

## CONTENTS

#### **FOREWORDS**

#### PARTNER COMMITMENT

The principles by which partners will operate in implementing this plan

#### **1. INTRODUCTION AND SUMMARY 5**

Introduction to the plan, some basic facts and figures for the area, the complete twenty year vision for the area and listing of objectives and policies for all themes in section 4

#### 2. SETTING THE SCENE

Background information to the plan and its context.

#### 2.1 Designation and management

#### - the statutory background

How the AONB was created and which organisations have duties within the area.

#### 2.2 Managing the area

The structure, role and funding of the Norfolk Coast Partnership and its activities and how the AONB interacts with other designations and organisations in the area.

#### 2.3 How to use the management plan

The role and structure of the Management Plan, who should use it and how it should be used.

#### **3. A SPECIAL PLACE**

3

4

8

9

13

Consideration of what makes the area unique, the current state of its natural beauty and key drivers of change acting on it

#### 3.1 Qualities of natural beauty 15

A 'Statement of Significance' and summary of the area's qualities of natural beauty

### 3.2 Assessment of the condition of the area's natural beauty

Summary assessment of the state of the area's natural beauty, based on the qualities defined in section 3.1

21

18

#### **3.3 Key drivers of change in the area** Consideration of important factors influencing change in the area and the approach of the Norfolk Coast Partnership to managing the changes

#### 4. THEMES, OBJECTIVES AND POLICIES

29

Each of the sub-sections contains an introduction to the theme, a vision for this aspect of the area in 20 years time, key issues to be addressed, objectives to be achieved in the five year plan and policies to achieve these and address the issues.

4.1 Landscape, biodiversity and geodiversity	30
4.2 Built and historic environment	34
4.3 Farming, forestry and fishing	36
	~~

4.4	Sustainable	communities	38	3

4.5 Access and recreation 40

#### 5. MONITORING AND REVIEW 42

How the plan will be monitored and reviewed

#### **APPENDICES**

Glossary of technical terms	43
References	48
List of supporting documents	50

## FOREWORDS



Lord de Mauley, Parliamentary Under Secretary of State for Natural Environment and Science

Areas of Outstanding Natural Beauty (AONBs) are some of our finest landscapes. They are cherished by residents and visitors alike and allow millions of people from all walks of life to understand and connect with nature.

I am pleased to see that this management plan demonstrates how AONB Partnerships can continue to protect these precious environments despite the significant challenges they face. With a changing climate, the increasing demands of a growing population and in difficult economic times, I believe AONBs represent just the sort of community driven, collaborative approach needed to ensure our natural environment is maintained for generations to come.

AONB Partnerships have been the architects of a landscape-scale approach to land management. This approach is a key feature of the Government's Natural Environment White Paper and emphasises the need to manage ecosystems in an integrated fashion, linking goals on wildlife, water, soil and landscape, and working at a scale that respects natural systems.

This management plan also makes the important connection between people and nature. I am pleased to hear that local communities have been central to the development of the plan, and will be at the heart of its delivery. From volunteers on nature conservation projects, to businesses working to promote sustainable tourism, it's great to hear of the enthusiasm and commitment of the local people who hold their AONBs so dear.

AONBs are, and will continue to be, landscapes of change. Management plans such as this are vital in ensuring these changes are for the better. I would like to thank all those who were involved in bringing this plan together and I wish you every success in bringing it to fruition.

Propert de Manley



**Cllr Angie Fitch-Tillett** Chairman of the Core Management Group for the Norfolk Coast Partnership

The Norfolk Coast Area of Outstanding Natural Beauty with its variety and challenges is recognised as one of this Country's very special places. Within its boundaries there are wild, open spaces rich in wildlife allowing visitors and residents alike time to breathe and relax. There are heaths and moors, salt marshes and majestic cliffs, chalk rivers and thriving harbours all rich in history, some dating back to pre-historic times.

It is an honour to Chair the partnership of the many organisations, listed on the facing page, tasked with the preservation and enhancement of the wonderful place that I have been lucky enough to have spent most of my life in.

We realise that there are many challenges, and whilst we welcome visitors, we are ever mindful that without the vigilance of the partnership they could so easily disturb the balance and destroy the beauty that they have come to enjoy. We are only too aware that the area depends heavily on tourism to provide a thriving economy and more recently, power generation, both offshore and by the importation of 40 % of the nation's gas supply, has a huge part to play. It is a very delicate balance and one the Partnership is pledged to maintain.

This Management Plan is the third edition of that first started in 2004 and demonstrates the commitment of the Partnership to uphold the duty placed on them by the Countryside and Rights of Way Act. I should like to thank them all for their hard work and dedication to the Norfolk coast.

thurchiller

## PARTNER COMMITMENT

In making decisions and managing activities that affect the area we will take account of the area's special qualities of natural beauty set out in this plan and how we can contribute towards maintaining and enhancing these.

We will...

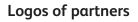
• maintain a committed and effective partnership between organisations and interests within the Norfolk Coast Partnership, work together according to the principles set out towards agreed aims and objectives in the AONB Management Plan and participate in appropriate projects and initiatives to implement the plan.

• ensure that appropriate representatives are appointed to attend meetings, liaise

within their organisations to raise awareness of the AONB and the Norfolk Coast Partnership, provide information on relevant partnership actions and participate in review of the AONB management plan and in action plan progress reporting.

• act to prevent things that would be detrimental to the area, to address problems that may affect its special character and to take advantage of opportunities for appropriate development.

• maintain good communication within and between organisations managing the area and between them and the wider public, seeking and taking into account the knowledge and views of local people in making important decisions affecting the area and its communities.





Local community representatives elected by AONB Parish Councils and nominated by Common Rightholders of the area are also members of the Partnership Forum and have been involved in the development of this Management Plan.

## **1. INTRODUCTION** and summary of the structure and key features of the plan

The Norfolk Coast Area of Outstanding Natural Beauty covers intertidal, coastal and agricultural land with a total area of over 450 square kilometres. Stretching from the silt expanses of the Wash in the west through the coastal marshes, soft cliffs and hinterland of north Norfolk, to the dune system at Winterton in the east, it is an area of remarkable beauty, diversity and scientific importance.

Although 'Area of Outstanding Natural Beauty' is essentially a landscape designation, natural beauty includes wildlife and historic and cultural heritage as well as scenery, and all of these are closely linked.

The Norfolk Coast today is the result of a complex interaction between people and their environment. The basic shape and contours of the land and the coast are the product of natural processes, linked to long term climate influence on the underlying geology, particularly the action of ice sheets and water.

The action of the sea, both eroding and building, produces an ever-changing coastline. Geology and landforms influence land use, and many of the smaller scale features which give the area its unique character are the result of the actions of people, who have lived in and used the area for thousands of years. The action of the sea, both eroding and building, produces an ever-changing coastline. Geology and landforms influence land use, and much of the larger scale landscape character as well as smaller scale features which give the area its unique character have been influenced by the actions of people, who have lived in and used the area for thousands of years.

Even the present 'wild' coastline is a product of a combination of natural processes and human activities, in that enclosure of saltmarsh by protective banks to provide agricultural land has influenced coastal processes over a much wider area. Connections between people and the landscape remain important. Employment in 'traditional' industries such as agriculture and fishing has declined but these still have a key role to play in the area's character. This special character makes the area a unique regional and national landscape resource.

The Norfolk Coast Partnership aims to ensure that the natural beauty and special character of the Norfolk Coast are conserved and enhanced through the work of the Partnership; a group of stakeholders, including the community, who manage a range of issues affecting the natural beauty of the area.

The Management Plan is **primarily for use by the members of the Norfolk Coast Partnership to inform, guide and influence their activities within the area**, though it is hoped that other individuals and organisations may also find it of interest and use.

This, the strategy for the 2014-19 Norfolk Coast AONB Management Plan, presents the background and the approach of the Norfolk Coast Partnership to management of the area. A separate action plan, to be reviewed annually, details specific actions that the partnership will take forward.

### Norfolk Coast AONB - some facts and figures

8/4/1968

date of designation confirmation

453km<sup>2</sup>

287km Length of Public Rights of Way



Norfolk County Council (AONB is entirely within the county) North Norfolk District Council (245.5 sq km in AONB) Borough Council of King's Lynn and West Norfolk (203.6 sq km in AONB) Great Yarmouth Borough Council (6.9 sq. km in AONB) Broads Authority (7.2 sq. km in AONB, the only example of an AONB overlapping with a national park / equivalent designation)

## 102m

Highest point above sea level at Roman Camp, on the Cromer Ridge between Sheringham and Cromer (also the highest point in Norfolk)

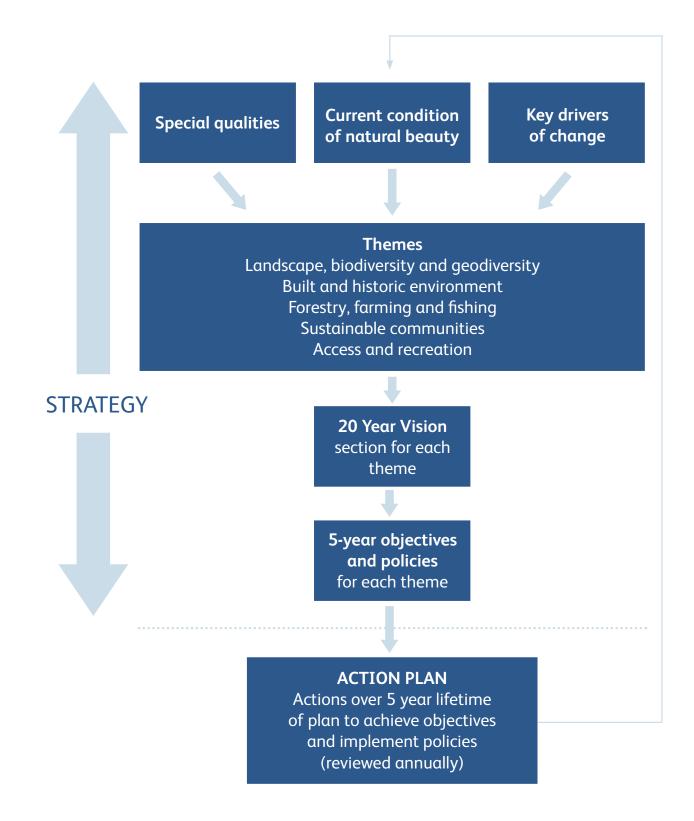
**69** No of parishes partly or wholly in the area

## 90.8km

Total length of coastline in the AONB. 44.8 km in NNDC 42.8 km in BCKLWN 3.2 km in GYBC

## Norfolk Coast AONB Management Plan Structure

Only the vision, objectives and policies for each theme are presented in this summary; please see the full plan for further explanation of how these were derived. This, together with the action plan, is available on the Norfolk Coast Partnership web site).





# 2. SETTING THE SCENE

### 2.1 Designation and management – the statutory background

## Designation as an area of outstanding natural beauty (AONB)

Areas of Outstanding Natural Beauty (AONBs), along with National Parks, make up our finest landscapes. Together they are a family of designated areas in England and Wales, which came into existence through the National Parks and Access to the Countryside Act 1949<sup>1</sup>. AONBs are recognised as being equal to National Parks in landscape quality, although arrangements for their management and provision for outdoor recreation are different. There are currently 36 AONBs in England, five wholly in Wales with one straddling both countries, and a further eight in Northern Ireland.<sup>2</sup>

The Norfolk Coast Area of Outstanding Natural Beauty was designated in 1968<sup>3</sup>. The final area confirmed (174 square miles, but re-measured in the 1990s as 453 square kilometres) includes the greater part of the remaining unspoiled coastal areas between the Wash and Great Yarmouth. The western outlier, coming within two miles of King's Lynn, takes in part of Sandringham Estate including Sandringham House, and also about six miles of the south-eastern corner of the Wash. The holiday resort of Hunstanton, and the coast immediately to the south of it, is not included, but from nearby Old Hunstanton a continuous coastal strip, varying in depth between three to five miles, extends eastwards to a point near Bacton, excluding the built-up areas of the resorts of Sheringham, Cromer and Mundesley. The eastern outlier stretches from Sea Palling to Winterton, including the magnificent dune system of Winterton Dunes.

Though there are minor instances where boundary features have changed or disappeared, the statutory boundary remains as originally designated. Review of AONB boundaries is under control of Natural England and is a process requiring approval by the Secretary of State. Natural England has no plans for a boundary review at present.

