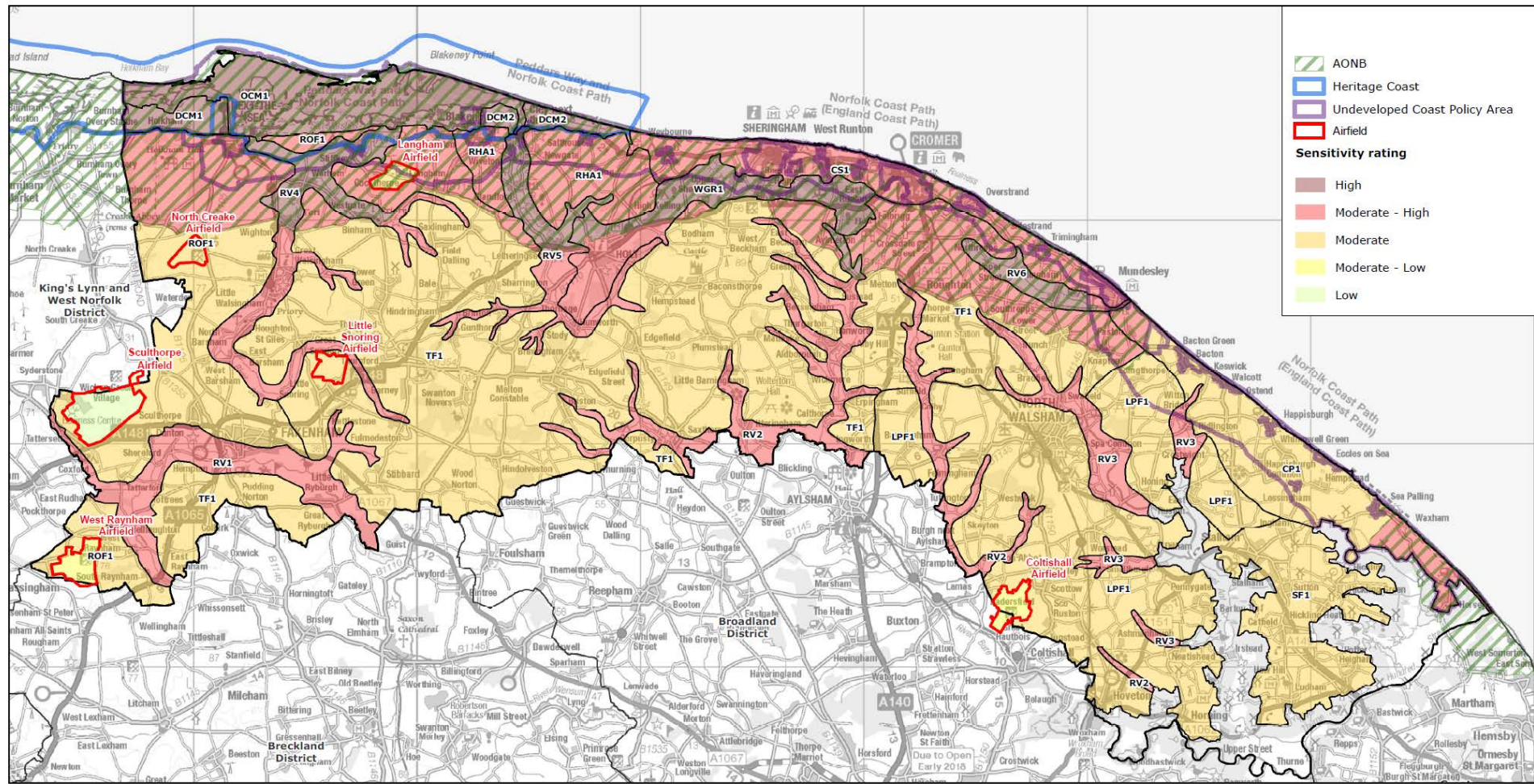
Results – onshore cable routes



Results – anaerobic digestion, battery storage, substations



Results - reservoirs



How to use the information – getting the right development in the right place

- Assist in identifying suitable locations for renewable and low carbon energy (LPA);
- Assessing and appraising planning applications (developers and decision makers);
- To develop policy in relation to renewable and low carbon energy and impacts on landscape (LPA).

Questions?