The designation helps to protect not just the natural features – the trees, fields and open spaces - but also settlements and working environments that are distinctive characteristics of the countryside. The designation allows for sustainable development (i.e. development that takes account of the requirements of environmental, economic and social sustainability), in ways that further enhance the character of the area.

The statutory purpose of designating an area of land as an Area of Outstanding Natural Beauty is to conserve and enhance the natural beauty of the area.

This comprises the area's distinctive landscape character, biodiversity and geodiversity, historic and cultural environment. For the Norfolk Coast AONB, this includes the wider non-statutory objectives for the North Norfolk Heritage Coast\*.

a) to conserve protect and enhance the natural beauty of the coasts, including their terrestrial, littoral and marine flora and fauna, and their heritage features of architectural, historical and archaeological interest;

b) to facilitate and enhance their enjoyment, understanding and appreciation by the public by improving and extending opportunities for recreational, educational, sporting and tourist activities that draw on, and are consistent with the conservation of their natural beauty and the protection of their heritage features;

c) to maintain, and improve where necessary, the environmental health of inshore waters affecting Heritage Coasts and their beaches through appropriate works and management measures; and

d) to take account of the needs of agriculture, forestry and fishing, and of the economic and social needs of the small communities on these coasts, through promoting sustainable forms of social and economic development, which in themselves conserve and enhance natural beauty and heritage features.

## Two secondary non-statutory purposes of AONBs are also recognised:

• To take account of the needs of agriculture, forestry, fishing and other local rural industries and of the economic and social needs of local communities, paying particular regard to promoting sustainable forms of social and economic development that in themselves conserve and enhance the area's natural beauty; and

• To seek to meet the demand for recreation so far as this is consistent with the statutory purpose of conserving and enhancing the area's natural beauty – and which preferably supports this purpose by increasing understanding, valuation and care for the area – and is also consistent with the needs of rural industries.

<sup>\*</sup> Objectives for Heritage Coasts<sup>4</sup>

#### Statutory duties for management

The 1949 Act gave rise to strong protection for National Parks and AONBs under the Town and Country Planning system, but did not give a specific duty to anyone regarding their management.

In 2000, Part IV of the Countryside and Rights of Way (CRoW) Act<sup>5</sup> (amongst other provisions) reaffirmed the objectives of designation of AONBs, gave a 'duty of regard' towards the purpose of designation to a wide range of bodies ('relevant authorities') and gave a duty to local authorities whose area included an AONB or part of one to prepare and review a plan for the management of the area.

#### Statutory duty of regard<sup>6</sup>

Section 85 of the Countryside and Rights of Way Act 2000 places a duty on relevant authorities and public bodies, in exercising or performing any functions in relation to, or which affect, land in the AONB to have regard to the purpose of conserving and enhancing the natural beauty of the AONB.

The term, 'public bodies' includes all arms of both central and local government:

- Environment Agency (EA);
- Department for Environment, Food and Rural Affairs (Defra);
- English Heritage (EH);
- New Anglia Local Economic Partnership (LEP);
- Forestry Commission (FC);
- Natural England (NE);
- Marine Management Organisation
- Parish councils and joint committees of local authorities; and
- Regulatory bodies of statutory undertakers such as Oftel (Office of Telecommunications), Ofwat (Office of Water Services), Ofgem (Office of the Gas and Electricity Markets), etc.

There are also other organisations and interests who do not have a formal statutory duty under the Countryside and Rights of Way Act but who have been part of the partnership for management of AONBs prior to the Act and have long had a significant and valuable role in conserving and enhancing the area's natural beauty.

People who live and work in an AONB or who visit it and other organisations can also play an important part in conserving and enhancing the character of the area.

## Statutory duties for AONB Management Plans

Section 89 of the CRoW Act gives relevant local authorities (i.e. those whose area wholly or partly includes an AONB) a duty to "prepare and publish a plan which formulates their policy for the management of the area of outstanding natural beauty and for the carrying out of their functions in relation to it" and to review the plan at "intervals of not more than five years".

A later paragraph stipulates that where the AONB is not entirely within one local authority area the plan should be prepared by "the local authorities for all the principal areas wholly or partly comprised in the area of outstanding natural beauty, acting jointly".

### 2.2 Managing the area

#### The AONB Management Plan

The relevant local authorities (Norfolk County Council, North Norfolk District Council, Borough Council of King's Lynn and West Norfolk, Great Yarmouth Borough Council, Broads Authority) have agreed that the Norfolk Coast Partnership should undertake the requirement of Section 89 of the Countryside and Rights of Way Act 2000 on their behalf. Although the legislation requires these local authorities 'to act jointly to prepare and publish a plan which formulates their policy for the management of the AONB and for carrying out their functions in relation to it' in practice, the plan extends to a much wider group of partners who also have important management functions.

This document is the third Management Plan produced by the Norfolk Coast Partnership for management of the Norfolk Coast AONB under the CRoW Act. It builds on the previous 2009-14 Management Plan<sup>7</sup> and has undergone a thorough review to update it, but in the event there are relatively minor changes from the previous strategy plan in terms of structure and content.

The Management Plan is the framework for all organisations with a role in management of the AONB. All Partners have worked together to produce and agree the contents of this Management Plan and are committed to its delivery.

#### The Norfolk Coast Partnership

Since 1991 the Norfolk Coast Partnership has brought together the many stakeholders who have a role in managing the area, with an overall aim:

"To bring about the sustainable management of the AONB in such a way that meets its specific environmental, social and economic needs whilst conserving and enhancing its natural beauty."

The Norfolk Coast Partnership consists of:

The Partnership Forum: made up of representatives from all the Partners including those on the Core Management Group and five **Community Representatives** elected by parishes in the area;

**The Core Management Group:** made up of representatives from the relevant local authorities – Norfolk County Council, North Norfolk District Council, the Borough Council of King's Lynn and West Norfolk, Great Yarmouth Borough Council and the Broads Authority – and local community representatives

**The Staff Team:** a small team of five people, who facilitate and support the operation of the Norfolk Coast Partnership, coordinating and leading on actions to implement the AONB Management Plan

Further details of the current membership and function of these groups can be found on the Norfolk Coast Partnership web site<sup>8</sup>

#### Funding

Core funding for the operation of the Norfolk Coast Partnership is provided from central and local Government, in recognition of both the national status and value of AONBs and local management arrangements. Central government funding is provided via the Department for Environment, Food and Rural Affairs (Defra); the relevant local authorities (see above) are also core funders. Details of core funding can be found in annual accounts on the Norfolk Coast Partnership web site.<sup>9</sup>

Core funds alone are not sufficient to undertake many of the actions in the AONB Action Plan. One of the functions of the Staff Team is to generate additional funding to implement priority actions. At any particular time during the lifetime of the plan, there are likely to be a number of projects involving different partner organisations and coordinated by the Staff Team, utilising funding from public, private and charitable sources to achieve the objectives of the management plan. Details of current 'external' funding and projects will be available on the Norfolk Coast Partnership web site.<sup>10</sup>

#### Other designations

The North Norfolk Heritage Coast, a section of the coast from Holme-next-the-Sea to Weybourne, was defined in an agreement between local authorities and the Countryside Commission in 1975, recognising this section of coastline as one of the finest stretches of undeveloped coast in England and Wales. 'Heritage Coast' is a non-statutory definition, although it is recognised within the statutory planning system. Management of the Heritage Coast is considered within the overall management of the area, as contained in this plan.

In a unique situation for the two national landscape designations, a small area of the eastern outlier of the AONB overlaps with the Broads, which is effectively a National Park. This was designated under the Norfolk and Suffolk Broads Act in 1988<sup>11</sup> since it is also part of the area with the distinctive character for which the Broads was designated.

There are also many sites or areas with other statutory designations at local, national and international level overlapping with, or contained within, the AONB. These are independent of the AONB designation, but reflect the richness and importance of its natural beauty in terms of wildlife, architectural and archaeological interest and contribute to the protection and enhancement of these aspects of natural beauty.

These other designations include:

#### International

- 4 Ramsar sites;
- 7 Special Areas of Conservation;
- 4 Special Protection Areas;

#### National

- 6 National Nature Reserves;
- 28 Sites of Special Scientific Interest (SSSIs), ranging in size from less than 1 hectare to several thousand hectares;
- 1 Local Nature Reserve (Wiveton Downs);
- 85 County Wildlife Sites;
- 61 Scheduled Monuments;
- 7 Historic Parks and Gardens;
- 45 Conservation Areas;
- 36 registered commons (some with registered common rights); and
- 849 listed buildings

For more information on these designations see the 'Summary of Conservation Designatons' appendix.

#### The Marine Dimension

The area designated as an Area of Outstanding Natural Beauty extends down to the mean low water mark – the limit of planning authority for terrestrial planning authorities. But the North Norfolk Heritage Coast has no formal seaward boundary, and there are many links between the area's natural beauty and the marine environment.

There are important links between land and sea in a coastal area; views out to sea, along the coast, or from sea to land (now becoming known as 'seascapes') are clearly part of what makes the area special to people. There are also ecological links, for example the beach-nesting terns or seals breeding and resting on local beaches that rely on the sea for their food. Cultural links also contribute – for example, the local fishing industry plays an important part in the area's distinctive character. Archaeological remains in the intertidal zone and further offshore help to tell the story of human activity over time.

The Wash and North Norfolk Coast European Marine Site (EMS), which was protected in 1996 for its significance in a European context, encompasses 108,000 hectares of the marine environment covering the Wash and extending along the Norfolk coast to Weybourne, overlapping with the AONB designation in the intertidal area. It combines Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) under European Union legislation, and is part of the 'Natura 2000' network of European sites for nature conservation.

There are close links between the Wash and North Norfolk Coast EMS Management Scheme<sup>12</sup> partnership and the Norfolk Coast Partnership – many representatives sit on both partnerships and staff cooperate closely to pursue joint interests and initiatives.

The combined East Onshore and Offshore Marine Plan<sup>13</sup>, launched in April 2014, is a statutory plan to manage development and activities in a large marine area including the intertidal part and offshore from the AONB. Objective 5, policies SOC2 and SOC3 and paragraphs 153-156 in section 3.3 of the Marine Plan are particularly relevant to coastal protected landscapes. Shoreline Management Plans are also important in managing the marine dimension (see section 3.3 of this plan).

Government has committed to ensuring that a well managed UK Marine Protected Area network, covering in excess of 25% of English waters, will be in place by the end of 2016. This could entail the designation of further Marine Protected Areas overlapping or offshore from the AONB, such as Marine Conservation Zones and Special Protection Areas for bird species reliant on the marine environment.

#### Working with other designations and plans

There are also many other plans, both statutory and non-statutory, ranging from local site management plans to international in their scope, which potentially affect the AONB or parts of it, either already in existence or in preparation. Almost all of these relate to management or enjoyment of aspects of its natural beauty or matters affecting it in some way. Many of these plans specifically refer to and recognise the AONB, those relating to the Town and Country Planning system being particularly important. Statutory powers available to partner organisations in AONB management play an important part in conserving and enhancing natural beauty.

It is intended that partners will ensure that broad objectives for the area, and the AONB Management Plan, are recognised in relevant plans they produce, and that they help to ensure these are also recognised in plans in which they have some influence. Conversely, the AONB Management Plan has been developed to maintain consistency with other relevant plans and initiatives that can help to meet its objectives, which are summarised in appendix 1 of the Strategic Environmental Assessment for this plan.

The AONB Management Plan does not override or supersede these other plans, strategies and designations, or confer any additional powers on any organisations. All of the organisations involved will continue to have their own objectives, powers and limitations. What the AONB Management Plan does is to provide an agreement between organisations for how they will work together, towards agreed aims and objectives for the Norfolk Coast AONB. It also provides guidance for other organisations and individuals who wish to play their part in conserving and enhancing its natural beauty.

#### AONBs in the Town and Country Planning System

National planning guidance and policies in local plans have been amongst the most important tools for meeting the objectives of designation of the Norfolk Coast AONB (and other AONBs) since its designation in terms of managing development within the AONB in a sensitive manner. The National Planning Policy Framework<sup>14</sup>, published as guidance in March 2012, contains key guidance in the following paragraphs:

14. At the heart of the National Planning Policy Framework is a **presumption in favour of sustainable development**, which should be seen as a golden thread running through both plan-making and decisiontaking.

#### For plan-making this means that

local planning authorities should positively seek opportunities to meet the development needs of their area;

Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change, unless:

• any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or

• specific policies in this Framework indicate development should be restricted.<sup>9</sup>

#### For decision-taking this means:<sup>10</sup>

approving development proposals that accord with the development plan without delay; and where the development plan is absent, silent or relevant policies are out of date, granting permission unless:

• any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or

• specific policies in this Framework indicate development should be restricted.<sup>9</sup>

9 For example, those policies relating to sites protected under the Birds and Habitats Directives (see paragraph 119) and/or designated as Sites of Special Scientific Interest; land designated as Green Belt, Local Green Space, an Area of Outstanding Natural Beauty, Heritage Coast or within a National Park (or the Broads Authority); designated heritage assets; and locations at risk of flooding or coastal erosion.

10 Unless material considerations indicate otherwise.

113. Local planning authorities should set criteria based policies against which proposals for any development on or affecting protected wildlife or geodiversity sites or landscape areas will be judged. Distinctions should be made between the hierarchy of international, national and locally designated sites,<sup>24</sup> so that protection is commensurate with their status and gives appropriate weight to their importance and the contribution that they make to wider ecological networks.

114. Local planning authorities should:

• set out a strategic approach in their Local Plans, planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure; and

• maintain the character of the undeveloped coast, protecting and enhancing its distinctive landscapes, particularly in areas defined as Heritage Coast, and improve public access to and enjoyment of the coast.

115. Great weight should be given to conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty, which have the highest status of protection in relation to landscape and scenic beauty. The conservation of wildlife and cultural heritage are important considerations in all these areas, and should be given great weight in National Parks and the Broads.<sup>25</sup>

116. Planning permission should be refused for major developments in these designated areas except in exceptional circumstances and where it can be demonstrated they are in the public interest. Consideration of such applications should include an assessment of:

• the need for the development, including in terms of any national considerations, and the impact of permitting it, or refusing it, upon the local economy;

• the cost of, and scope for, developing elsewhere outside the designated area, or meeting the need for it in some other way; and

• any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.

24. Circular 06/2005 provides further guidance in respect of statutory obligations for biodiversity and geological conservation and their impact within the planning system

25 English National Parks and the Broads: UK Government Vision and Circular 2010 provides further guidance and information about their statutory purposes, management and other matters.

Following through from this high-level guidance, local plans<sup>15</sup> also contain policies designed to conserve and enhance natural beauty in designated AONBs, as well as provide protection for sites and areas designated for other reasons, usually biodiversity or cultural value. Local planning authorities therefore play a prime role in managing the AONB, in terms of managing development.

# 2.3 How to use the management plan

#### Structure of the plan

The 2014-19 Norfolk Coast Area of Outstanding Natural Beauty Management Plan is a working document which sets out the approach of the Norfolk Coast Partnership to the management of the area.

The Management Plan comprises:

#### 1) The Strategy (this document)

The strategy has a lifetime of five years and aims to:

- Highlight the special qualities and enduring significance of the area and identify those that are vulnerable to change;
- Identify the key pressures for change on these special qualities;
- Present an integrated vision for the future of the AONB as a whole, in the light of national, regional and local priorities;
- Set out agreed objectives and policies which will help secure that vision; and
- Identify the means by which objectives, actions and overall management will be monitored and reviewed.

The Strategy is supplemented by a range of background information – **'Supporting Information'**<sup>16</sup> – which has contributed to the plan. This provides more in-depth background information to aid understanding about the history of the AONB and its designation, the management plan process and the Norfolk Coast Partnership.

#### 2) The Action Plan and Annual Progress Report

The Action Plan aims to:

- Detail specific actions for the five years of the plan which aim to achieve the objectives and enact the policies;
- Define which Partners are involved in each Action;
- Define the timing of delivery of each Action;
- Monitor progress with each individual Action.

The Annual Progress Report<sup>17</sup> aims to:

• Review, and publicly report on, progress on the Action Plan in each 12 month period of the Management Plan.

#### 3) Associated Guidance<sup>18</sup>

Guidance produced by the Partnership to inform and assist management of the area by partners, others organisations and individuals. It is available via the web-based version of the plan and at the time of publication of this plan, it consists of:

• Integrated Landscape Character Guidance for the AONB (provides detailed spatial guidance on landscape, ecological, geodiversity and historic character, including sensitivities and recommendations);

• Visitor management zoning map and policies (published in 1995, continues to provide spatial guidance on sensitivities and management of visitors, review to be completed within the lifetime of this plan);

• **Bird Hide Design Guide** (published 2002 in a revised and updated form from an earlier draft, provides guidance on sensitive design and siting of bird watching facilities); and

• **Signing guidance** (published 2005, provides guidance on sensitive use of signage).

Further guidance may be produced during the 5 year life of this plan.

Issues affecting the area and its character have been identified in the previous AONB Management Plans and in studies by partner organisations and were reviewed during the process to produce this plan.

The combination of existing mechanisms, specific objectives and partnership policies is intended to ensure that progress is achieved on all of the issues identified. Many partner organisations will contribute to achieving the objectives, although there will normally be one organisation that leads on each action (see the Action Plan).

A diagrammatic representation of the plan structure can be found in section 1

#### Using the management plan

The Management Plan is intended to be used primarily by partner organisations of the Norfolk Coast Partnership, who have adopted the plan (see inside front cover of the plan), and its Staff Team.

The three tiers of the Management Plan enable partners to:

#### Strategy

- Gain an overview of the AONB, its designation and how it is managed;
- Understand what makes the area special; and
- Access the objectives and policies and use them to guide Partner decisions on their activities within the AONB.

#### Action Plan and Annual Review

• Access and monitor progress on Partner actions within the AONB.

#### **Associated Guidance**

• Access more detailed information produced by the Norfolk Coast Partnership, some of a spatial nature, and use it to aid decision making.

Implementation of the objectives, policies and actions will primarily be the responsibility of the organisations within the Norfolk Coast Partnership and the Staff Team (see the Action Plan).

However, the plan is also intended to be used by other organisations and interests to guide management of the area and indeed by anyone with an interest in conserving and enhancing its special character.

The plan provides information and guidance on the AONB and its management for those who wish to contribute to conservation and enhancement of the area's natural beauty - individuals or organisations, with or without a statutory duty towards AONBs under the Countryside and Rights of Way Act 2000.

# **3. A SPECIAL PLACE**

### Introduction

The Norfolk Coast Area of Outstanding Natural Beauty is unique. What we see today is a result of the interplay of environmental influences on the area over millions of years and more recently its use and modification by people over thousands of years. The human influence is obvious in settlements and buildings, communications, field patterns and agriculture, and in archaeological remains. Even the apparently wild parts of the area, for example coastal marshes and cliffs, have been modified by flood defence banks and erosion protection structures.

**Section 3.1** briefly describes the combination of characteristics that make the area special and distinguish it from other places and summarises the key qualities that make the area unique and worthy of designation. (More detailed information about the character of the area can be found in the National Character Area Profiles produced by Natural England<sup>19</sup>, the supporting information to this management plan<sup>16</sup> and the Integrated Landscape Character Guidance for the AONB<sup>20</sup>).

**Section 3.2** provides a summary assessment of the condition of the area's natural beauty, based on the summary of its key qualities of natural beauty from section 3.1.

**Section 3.3** considers the current and anticipated drivers of change experienced by the area – a range of environmental, economic, social and political influences that are acting, or may affect on the area's qualities of natural beauty.

Overall, this section reflects the fact that the area has changed in the past, and will continue to change. The qualities described in section 3.1 are those that it should be possible to conserve and enhance into the future through management of change, following a path of sustainable development that respects the needs of the environment and of people.

### 3.1 Qualities of natural beauty

**Statement of Significance** – a summary of the area's qualities of natural beauty:

The area designated as the Norfolk Coast Area of Outstanding Natural Beauty comprises three separate areas, extending to mean low water and including coastal hinterland up to about 6 kilometres (4 miles) inland that has a visual and functional relationship with the coast. As with any area, geology underpins its character. For the Norfolk Coast AONB, the defining geological influences are the Cretaceous chalk and carstone in the west and glacial deposits further east, with more recent marine and freshwater formations near the coast also playing an important role. The geomorphology of the entire coastline is one of the most outstanding assemblages of coastal forms in Britain and is important internationally. The area also includes outstanding examples of glacial and glaciofluvial landforms such as moraines, eskers and outwash plains. The Cromer Ridge is a terminal moraine revealing much information on past glaciation events.

Unlike some protected landscapes whose character is more uniform, the designated area is very varied in character, containing a wide variety of landscapes, seascapes and locally distinctive features, including variation in geology and topography, land use, field and settlement patterns, the character of settlements, buildings and materials. The orange-brown carstone is prominent in vernacular buildings in the west, with chalk and then flint and cobbles becoming more dominant travelling east.

Overall, the influence of the sea provides a unifying theme, with the variety and interrelationship of dynamic coastal features such as saltmarsh, sand dunes, shingle and soft, eroding cliffs especially important. The links between land and sea are an essential part of its unique character. On the low coast, the distinction between land and sea is blurred by the wide and varied band of intertidal habitats and former intertidal land claimed from the sea, some of which has recently been returned to an intertidal state, a trend likely to continue. On the cliffed coast, the distinction is sharp and provides a more immediate impression of change in the eroding cliffs. The quality and health of the marine environment is vital to the area's natural beauty.

Along the undeveloped coast, panoramic and spectacular views - from the coastal marshes, the higher land behind the low coast and from the cliff top are characteristic and varied but all give an impression of wildness and the dominance of the forces of nature.

Ecological interdependencies between land and sea are also important and characteristic, for example breeding and feeding common and grey seals, and four species of tern breeding on beaches and feeding in the sea. Estuaries and creeks provide nursery areas for fish and the unique and extensive intertidal and offshore chalk platform and reef between Weybourne and Trimingham is important for marine biodiversity as well as local fishing. The links extend to local livelihoods and culture. Fishing and the 'longshore economy'\* have played and still play an important part in the character of coastal settlements. The quality of the beaches, coastal landscape and wildlife attract many visitors, providing a major component of the local economy and many local residents also enjoy the many recreational opportunities on offer, which include walking, watersports, bird watching and fishing.

The area is rich in archaeological and historical sites, many of which have roots in the coastal location, with remains and features dating back to the Palaeolithic and giving a strong 'time depth' to much of its landscape. The intertidal 'Seahenge' and Salthouse Heath burial ground from the Bronze Age, Branodunum Roman coastal fort, medieval harbours and structures and coastal airfields and bases from the Second World War are all examples. Its important heritage of Ice Age landforms contributes another time-depth dimension.

The three separate parts of the AONB and the exclusion of the main holiday towns of Sheringham and Cromer and the section of coast between them, and the villages of Overstrand and Mundesley, was decided during the designation process because of existing development at that time.

It includes the coastal plain of the North Norfolk Heritage Coast, a section of undeveloped coast from Holme-next-the-Sea to Weybourne, with its internationally important and dynamic saltmarshes, dunes and shingle, the best known features being the barrier features of Scolt Head Island and Blakeney Point with the shingle bank connecting the latter to the coast. Creeks run through the marshes, connecting small, sheltered harbours to the sea.

At national level, it is one of the few remaining examples of relatively undeveloped and unspoilt coastal areas of this character. At a regional level

\*Traditional activities, including those of common rights, such as shellfish gathering and cultivation, samphire gathering, bait digging and wildfowling, which are widely recognised by Natural England and the other relevant authorities as a particularly important aspect of the local culture and economy at this site. Such activities are generally seasonal in nature, localised in their occurrence, employ traditional methods and place a strong emphasis on the principles of sustainability. it forms a wild, rich and diverse complement to the intensive agricultural landscapes that dominate East Anglia.

The transition from the flat marshes to the coastal slopes behind is sharp, marking a former cliff line and more or less following the coast road, which runs through a string of coastal villages and the larger town of Wells-next-the-Sea. Above the coastal slope, a rolling plateau landscape based on chalk covered by glacial drift, with large arable fields and cut by chalk streams to form quiet, secluded valleys is reminiscent of the Lincolnshire and Yorkshire Wolds.

At Weybourne, spectacular and geologically important soft cliffs of sands, gravels and muds derived from glacial moraines start abruptly and continue eastwards in this main section of the area. The cliffs are unstable and of easily eroded material; the slumped cliff slopes contain a wide variety of habitats and are important for both plant and invertebrate communities. Inland, the moraine material of the Cromer Ridge, which meets the sea between Overstrand and Trimingham, forms a relatively hilly landscape with woodland and heaths amongst arable farmland.

In the west, the 'outlier' between the Woottons and Dersingham includes part of the Sandringham Estate, the settlements of Sandringham, Wolferton and Castle Rising as well as a large area of Wash mudflats and flat arable land reclaimed from former intertidal areas. Inland, higher areas based on a north-south ridge of Cretaceous greensand, locally known as carstone and which extends into the southern extension of the main section of the AONB north of Snettisham, is more wooded and heathy. Dersingham Bog is the largest and most intact example of an acid valley mire in East Anglia, which is bordered on one side by an escarpment marking the edge of an ancient coastline.

In the eastern 'outlier' between Sea Palling and Winterton-on-Sea a band of acidic dunes, different in character from those of the north Norfolk coast, separates the sea from low-lying wet pastures and woodlands and the small villages of Waxham, Horsey and Somerton, providing a link to the distinctive landscape of the Norfolk and Suffolk Broads.

The many nature conservation designations testify to the area's national and international importance for wildlife and geology. Coastal and intertidal habitats (cliffs, shingle banks, sand dunes, lagoons, saltmarsh, mudflats, sandflats and freshwater marsh) and the birds and other wildlife they support (particularly the wildfowl and waders in the areas of the North Norfolk Heritage Coast and the Wash), together with some inland habitats such as lowland heath, are particularly important. Iconic and easily seen coastal birds include vast skeins of pink-footed geese in winter and marsh harriers, as well as the more secretive bittern and marsh tit; natterjack toads inhabit the dunes. In the coastal hinterland, nightjars and woodlarks breed on the heaths, and the open, rolling farmland supports increasingly threatened birds such as grey partridge, corn bunting and turtle dove. Ancient woodland is relatively scare in the area but more valuable locally as a result. More recent plantations and shelter belts add to the character and diversity of a mainly open landscape. Much of the undeveloped coast, most notably the North Norfolk Heritage Coast but also parts of the Wash coast, the cliffed coast and the dune coast of the eastern outlier, have a wilderness quality rare in lowland England. Inland also, the area's perceived qualities of relative remoteness and tranquillity - it's quiet and peaceful atmosphere and relaxed pace of life - are qualities reflected in art and literature, and are often mentioned today as those that people particularly value. The area is noted for the quality of its night skies, the relative lack of artificial lighting away from main roads and towns providing fine views of constellations and occasionally the northern lights.

### SUMMARY OF KEY QUALITIES OF NATURAL BEAUTY OF THE NORFOLK COAST

#### 1. DYNAMIC CHARACTER AND GEOMORPHOLOGY OF THE COAST

Movement and interchange of internationally recognised geomorphological features and habitats.

### 2. STRONG AND DISTINCTIVE LINKS BETWEEN LAND AND SEA

The area's distinctive and unique character is based on the visual, ecological, socio-economic and functional links between land and sea.

### 3. DIVERSITY AND INTEGRITY OF LANDSCAPE, SEASCAPE AND SETTLEMENT CHARACTER

Key quality is based on maintaining diversity of character types rather than uniformity across the area, including landscapes and seascapes, settlement pattern, building materials and styles.

#### 4. EXCEPTIONALLY IMPORTANT, VARIED AND DISTINCTIVE BIODIVERSITY, BASED ON LOCALLY DISTINCTIVE HABITATS

Recognised by a range of national and international designations. Coastal habitats are particularly important and most famous for birds, supporting iconic species. Inland habitats and species are also important, particularly lowland heath.

### 5. NATIONALLY AND INTERNATIONALLY IMPORTANT GEOLOGY

Mainly based on past glaciation and current coastal processes. Includes landforms and landscape scale features as well as individual sites.

### 6. SENSE OF REMOTENESS, TRANQUILLITY AND WILDNESS

A low level of development and population density for lowland coastal England, leading to dark night skies and a general sense of remoteness and tranquillity away from busier roads and settlements and, particularly for undeveloped parts of the coast, of wildness.

#### 7. RICHNESS OF ARCHAEOLOGICAL HERITAGE AND HISTORIC ENVIRONMENT, PARTICULARLY THAT RELATING TO THE COAST AND ITS CHARACTER.

Evidence and features of human use of the area since prehistoric times and links to current uses and features.

# 3.2 Assessment of the condition of the area's natural beauty

The following summary assessment of seven key qualities of natural beauty (QNB) is based on a detailed condition assessment, provided as a separate appendix.

GREEN quality is being conserved and enhanced

AMBER some grounds for concern

**RED** quality is not being conserved and enhanced

#### 1. DYNAMIC CHARACTER AND GEOMORPHOLOGY OF THE COAST

Movement and interchange of internationally recognised geomorphological features and habitats.

#### Summary assessment

Some form of flood defences exist for much of the 'low' coast from the western outlier to Weybourne but extensive marshes, mud and sand flats in front of sea banks means that the coast is extensively subject to change through the action of natural forces and coastal processes at present, maintaining the existing range of dynamic coastal geomorphological features and coastal habitats.

Realignment schemes and sympathetic management changes have taken place and the future trend is likely to be continued realignment.

Extensive stretches of the cliffed coastline are able to erode and change naturally, maintaining a dynamic variety of habitats and providing vital sediment for beaches down-drift. Major settlements are protected by hard defences, which are likely to remain for the foreseeable future and constrain coastal change in these locations. Away from settlements the current and future trend is for reduced defence.

**Overall assessment:** 

Since designation: GREEN Currently: GREEN

#### 2. STRONG AND DISTINCTIVE LINKS BETWEEN LAND AND SEA

The area's distinctive and unique character is based on the visual, ecological, socio-economic and functional links between land and sea.

#### Summary assessment

Ecological links are generally sound. A few species depending on both land and sea are under pressure, although not necessarily because ecological links are failing. Intertidal areas are a key component in the area's biodiversity and landscape / seascape character. Coastal wildlife and seascapes are strong factors in the local tourism industry.

Economic and social links with the sea remain strong, although different in emphasis from the past. Many local people maintain an active involvement with the coast e.g. through recreational activities such as sailing, through the 'longshore economy', including common rights (for example shellfish and samphire gathering), although wildfowling has decreased with increasing numbers of visitors. The local fishing industry, although employing few people, is relatively stable and continues to constitute a part of the area's character. Coastal water quality and the quality of beaches is generally good, providing a suitable environment for coastal recreation and bringing large numbers of visitors at peak times.

Panoramic coastal views and seascapes remain distinctive in character, although the wilderness quality of the seascapes of the North Norfolk Heritage Coast has been affected recently by the development of offshore wind farms, with additional wind farms consented (see QNB 6).

#### **Overall assessment:**

Since designation: GREEN Currently: AMBER

#### 3. DIVERSITY AND INTEGRITY OF LANDSCAPE, SEASCAPE AND SETTLEMENT CHARACTER

Key quality is based on maintaining diversity of character types rather than uniformity across the area, including landscapes and seascapes, settlement pattern, building materials and styles.

#### Summary assessment

Since designation in the 1960s some significant developments in the area have adversely affected the character of parts of the Norfolk Coast, mainly the A149 bypass in the western parts of the area and the expansion of some settlements outside or on the border of the AONB into the designated area – principally in the Cromer-Sheringham-Holt triangle.

Considerable development has taken place on the edge of the AONB, either straddling or just outside the boundary. Bacton Gas Terminal was anticipated at the time of designation and the boundary drawn on its anticipated western edge; the terminal exerts a strong influence on the character of this part of the area. Boundary settlements where particularly significant expansion has occurred include Dersingham, Snettisham, Heacham and the Woottons in the western part of the area; Holt, Sheringham and Cromer in the northern part of the area – although most boundary settlements have expanded noticeably. These have some impact on the setting of the AONB as well as adding to recreational pressures.

Within the AONB settlements have generally expanded to some extent, although designation of the cores of most AONB settlements as Conservation Areas has helped to maintain the character of these areas. Growth has not necessarily had a significant effect on the area's character in itself, although insensitive changes to building and settlement character from building alterations / extensions and security lighting are a concern.

The wilderness character of seascapes on a large proportion of the undeveloped coast, principally the North Norfolk Heritage Coast, has been adversely affected by the development of offshore wind farms.

Otherwise in the wider coast and countryside of the Norfolk Coast, diversity and integrity of character has remained relatively conserved, although agricultural production has generally intensified in line with national trends. Recent changes having a minor effect on character include agricultural irrigation reservoirs (relatively few) and onshore wind farms (none recently approved in the AONB, although some outside the area will be visible to some extent).

#### Overall assessment:

Since designation: AMBER Currently: AMBER

#### 4. EXCEPTIONALLY IMPORTANT, VARIED AND DISTINCTIVE BIODIVERSITY, BASED ON LOCALLY DISTINCTIVE HABITATS.

Recognised by a range of national and international designations. Coastal habitats are particularly important and most famous for birds, supporting iconic species. Inland habitats and species are also important, particularly lowland heath.

#### Summary assessment

Coastal nature reserves in the area were amongst the first to be established so sympathetic management by conservation organisations has long been in place. 95% of the area's Sites of Special Scientific Interest (SSSI), comprising approx 27% in total of the area, are in good condition, comparing very favourably with other AONBs and national parks in general. Populations of most high profile, characteristic bird species are stable or increasing at present. Some of the relatively few exceptions are affected by pressure from coastal visitors, although this is not the only factor.

50% of the area is covered by Environmental Stewardship agreements, including 29% of the area's Biodiversity Action Plan (BAP) habitats.

The benefits of this on biodiversity in the wider countryside of the area are not quantified, however. Statistically valid data on farmland bird populations, a useful high level indicator, are not available for the AONB although individual species such as turtle dove, for which the Norfolk Coast has been known as something of a stronghold, are known to be much reduced in line with national trends.

Assessment of the ecological status of the area's rivers under the Water Framework Directive suggests that 17% of their lengths are in poor condition, over 80% in moderate condition although initiatives are in progress to address these issues.

#### **Overall assessment:**

Since designation: GREEN for designated sites, AMBER for wider countryside Currently: GREEN for designated sites, AMBER for wider countryside

#### 5. NATIONALLY AND INTERNATIONALLY IMPORTANT GEOLOGY

Mainly based on past glaciation and current coastal processes. Includes landforms and landscape scale features as well as individual sites.

#### Summary assessment

At least partly because of the relatively undeveloped nature of the area, large-scale geological formations, features and landforms are largely intact and visible in the landscape, and most are accessible. Coastal geomorphological features are dynamic and internationally known as classic examples (see QNB1). Individual sites are mostly the result of extractive activity, now almost all inactive. Many of these provide sites for geological record and study although not all are accessible or in good condition, and few have interpretation.

#### Overall assessment:

Since designation: GREEN Currently: GREEN

#### 6. SENSE OF REMOTENESS, TRANQUILLITY AND WILDNESS

A low level of development and population density for lowland coastal England, leading to dark night skies and a general sense of remoteness and tranquillity away from busier roads and settlements and, particularly for undeveloped parts of the coast, of wildness.

#### Summary assessment

Given the amount of development in and bordering the AONB since designation in 1968, the population both in and close to has clearly increased significantly, although it is still arguably of low density compared with lowland England as a whole.

Recent trends suggest a slight reduction in the population of some coastal parishes, possibly because of second / holiday homes. This may contribute to a sense of tranquillity but also has negative impacts on local services and communities and increases the pressure for developments including affordable housing.

Visitor numbers have increased significantly since designation and pressures arising from this were the main reason given for the foundation of the Norfolk Coast Project in the early 1990s. Evidence for the last five years suggests that visitor figures are stable, with a large difference between peak and low season numbers on the coast.

Most of the area has been objectively assessed as tranquil or very tranquil in a 2006 national study by CPRE, with western and eastern outliers and the North Norfolk Heritage Coast being the most tranquil areas, although the study has not been repeated to enable an assessment of trends.

Recent night sky surveys show dark skies away from the larger settlements of a quality to compare with areas that have been certified as 'dark sky reserves', although no data is yet available to show trends.

Recent development of wind farms off the north Norfolk coast have had a significant negative impact on the wilderness quality of the undeveloped coast, as noted by local observers.

#### Overall assessment: Since designation: AMBER Currently: AMBER

#### 7. RICHNESS OF ARCHAEOLOGICAL HERITAGE AND HISTORIC ENVIRONMENT, PARTICULARLY THAT RELATING TO THE COAST AND ITS CHARACTER.

Evidence and features of human use of the area since prehistoric times and links to current uses and features.

#### Summary assessment

Of the large number of designated heritage assets from a range of periods in the AONB, only around 1.5% are assessed as being 'at risk', which is at the lower end of the range for English AONBs as a whole. Two of the heritage assets 'at risk' assessments appear to be because of their vulnerability to coastal change / flooding.

Although agri-environment schemes have assisted in providing beneficial management for some archaeological sites, archaeological damage has occurred from ploughing and continues in some cases. There has also been some loss of historic landscape patterns, for example field boundaries since designation although this has also been reduced by changes in agricultural grants and incentives.

Coastal and offshore development such as wind farms has affected the setting of some coastal heritage assets.

#### Overall assessment: Since designation: GREEN Currently: GREEN

# 3.3 Key drivers of change in the area

There are key drivers of change acting on the area that have potential to affect its special qualities of natural beauty significantly now and in the future.

The purpose of the management plan is not to preserve the area unchanged, which would anyway be unrealistic; it has changed over time in response to environmental and human influences and will continue to do so. Rather, the aim is to manage change so that its special characteristics of natural beauty are conserved and enhanced.

Some of these drivers of change can be managed directly and locally, through the powers of individual partners or by new partnership initiatives; others we can only aim to influence indirectly but all are legitimate considerations within this plan.

These drivers for change and their potential impacts on the area's natural beauty are considered below and the general approach to management is based on the characteristics of the drivers. Not all of these drivers are likely to have significant impacts within the five year timescale of this Management Plan but these still require action to address longer term impacts. Most of these influences will have impacts under more than one theme in section 4.

#### **Coastal processes**

All coastlines are naturally dynamic, although changing at different rates; the coastline of Norfolk is especially so, subject to continuous and often rapid change. For the Norfolk Coast AONB, this is a major aspect of its special character. The geology and dynamic landforms of the AONB coastline (including submarine features), with its variety and combination of features responding to coastal processes, make it of international scientific importance, in addition to its landscape qualities.

As historical and archaeological records and geological research show, this coastline has been changing for millennia: there are records of many 'lost villages' along the cliffs; sediment cores drilled across the North Norfolk Heritage Coast show a succession of alternating intertidal and freshwater habitats; in Roman times the Broads area was a navigable estuary.

Sediment transport processes driven by tides and waves interacting with coastal and undersea

geomorphology act on the coastline to change it, eroding in some places and building in others. These processes are large scale, so what happens in the marine and coastal environment well outside the area, as well as along its immediate coastline, needs to be considered in managing its coastline. Coastal defence structures exist along much of the area's coastline, in some cases affecting the natural operation of coastal processes.

The tidal storm surge in December 2013, the most severe for decades, highlighted the forces acting on the coast and particularly the changes that can take place in extreme events over very short timescales.

The British landmass is still adjusting to the removal of the huge weight of ice sheets over its northern parts during the last Ice Age, by tilting on a north west / south east axis (isostatic readjustment). This is still causing relative sea level rise of around 1-2 mm per year on the Norfolk coastline. Although this has some impact on erosion rates on the cliffed coastline, saltmarshes have easily been able to keep up with this rise through sediment accretion.

Offshore dredging of aggregates (sand and gravel) and offshore developments also have the potential to affect the coastline through complex interaction with sediment supply and transport systems (as well as potential effects on marine ecosystems and species). The actual effects, including potential cumulative and long-term effects, are difficult to assess in an environment of complex interactions and a lack of data, and often not fully understood or generally agreed, although there is no evidence that current offshore activities are having an impact on the coast.

#### Based on historic rates of change, continuing coastal change in areas where defences currently allow this would support the conservation and enhancement of natural beauty in general.

For the western parts of the AONB, including the western outlier, to Weybourne the current mosaic of intertidal features and habitats would be expected to change but to retain its character overall. Defences, where necessary to protect settlements, would be expected to be able to cope with limited sea level rise from isostatic readjustment. Former intertidal areas now protected from the sea by sea defence banks would gradually become further below the saltmarshes as the level of the latter would rise by accumulation of sediment, and would need to be returned to an intertidal state by careful management to maintain a functioning system. This would mean some loss of valued wildlife habitats and landscape elements, but replacement by others of a consistent character overall.

On the cliffed coastline, continued erosion and slumping would maintain the biodiversity, geological importance and landscape character of the cliffs. There would, however, be implications for some coastal communities where the cliffs are not fronted by defences or where these become ineffective, and means of enabling settlements to 'roll back' in a way that is both sensitive to conserving natural beauty and the needs of local communities would need to be identified and implemented.

In the Horsey-Winterton part of the AONB, the current Shoreline Management Plan policy is to maintain coastal defences.

However, the prospect of significant sea level rise caused by global warming, far above the rate from isostatic readjustment, is likely to affect future scenarios significantly. Shoreline Management Plans<sup>21</sup> are the recognised means of managing the coastline within the AONB.

Consideration of current and potential future effects of coastal processes and options for management can be found in table 5, Appendix 3 of the Strategic Environmental Assessment (SEA) for this plan.

The approach to management of coastal processes in this plan is:

- Ensure that the predictions of coastal change and its impacts are better understood and inform key decisions that affect the coastal zone.
- Work within the Shoreline Management Plan to plan and prepare for managed change if necessary which maintains the special qualities of the area in such a way that any negative impacts on coastal communities and habitats can be properly mitigated.

#### Climate change

Scientific research and historic records show that global and local climates have changed over geological and shorter timescales, through natural cycles and events. However, there is almost unanimous consensus in the scientific community, based on a vast body of evidence, that emission of 'greenhouse gases', mainly carbon dioxide from burning fossil fuels, is driving relatively rapid global climate change. Although the overall global effect is climate warming, there may be local cooling effects through changes in ocean currents and large scale weather systems. Despite the observed land surface temperature change in recent years remaining almost flat, the underlying trends remain valid.

Recent analysis suggests that the global target of a limit of 2°C beyond which more serious impacts of climate change are unavoidable, is unlikely to be met under realistic emissions scenarios. The unknown contributions from 'feedback' mechanisms that are as yet poorly understood and unpredictable, such as the release of carbon from permafrost and marine methane hydrates, which might be triggered by higher global temperatures, could further magnify the effect.<sup>22</sup>

Predictions of climate change are uncertain and highly variable, depending on future emissions scenarios and geography. The figures used here are based on those from the latest UK Climate Impacts Programme with Predictions report (UKCP 2009).<sup>23</sup> However, predictions are being constantly revised and there have been continually increasing global greenhouse gas emissions since the baselines on which these predictions are founded, so revised predictions are likely to suggest higher figures / shorter timescales for change.

Temperature and rainfall predictions are made for different regions of the UK based on low, medium and high emissions scenarios relative to a 1961 to 1990 baseline for the 2020s, 2050s and 2080s. Across all emissions scenarios for the East of England:

- Winter and summer mean temperatures are predicted to increase by between 0.5-over 2°C by the 2020s, 1-4°C or more by the 2050s and about 1.5- 6°C or more by the 2080s.
- Summer mean daily maximum and minimum temperatures are predicted to increase by about 0.5- 3°C or more by the 2020s, 1-5.5°C or more by the 2050s and 1.2 to 8-10°C by the 2080s.

Precipitation predictions are more uncertain. Annual mean precipitation may not change greatly, but...

- Winter mean precipitation is predicted to increase by anything up to 16% by the 2020s, up to 35% by the 2050s and up to over 50% by the 2080s
- Summer mean precipitation is predicted to change by around -20% to +15% by the 2020s, -40% to +15% by the 2050s and -50% to +10% by the 2080s

However, within this context of longer term climate change, shorter term forecasts are uncertain and weather may not follow these trends within the five year timescale of the Management Plan. Other indirect impacts of atmospheric carbon dioxide increase and climate change, including jet stream disruption, frequency of extreme weather events, polar ice recession, changes in ocean currents and ocean acidification are not quantified but all are likely to have additional impacts. The assessment within UKCP09 is that it is very unlikely that an abrupt change to the Atlantic Ocean Circulation (Gulf Stream), which exerts a strong influence on UK climate, will occur this century.

#### Marine impacts

Sea level rise is related to climate change, a warmer global climate giving rise to both thermal expansion of sea water and input of additional water through melting of land ice (Antarctic and Greenland ice sheets, and mountain ice caps and glaciers), with temperature increases predicted to be more marked for polar and high latitude regions. The seas warm much more slowly than the air so ocean warming and sea level rise lag behind atmospheric temperature changes; even if the trend of global air temperature increase were to stop now, sea temperature rise and other associated changes would continue for decades or longer.

Sea levels rose by about 1mm a year during the 20th century, allowing for isostatic readjustment (*see 'Coastal processes'*). The rate since the 1990s has been higher than this, and globally sea level rise is currently about 3mm a year.

In UKCP09 the range of absolute sea level rise around the UK (before land movements are included) is projected to be between 12 and 76 cm for the period 1990–2095. Taking vertical land movement into account gives slightly larger sea level rise projections relative to the land in the more southern parts of the UK where land is subsiding. For London (the nearest reference point to the East of England) sea level rise is predicted to be between about 8-11cm by 2020, between about 18-26cm by 2050 and between about 30-43cm by 2080.

Future projected trends in storm surge height are small everywhere around the UK, and seasonal mean and extreme waves are generally projected to experience little change in the southern North Sea.

The shelf seas around the UK are projected to be 1.5 to 4°C warmer and ~0.2 practical salinity units (p.s.u.) fresher (lower salinity) by the end of the 21st century. The strength and period of summer stratification is projected to increase in the future.

#### Current and potential future effects

Although there are no current significant clear-cut changes in natural beauty due to local climate change, there is already evidence that climate change and associated changes are acting on features and species that are characteristic of the area, for example the migration and distribution of wintering wildfowl and waders and ranges of mobile invertebrates and marine species.

#### In the longer term, climate change is likely to be a very significant driver of change for the area's current characteristics of natural beauty.

Although it is not possible to predict detailed impacts with any certainty, over the coming decades climate change could have profound effects on:

- Characteristic habitats, landscape features based on these and the species they support (including Biodiversity Action Plan (BAP) habitats and species), and on the marine environment. (sensitivity etc)
- Agriculture, and agricultural landscapes and habitats through changing viability of crops and production methods (e.g. irrigation);
- The local economy and pressures for development, through a changing climate for tourism; and
- Conservation, understanding and enjoyment of heritage assets (including more frequent flooding).

A study on the implications of climate change for the Norfolk Coast's characteristic species and habitats<sup>24</sup> was commissioned by the Norfolk Coast Partnership in 2013. Broadly, the results of the study suggested that:

- For many terrestrial species, significant increases in mean and maximum temperatures *in themselves* might be expected to have little negative impact
- However, associated changes such as precipitation, soil moisture and extreme weather events could mean that this is too simplistic, and that the dependence of many species on complex ecosystems could mean that 'generalist' species are favoured over more specialist, characteristic species.
- Nevertheless, for at least some terrestrial habitats and landscapes, with suitable management it may be possible to maintain something like the current characteristics of the habitats and species they support in their current landscape context for at least some time yet.
- For aquatic habitats and species, both freshwater and marine, changes associated with increased temperatures and associated effects are likely to be more significant.
- Although the factors identified for terrestrial and aquatic habitats also apply to the low-lying coastal

habitats around the western and northern coast of the AONB, which comprise the best known and richest landscapes of the AONB in terms of the variety, abundance and rarity of its wildlife, the overriding factor for these is sea level rise, which is likely to give rise to very significant change to these habitats and landscapes at some time in the future.

The sea level rise effects of global climate change also greatly magnify and accelerate the effects of coastal processes. Whereas it might be possible, if not necessarily desirable from all perspectives, to maintain and even extend sea defences in some places for a considerable period into the future under the historic scenario, this would not be viable with rapid sea level rise.

This would cause additional and increasing problems in maintaining sea defences in their current position, giving rise to threats to coastal settlements, archaeology and buildings (including some of architectural/historical value). It also threatens to damage or destroy characteristic and designated coastal habitats, although it could also lead to the creation of other valuable and characteristic habitats at the same time.

A more detailed consideration of effects of climate change can be found in table 5, Appendix 3 of the Strategic Environmental Assessment.

#### Approach to management

Effective action by individuals and organisations locally to reduce carbon emissions and reduce contributions to climate change are important and will all help to affect the global picture. However, the reduction of greenhouse gas emissions is a global issue that requires concerted action from all countries. However, reducing greenhouse gas emissions locally or even nationally, although important, is not by itself an effective option in terms of managing the local effects of climate change and development of resilience and adaptation to climate change are also important as well as achievable through local action.

There is still much uncertainty about local changes in climate and their potential impacts on the area's natural beauty. The main focus within this plan is therefore:

- continuing to improve and update understanding of local impacts of climate change on natural beauty
- improving resilience and ability to adapt to climate change for key components of the area's natural beauty

#### Policy and socio-economic drivers

Policy decisions and changes at national and international level can affect what happens in the area, either directly or through influencing local policy. Difficult economic conditions persist following the national and global financial crises that developed in 2008 and are a strong driver of national policy. Market forces, the result of society's preferences and decisions, are also a powerful driver of change for example through impacts on the land and sea based economies, and commodity and property prices.

Understanding changes that may potentially arise as a result of such drivers is difficult and likely to change during the lifetime of the plan. The ability to manage the effects of both high level policy and market forces at a local level is limited, although not completely absent.

Current potential and actual key drivers of change in the AONB under this heading include:

#### Development and economic policy

In 2014, economic growth is a high priority for the Government and likely to remain so for at least the lifetime of this plan. This may have implications for the AONB.

Local development (within the AONB and its setting) The National Planning Policy Framework (NPPF), which replaced most previous national planning policy guidance in 2012, retains strong protection for AONBs and national parks, and for many other environmental and cultural designations and assets. It also includes a strong 'presumption in favour of sustainable development' (as a driver of economic growth), which although it does not override this protection, may be leading to further pressure for development in or on the fringe of the AONB.

Any development in the AONB must aim to promote the purpose of designation of the AONB (i.e. conservation and enhancement of natural beauty) and 'major' development must consider the provisions of paragraph 116 of the NPPF.

Local Development Frameworks / Local Plans, developed and administered by local authorities, are the prime local planning policy documents for managing development in the AONB. (see also section 2.2 in this plan)

Estimates of population and trends from the 2001 and 2011 census suggest that the population for parishes wholly within the designated area in 2011 was 13,235, which is 652 (4.7 %) fewer than in 2011 – possibly because of a continuing increase in second / holiday homes. The fall in population is apparently much greater than 4.7 % in some parishes. (see table 4, Appendix 2 of the Strategic Environmental Assessment).

For parishes spanning the boundary of the AONB, the estimated population in 2011 was 59,453, and increase of 2,175 (3.8%) compared with 2001, although this varies from -15% to +13% for different parishes. It also includes the towns and larger settlements on the AONB boundary – North and South Wootton, Snettisham, Heacham, Hunstanton, Cromer, Sheringham and Mundesley.

Provision for 560 new dwellings in the AONB has been made in the North Norfolk Local Development Framework (LDF) (Site Allocations, 2011), most of these being on the fringes of Sheringham and Cromer, and at Wells. Modest allocations for some AONB villages are suggested in the draft allocations for the West Norfolk LDF (2013), although significant growth is anticipated close to the AONB around Hunstanton and Kings Lynn. No draft allocations have yet been published for the Great Yarmouth LDF.

New housing in and around the AONB is likely to remain a strong economic proposition for developers; the quality of the local environment and its popularity with visitors means that new houses sell well at high prices. Although housing construction remains slow under current economic conditions, an increase in housing in the area can be anticipated in the timeframe of the current plan and beyond.

New housing provision in and close to the AONB has potential benefits for the local economy and viability of services and there is a need for 'affordable housing' to enable people working in local jobs, at least some of which contribute to maintaining the area's natural beauty, to live in the area. It can be difficult to finance affordable housing provision without subsidy as part of a commercial housing development, which can lead to development pressures beyond the housing actually required in the area.

In the longer term, it may be necessary in accordance with the Shoreline Management Plan to plan for at least some coastal settlements to 'roll back' or to relocate inland in order to maintain living, working communities on the coast as the coastline changes (see the 'Coastal processes' and 'Climate change' sections above). This may mean planning to build on areas that have previously been outside the settlement development envelope, and in some cases allowing settlements that are currently 'hemmed in' by the AONB boundary to roll back into the AONB. Tourism-related development, including services and provisions for the local tourism industry and diversification of farming enterprises into visitorrelated economic activities, can have economic benefits for local communities but also has potential for significant adverse impacts on the natural beauty on which tourism depends - for example tranquillity, the area's landscape character and through increasing pressures on sensitive habitats and species, especially on the undeveloped coast.

Housing targets also contribute to pressures for expansion of some of the larger settlements on the AONB boundaries, particularly where areas for expansion are limited by the coastline and other factors, and some incursions into the AONB have already taken place. Even new housing outside the AONB boundary can have visual impacts on the setting of the AONB as well as some indirect effects, as noted above.

There are also pressures for other forms of development in the countryside and in some cases potential conflict between government and other guidance and AONB protection – for example telecommunications masts and broadband infrastructure – and there may be others, unforeseen at present, in the future. Although development is likely to bring economic benefits, impacts on the areas natural beauty can undermine the natural capital that underpins the tourism industry and makes this an attractive area to live in and visit. We need to manage development so that it is compatible with AONB designation.

#### National energy policy

The UK Government's commitment to meet 15% of the UK's energy demand from renewable sources, and its desire to provide a more secure supply of energy for the UK, is driving renewable energy development. For the AONB, this is currently apparent in the development of wind farms and solar photo-voltaic arrays.

For wind energy, the main focus at present is on offshore development, although a few relatively small scale onshore wind farms are present in or close to the AONB. Offshore, large wind farms are operating and frequently clearly visible from the AONB - in the Wash off the Lincolnshire coast (Lincs, Lynn, Inner Dowsing), off Sheringham (Sheringham Shoal) and off Winterton-on-Sea (Scroby Sands). Two further offshore wind farms are already consented off the North Norfolk Heritage Coast (Dudgeon and Race Bank) although it looks likely that any other future offshore wind farms will be well offshore. One solar PV array has been granted planning permission in the AONB and a few others on the edge of the area, although visual impacts from these are expected to be limited compared to wind farms.

#### Marine planning

Since the AONB is a coastal designation which includes the intertidal zone, with many ecological, cultural and visual links with the sea, what happens in the marine area is highly relevant to the conservation and enhancement of its natural beauty.

An important provision of the Marine and Coastal Access Act (2009)<sup>25</sup> is the development of Marine Plans, which interpret the principles of the high level marine objectives from the Government's Marine Policy Statement in a detailed spatial management plan for sections of offshore and inshore waters (up to high water on the coast).

The combined East Marine Plan<sup>26</sup>, covering inshore and offshore areas from Flamborough Head to Felixstowe, and so including and relating to part of the AONB, was published in April 2014. The objectives and policies of the plan need to be taken into account by public bodies in making decisions that may affect the marine environment. The plan can potentially help to support the objectives of AONB designation by managing development in the marine area to conserve seascapes, habitats and species that contribute directly or indirectly to natural beauty.

#### Housing development in the visitor catchment

A study in 2006<sup>27</sup> estimated that there were almost 2 million tourism day trips to the area per annum, with a value of around £51 million. More recent estimates available for some individual sites and attractions, together with traffic count figures on the A149 coast road and the Peddars Way and Norfolk Coast Path National Trail, suggest that numbers have probably been fairly stable recently after increasing during the 1990s.

As examples of the scale of numbers at some sites, Titchwell Marsh, Cley Marshes and Lady Anne's Drive at Holkham are estimated to receive up to about 1,000,000 visitors per year, whilst high numbers are also estimated for others such as Sheringham Park (180,000) and Blakeney and Morston quays (140,000).

Within the mix of more traditional recreational activities such as sailing and other forms of boating, windsurfing, wildfowling, sea angling, walking, cycling, walking dogs, browsing in villages and scenic drives, new recreational activities may arise either as short term fashions or more permanent features of the recreational scene. A recent example is kite-based activities on beaches. It is difficult to predict new activities and the opportunities and pressures they may bring, but they need to be managed in a way that is compatible with existing activities and conservation of the area's natural beauty.

Very significant housing growth is anticipated in areas within the wider catchment area of potential day visits to the area over the next five years and beyond – for example around Norwich, Great Yarmouth, Thetford, King's Lynn, Peterborough and Cambridge.

The development of the England Coast Path<sup>28</sup> with associated 'spreading room' by Natural England around the coast under the Marine and Coastal Access Act will continue during the period of the AONB plan. The route of the section from Sea Palling to Weybourne has been approved and is expected to open in 2014, with Hopton to Sea Palling and Weybourne to Hunstanton to follow in succeeding years. This is likely to attract additional visitors, with associated economic benefits, although development of the routes and spreading room will take potential impacts on nature conservation into account.

### Current / potential effects – development and economic policy drivers

Even small-scale development can have impacts on the character of existing settlements, heritage assets and the landscape and seascape character of a wider area depending on design and location. There are also potential associated environmental impacts such as:

- Water resources and effects on natural features dependent on these;
- Capacity of sewage and sewage treatment systems and consequent water quality;
- Transport infrastructure and traffic;
- Light pollution; and
- The tranquillity of the area.
- Unexpected consequences of development on complex relationships and processes, especially in the marine environment (e.g. coastal processes, species and food chains)

Properties bought as second homes, for retirement, as holiday homes, or for buy-to-let cause high property prices, excluding people on relatively low incomes who work in the area from the market. This has impacts on the character and cultural distinctiveness of communities and settlements, with many properties empty for much of the time, and on the local economy. Depending on the ability and resources to influence and manage recreational activities, an increase in visitor numbers driven by local and, perhaps more significantly, regional housing development could potentially have impacts through:

• pressures on some sensitive habitats and species, particularly in coastal locations, through inadvertent damage and disturbance. There are already known pressures and impacts on some sensitive habitats and species in some locations, for example dunes and beach nesting birds. Impacts on ground-nesting, feeding and roosting birds from people walking dogs is a contentious issue on some sections of coast and poorly-controlled dogs can also cause problems with livestock. Impacts may be experienced in conjunction with other pressures, such as those arising from climate change, and may affect habitats and species covered by European designations

• increased traffic levels and associated impacts e.g. erosion of tranquillity, pressures for signage and infrastructure (visual / landscape character impacts), increased local air pollution and carbon emissions, increased congestion and impacts on settlement character

• increased damage to heritage assets

• increasing noise and disturbance from some recreational activities (e.g. aircraft, jet-skis)

• Conflicts between different recreational activities

• increase in litter, including dog fouling (already a recognised problem in many parts of the area, which affects people's enjoyment of natural beauty as well as carrying health risks)

Although there is a likelihood of impacts, there is currently limited information available to predict likely increases in numbers, potential impacts and areas of most sensitivity.

A more detailed consideration of effects can be found in table 5, Appendix 3 of the Strategic Environmental Assessment.

### Agriculture, forestry, fishing and other local economy

Review of the European Common Agricultural Policy (CAP)<sup>29</sup> has recently been completed although exactly how this will translate into national policy and schemes has yet to be finalised.

Environmental schemes and the Rural Development Programme will get a higher proportion of the CAP budget than they did under the previous CAP (12% rather than 9%) although this is less than the maximum 15% that many environmental organisations would have preferred and the overall budget is smaller. From 2015, support for farmers under a new agrienvironment scheme<sup>30</sup> will replace support under existing Environmental Stewardship and forestry grant schemes as agreements under these expire.

A large proportion of the AONB is farmland and environmental organisations also rely on agrienvironment funding to manage reserves, so how the scheme is developed, targeted and applied in the AONB, as well as the funding available, will have a significant influence on the conservation and enhancement of the area's natural beauty.

Global market commodity prices remain volatile, subject to variations from supply and demand, and profit margins in agriculture, forestry and fishing are also affected by high input costs, including fuel and fertiliser. The take-up of the new agri-environment scheme will depend on the availability of funding and judgements by farmers of security of income, environmental and financial considerations, and flexibility of management.

The Water Framework Directive<sup>31</sup>, for which the Environment Agency is the key competent authority, is a powerful policy driver for river catchment improvement. The Directive commits European Union member states to achieve good ecological and chemical status of all water bodies (including marine waters up to one nautical mile from shore) by 2015, or if this is not possible, it allows interim targets to be set for 2015 and 2021 with full compliance by 2027. Under all conditions, it requires that there should be no deterioration in status.

Following more than three years of negotiations, fundamental reform of the European Common Fisheries Policy (CFP)<sup>32</sup> has been agreed. The reforms include a commitment to end overfishing and gradually eliminate discards, providing scope to deliver more sustainable management in European fisheries and support for the owners of small fishing boats in coastal ports. The reforms are due to come into effect from 2014 onwards. A new European Maritime and Fisheries Fund will help to implement the new CFP.

In theory, at least, this should help to support the small scale local fishing industry in the AONB, which contributes to the distinctive character of the area and its communities as well as the local economy although the effects of the revised CFP remain to be seen.

The majority of funding available to support other economic development in Norfolk and Suffolk will be distributed through the New Anglia Local Enterprise Partnership (LEP)<sup>33</sup>. The LEP's Strategic Economic Plan will be finalised in 2014. (see SEA table 2 for summary of thematic objectives)

The Norfolk Rural Development Strategy 2014-20<sup>34</sup> has been produced. Local Development Strategies and the areas for their delivery using a 'Leader' approach, Local Action Groups and the amount of funding that will be available will be finalised in 2014.

### Potential effects – agriculture, forestry, fishing and other local economy drivers

Given the state of development and change in policy and programmes, it is very difficult to assess potential effects on the AONB, although this is likely to become clearer over the next year or so. These could include:

• Changes to the CAP and national delivery of this, as well as commodity prices and operational costs, may have significant effects on agricultural habitats, species and landscapes

• Some operations that are not currently viable may be able to attract funding through the RDP e.g. small scale woodland management

• Changes in crops may affect wildlife and the historic environment, both positively and negatively. For example, loss of sugar beet as a prominent local crop through loss of production support and market viability would be likely to affect farm economics and wildlife, although it could benefit some archaeological sites. Beet is an important 'break' crop in the rotation with no obvious alternative at present and is important for farmland bird species such as skylarks. Wintering geese use harvested beet tops as an important food source and may transfer to other crops (e.g. winter barley), with impacts on the value of the crop

• Demand and profits for increased biofuels/biomass production may increase, with potential changes in crops and characteristic biodiversity and landscapes

• Difficulty in sustainable economic management of some characteristic habitats e.g. heathland, grassland (grazing), woodland may continue, with effects on landscape and wildlife from lack of active management – although RDP funding might be available

• The Environmental Land Management Scheme may not be widely adopted if funding levels are insufficient or compare unfavourably with market prices

• There is a risk of loss of continuity in transferring from pre-existing Environmental Stewardship and woodland grants to the new agri-environment scheme, with possible loss of sensitively managed landscape/ habitats and damage to the historic environment • Economic development funding may drive diversification into other activities e.g. tourism, for smaller farms in particular, with possible landscape impacts but also potentially some relief of recreation pressures on the coast

#### Reduction in public sector funding

Following the economic crash of 2008, Government policy has included reducing the cost of the public sector as part of reducing the UK budget deficit. This has included significant reduction in Government funding to local authorities and AONB partnerships, with further reductions likely for most organisations for the foreseeable future.

Local authorities and other public sector organisations such as the Environment Agency, Natural England and English Heritage have an important role to play in conserving and enhancing aspects of the area's natural beauty.

#### **Potential effects**

Whether, and if so how, the roles and operation of AONB partnerships and partner organisations who play a critical role in meeting AONB objectives are affected by continued reductions in funding remains to be seen.

Overall, the approach in this plan is to:

Improve understanding of issues where necessary

• Manage development to conserve and enhance natural beauty through the local planning system, achieving a consistent and co-ordinated approach across the area, including by using the Integrated Landscape Character Guidance for the area and other guidance such as that provided for National Character Areas.

• Develop a consistent and co-ordinated approach to influencing policy and development issues outside local control that have potential impacts on the area's natural beauty, through the National Association for AONBs and by coordination between local partners.

• Develop local approaches for adaptation to high level policy initiatives, where possible.

• Develop effective and coordinated local targeting and promotion of grant schemes that help to conserve and enhance natural beauty and promote sustainability

# **4. THEMES, OBJECTIVES AND POLICIES**

### 20 year vision for the area

In developing the 2004-09 Management Plan, local people and organisations were asked what they wanted for the future of the Norfolk Coast. Their views were developed into a vision for the area in 20 years time, divided into sections following the themes in this section of the plan. This vision was taken forward into the 2009-14 plan with only minor modifications As it is now ten years since the vision was originally formulated, it has been more extensively refreshed in this 2014-19 plan. The vision covers what needs protecting - and what needs changing. The aim is not for everything to remain the same and it is important to recognise the tension between the character of the area, as seen today, and change and adaptation required to meet the future. Everything in the Management Plan is linked to this vision.

#### Themes in this section of the plan

There are five themes, covering aspects of management of the area:

- Landscape, biodiversity and geodiversity;
- Built and historic environment;
- Farming, forestry and fishing;
- Sustainable communities; and
- Access and recreation.

The objectives and policies have been developed through consideration of the qualities of natural beauty, its condition and the drivers of change from section 3, and what is needed to help to achieve the vision. Each theme section contains:

• An **introduction** containing background information relating to the theme

• The section of the **twenty year vision** relating to this theme;

• A summary of key issues relating to this theme;

• **Objectives**, which are an expression of specific goals over the five year period of the plan and relate to the achievement of the twenty year vision for that theme, against which progress (and possibly setbacks) can be assessed, probably annually, as part of management plan monitoring

• **Policies**, which set out broadly how the Partnership intends to address key issues and achieve the objectives

Actions for each theme section are presented in a separate Action Plan, which will be reviewed and updated annually. Actions may contribute to both objectives and policies; their relevance to these is indicated in the action plan. The actions are intended to be specific initiatives or projects involving the staff team and /or partners, which are over and above partners' normal management operations that contribute to AONB management, and their day to day application of AONB policies.

#### Understanding and education

Understanding of the area, its unique and special qualities and its sensitivities, is an additional crosscutting theme throughout this section and there are objectives and policies relating to understanding and education in all of the sections.

Appreciating what the natural and managed environment of the area provides for people is essential to maintain these vital environmental goods and services (sometimes called ecosystem services). Understanding the natural and managed systems, habitats and species and their sensitivities is essential to enable sustainable use of the area – for environmental and other organisations managing the area, but also for local residents, landowners and farmers, businesses and visitors.

# 4.1 Landscape, biodiversity and geodiversity

#### Introduction

The landscape, in its broadest sense, including its wildlife, habitats, cultural and historic features – how the area looks and how it is perceived by people, using all their senses including emotional response – is the basis of AONB designation. The details of the landscape will change as they always have done in response to physical, economic and social influences but the challenge is to recognise and act to conserve the essential character of the area.

The area's landforms are based fundamentally on its geology and the forces that have acted on it over time – particularly the effects of glaciation, followed by marine erosion and deposition. It is nationally and internationally recognised for its geological and geomorphological features, especially the coast with its variety and combination of features responding to coastal processes.

The qualities of the coast and its relationship with the marine environment and its hinterland are fundamental to the character of the area, and the foundation of its designation. This is a particularly dynamic coastline, subject to continuous and often rapid change, which is an essential part of its special character.

The area's landscapes, and the habitats and species within them, are diverse. The many layers of international, national and local statutory and nonstatutory conservation designations for wildlife and geodiversity testify to the area's importance and are fundamental to protecting the key habitats, features and species which make a major contribution to the area's natural beauty.<sup>15</sup> The international importance of the wildlife and habitats of the marine and intertidal areas of the Wash and North Norfolk Coast is also recognised by its designation as a European Marine Site. Many of the species and habitats are listed in the Norfolk Biodiversity Action Plan<sup>35</sup>, and a number of species are protected in their own right.

Inland from the highly designated coast, important areas of lowland heath remain as remnants of once much more extensive habitat, with relatively small blocks and belts of woodland, including a small amount of ancient woodland. A large part of the area is farmland, so farmland landscapes and wildlife are an important part of the area's natural beauty (see section 4.3). Opportunities to remove overhead electricity supply lines in sensitive landscapes have arisen since 2005 for national parks and AONBs, through an agreement between the Government regulator Ofgem and the Distribution Network Organisation in this area, currently UK Power Networks. Three schemes have been completed so far, with a further scheme in the pipeline and others anticipated in the lifetime of this plan.

#### The European Landscape Convention<sup>36</sup>

The convention was ratified by the UK Government in 2006 and was reaffirmed as being part of Defra's delivery framework in the Natural Environment White Paper, 2011.<sup>37</sup> The UK is recognised as already putting much of the principles of the ELC into practice, for example through the Joint Character Area (now National Character Area) map of England and also through the well established practice of using landscape character assessment to inform local policy making.

#### It defines landscape as:

"Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors."

The convention highlights the need to recognise landscape in law, to develop landscape policies dedicated to the protection, management and creation of landscapes, and to establish procedures for raising awareness and understanding of landscapes and the participation of the general public and other stakeholders in the creation and implementation of landscape policies. It also encourages the integration of landscape into all relevant areas of policy, including cultural, economic and social policies.

### Integrated Landscape Character Assessment for the AONB<sup>20</sup>

An Integrated Landscape Character Assessment and guidance for the AONB have been produced by Partners working together to integrate information on landscape, biodiversity and historic environment

The full Integrated Landscape Character Guidance is a large document, accessible via the Norfolk Coast Partnership website. It consists of:

• An introductory section giving background to the study and explaining how to use the guidance for different user groups;

• An overview of the data used to compile the integrated character types and guidance;

• A section on general character and pressures for change in the area; and

• A section for each of the 16 distinct landscape character types in the area, comprising:

- An integrated description of its character and development, including sub-areas;
- The key characteristics that are sensitive to change, and key forces for change in this landscape character type;
- A vision for the future of this landscape character type;
- Recommendations / guidance for management to achieve the vision; and
- Maps showing local landscape character areas and the information layers that have gone into producing the integrated guidance.

#### Biodiversity 2020<sup>38</sup>

Launched in 2011, "Biodiversity 2020: A strategy for England's wildlife and ecosystem services" outlines the strategic direction for biodiversity policy for the next decade on land (including rivers and lakes) and at sea, building upon the Natural Environment White Paper, 'The Natural Choice' and linked to the National Ecosystem Assessment and the recommendations in a report on the State of England's wildlife sites by Prof John Lawton in 2010, 'Making Space for Nature'.

A key conclusion of 'Making Space for Nature' is that England's collection of wildlife sites does not currently comprise a coherent and resilient ecological network that is capable of coping with the challenge of climate change and other pressures. The report recommends that we address this by:

• Improving the quality of current sites by better habitat management.

• Increasing the size of current wildlife sites.

• Enhancing connections between, or join up, sites, either through physical corridors, or through 'stepping stones'.

• Creating new sites.

• Reducing the pressures on wildlife by improving the wider environment, including through buffering wildlife sites.

In short – more, bigger, better and joined up sites to create a sustainable, resilient and effective ecological network.

AONB Partnerships clearly have an important part to play in helping to deliver Biodiversity 2020 targets. Action 1.1.9 states: *"Encourage and support new and existing large scale initiatives for improved ecological networks across the Area of Outstanding Natural Beauty (AONB) designated landscapes"*. The key outcome in Biodiversity 2020 for AONB Partnerships is Outcome 1c: *"By 2020, at least 17% of land and inland water, especially areas of particular importance*  for biodiversity and ecosystem services, conserved through effective, integrated and joined up approaches to safeguard biodiversity and ecosystem services including through management of our existing systems of protected areas and the establishment of nature improvement areas."

This plan aims to promote a coordinated, landscapescale approach to conserving and enhancing ecosystems and to contribute to Biodiversity 2020 targets. One example of a current large-scale ecosystems project is the Nine Chalk Rivers programme to restore and enhance the area's rivers.

#### Vision: in 2034...

The Norfolk Coast will be richly diverse, with distinctive landscapes, wildlife, settlements, geological features, building styles and materials, communities, history and culture.

Necessary development, including outside the area and in the marine environment, will have been managed so that the area will still be essentially unspoilt with a strong feeling of remoteness, peace and tranquillity, with wide skyscapes, seascapes and dark night skies that show the richness and detail of constellations. The marine environment will be sustainably managed in a way that takes full account of the area's important links with the sea.

The coast will retain a strong feeling of wilderness and of being exposed to and shaped by the elements. In general, there will have been a managed approach to achieving a more naturally functioning coastline, which will be increasingly valuable for its habitats and the species they support, including breeding, migrating and wintering birds. Where it has been deemed necessary to maintain coastal defences, this will have been done in the most sensitive way possible in terms of sustainability and visual and wildlife impacts.

Habitats will have been improved, increased and linked to enable adaptation of the area's biodiversity to climate change. The area's rivers and estuaries will be in good ecological condition, providing a passage for migratory species. All parts of the area, not just designated sites, will support a rich diversity of characteristic wildlife and habitats associated with local environmental variations and management, including species and habitats of national and international importance, although these will not necessarily be exactly the same as in 2014. Where coastal habitats have been lost through realignment they will have been replaced elsewhere, and plans for managing future loss will have been developed. The landscape will show many links with history, with features and patterns created by past cultures and land use, and with its geological past through large scale features and individual sites. The value of the landscape and the story it tells will be widely understood.

## Key issues relating to natural beauty for 2014-19 plan

In the longer term, there is likely to be potential loss of, or at least major change to, existing dynamic coastal geomorphology and coastal / intertidal habitats of the North Norfolk Heritage Coast through sea level rise. To provide for effective mitigation and adaptation there is a need to plan well in advance.

Impacts on biodiversity and landscape features from climate change (other than sea level rise); are also expected; although uncertain, these are likely to be more significant for aquatic (including marine) than terrestrial species and habitats. Ground water availability and flows in water courses are likely to be affected, and acidification of the sea through increased dissolved carbon dioxide affects marine ecology. Some impacts are beginning to be apparent now but there is also a need to plan for increased resilience in the longer term.

Changes to marine, freshwater and terrestrial ecology from climate change are likely to have impacts on species relying on one or more of these e.g. marine food sources.

A general decline in biodiversity is apparent, particularly away from designated sites. There is an international, national and local responsibility to reverse this decline and meet Biodiversity 2020 targets.

Non-native invasive species exist in places but are not currently a major issue affecting native biodiversity in the area. There is a possibility that they may become more of a problem in future, possibly driven by climate change in some cases and including marine species.

In addition to development that has been planned and consented, there are potential additional impacts of future offshore, coastal and terrestrial developments on existing landscape and seascape character, which may need to be avoided, mitigated or as a last resort compensated for.

Development both within the area and within travelling distance to it may lead to continued gradual erosion of tranquillity and wilderness quality, for example through roads, car parking, lighting, traffic and numbers and activities of visitors. (see section 4.5)

There is generally a low awareness and understanding of geodiversity and its importance, with little information aimed at non-specialists available. Some individual sites are in poor condition through lack of maintenance.

The area's rivers, which are important ecological and landscape features in their own right and key links between land and sea, are not currently in good ecological condition, although work is underway to address this.

#### Objectives 2014-19: by 2019...

#### Landscape:

**OL1** The integrity and diversity of the area's landscapes and seascapes will have been maintained and preferably enhanced, assessed with reference to the Integrated Landscape Guidance for the AONB

#### **Biodiversity:**

**OL2** Internationally and nationally designated sites for wildlife will be in favourable condition and under effective management

**OL3** Locally designated sites for wildlife will be under positive management

**OL4** A local expression of Biodiversity 2020 targets for the area will have been developed and a programme for their achievement nearing completion

**OL5** The area's rivers and estuaries will be in good ecological condition or approaching this state

#### Geodiversity:

**OL6** Large scale geodiversity features, including dynamic coastal features will have been conserved so that their integrity and their influence on the landscape remains apparent

**OL7** Significant local geodiversity sites will be in positive management

**OL8** The area's geodiversity will be better understood and appreciated by decision-makers and the public, and public access and information for a range of sites will be available

#### Policies 2014-19

Members of the Norfolk Coast Partnership, including the staff team will, cooperating where necessary...

**PL1** Refer to and use the Integrated Landscape Character Guidance for the AONB to guide decision making and delivery of conservation objectives across the area

**PL2** Continue to promote understanding of the area's key qualities of natural beauty, particularly those less understood and valued at present and including seascapes and the marine environment, and take account of these in decision-making

**PL3** Continue to improve understanding of changes to landscape and biodiversity arising from climate change (including sea level rise and other effects) and other drivers, and plan to adapt to and mitigate these changes

**PL4** Work together on a landscape scale to improve resilience to change for key habitats and species through development of ecological networks that increase, extend, link and buffer key habitat areas

**PL5** Be proactive to reduce and manage adverse impacts on the key qualities of natural beauty from past development and activities, as well as resist and mitigate damaging new impacts and influence decisions by organisations outside the Partnership

**PL6** Protect the area's distinctive native biodiversity from the impacts of invasive non-native species where possible by restricting pathways of introduction and carrying out targeted eradications

**PL7** Plan and prepare for implementation of coastal realignment where necessary to allow maximum ability to adapt and maintain active coastal geomorphology, landscape and seascape character including ecological links between land and sea, taking into account conservation objectives for coastal sites and the interests of coastal communities (*see also policy PC8*)

**PL8** Identify and implement opportunities for the relocation of key habitats and features that are threatened by coastal change

**PL9** Take into account in plans and decision-making the services to society that habitats in the AONB provide (eco-systems services)

**PL10** Work with landowners to bring Sites of Special Scientific Interest, County Wildlife Sites and other Biodiversity Action Plan habitats and non-statutory geodiversity sites into positive management where this is required

# 4.2 Built and historic environment

#### Introduction

Important archaeological features and artefacts have been found in both terrestrial and intertidal areas. Flint tools made by Palaeolithic hunter-gatherers are the earliest evidence of human occupation and use of the area, dating back to around half a million years ago. Recent nationally important discoveries at Happisburgh (outside the AONB) dating back at least 780,000 years emphasise the importance and potential of this stretch of coastline. More recent archaeological evidence, following the end of the last Ice Age about 10,000 years ago, is more plentiful. Artefacts and sites from the Mesolithic period (about 10,000 to 6,000 years ago) and Neolithic period (about 6,000 to 4,000 years ago) have been discovered. The Bronze Age (about 4,000 to 2,700 years ago) is well represented, with numerous burial mounds and the famous timber circle at Holmenext-the-Sea, discovered in the late 1990s. Iron Age forts and treasures, Roman forts and villas and Saxon settlements and cemeteries enrich the picture, which continues through medieval times with the development of fishing and trading ports. Further information on the area's heritage assets in the coastal zone, historic landscape character and other heritage information can be found via English Heritage and the Norfolk Historic Environment Record<sup>39</sup>.

Traditional buildings make a strong contribution to the distinctive character of the area through the use of local vernacular materials, particularly flint in the eastern sector, and chalk and carstone to the west. Villages, consisting largely of modest 18th and 19th century cottages, are clustered along the coast road, most markedly in the chalk downland area where the hinterland is noticeably empty of settlement, punctuated with an occasional isolated farmstead. In the eastern half, small settlements are found inland amongst a network of narrow, winding country lanes. Flint churches, mainly with square towers, are often prominent features in villages, particularly where they are sited on ground rising from sea level, as at Salthouse and Morston. A number of surviving windmills form landmarks in the coastal villages. Traditional farm buildings of flint and soft red brick are common, particularly in the area east of Holkham. Barns and other agricultural buildings often form characteristic blank boundary walls within villages.

Many have been converted to residential use or have become redundant.

Historic parks shape a significant part of the landscape and contain country houses of great variety (Old Hunstanton, Felbrigg, Bayfield, Sheringham, Holkham, Sandringham). There is also a strong Arts and Crafts influence on the design of a number of early 20th century country houses found between Holt and Mundesley. In addition to their visual contribution, these historic buildings are important for providing wildlife habitat, in particular for bats, barn owls, swallows and house martins. Traditional lime mortar also provides habitat for lichens.

The design of some more recent housing development has not always respected local character, although the Town and Country Planning system has been generally effective since designation in managing levels of development, including some affordable housing. The area still has a generally undeveloped character, in common with much of Norfolk.

Traditional materials and designs do not always lend themselves easily to improved environmental performance or for conversion to other uses, but this should be achievable with thought and care. Some new buildings, e.g. the Norfolk Wildlife Trust Visitors Centre at Cley and the Millennium Centre at Brancaster, include innovative sustainable design features, as well as complementing their surroundings.

#### The highway corridor

The network of narrow roads, often hedge-lined and with wide grass verges, makes a significant contribution to the area's landscape and historic character and biodiversity, and needs sensitive management when undertaking signing, maintenance or other traffic management work.

#### Vision: in 2034...

The quality and locally distinct character of the historic environment, including settlement form, character and patterns and in the marine environment, will be evident and valued. It will be understood, recorded, maintained and conserved as far as possible.

Archaeology and historic ruins will have been well conserved and managed, or where this is not feasible will have been recorded. Traditional buildings that contribute to the character of the area will have been well maintained and conserved, including through appropriate productive use where possible. New buildings will have been located and designed to conserve and enhance landscape and settlement character.

Buildings will have been sensitively adapted where necessary to incorporate features that enhance their performance in terms of both local and global environmental sustainability. New buildings, including those using innovative design, will also have these features as well as complementing their surroundings.

Within the constraints of rising sea levels and storm activity the area will retain characteristic coastal settlements and road networks. Coastal settlements will be adapting to change, with new buildings and roads located where they are sustainable in the long term in respect of coastal erosion and flood risk from rivers and the sea while retaining local distinctiveness.

## Key issues relating to natural beauty for 2014-19 plan

Relatively minor individual developments and changes to buildings can accumulate to cause a larger change in overall settlement character.

'Exceptions' sites for affordable housing can deliver affordable housing in response to proven local needs, with minimal landscape impacts. However, affordable housing requirements are often met through a proportion of market housing developments, leading to more housing overall than is required to meet local needs.

New development, both residential and for tourism, can lead to additional pressures on the local environment such as water resources and sewerage (see also section 4.5)

Some historic environment sites are likely to be at risk from climate change related impacts in the longer term, including sea level rise and flooding. Planning to adapt and mitigate impacts needs to happen in the short term.

Understanding and awareness of some historic environment sites may be affected by poor management and information.

Some historic / vernacular buildings are no longer required for their original use and may be unsuitable for modern uses without alteration. It may be necessary to convert some buildings to enable a modern use to preserve them overall.

#### Objectives 2014-19: by 2019...

**OB1** The area's designated heritage assets will be under positive management

**OB2** Measures to improve understanding and conservation of the area's historic and archaeological heritage amongst partners and public will have been implemented

**OB3** The area's key historic environment sites most at risk from climate change-related and other impacts will be known and where appropriate mitigating measures investigated and in progress

#### Policies 2014-19

Members of the Norfolk Coast Partnership, including the staff team will, cooperating where necessary...

**PB1** Ensure that historic and archaeological heritage assets within their ownership or powers of regulation, particularly heritage assets at risk, are recorded, conserved and enhanced

**PB2** Provide opportunities for public understanding and appropriate access to historic environment sites within their ownership and promote this elsewhere, where consistent with conservation objectives

**PB3** Ensure that new development, including changes to existing buildings and infrastructure, within their ownership or powers of regulation are consistent with the special qualities of the area and relevant conservation objectives

**PB4** Demonstrate good practice and provide examples of how to incorporate measures for energy, water use, resource reduction and biodiversity enhancements sensitively into new, vernacular and historic buildings and structures

**PB5** Support new development and conversion that is consistent with local and national planning policy and the principles above, in order to retain and develop residential and employment opportunities that support natural beauty

# 4.3 Farming, forestry and fishing

#### Introduction

Our landscapes and wildlife heritage have been shaped by the decisions of land managers over thousands of years. The management of farmland and woodland for food and other products has been, and still is, the key human influence on the landscape of most of Britain, including most of the Norfolk Coast AONB; approximately half of the designated area is farmland, mainly arable, with about a further 17 % woodland or parkland.<sup>40</sup> Agricultural and parkland landscapes, with field boundaries, hedgerow trees, and belts and blocks of woodland, are an important part of the area's character, contrasting with the relative wildness of coastal landscapes. Parkland and wood pasture includes rare and valuable habitat including occasional veteran trees.

The economic health of farming and woodland management, and the ability of these land uses in the future to deliver environmental benefits at the same time, are vital for the maintenance of a landscape worthy of the AONB designation. The decisions that farmers and land managers take, often influenced by EU and Government policy, determine to a great extent whether society's ambitions for water, wildlife, healthy soil and production of food and other goods can be achieved.

Historically the farmed landscape has reflected the economic and social needs of the time and the area has played an important role in the history of agricultural innovation, for example by 'Coke of Norfolk' in the 17th century. Arable farming has been a major land use since designation, and although profitability has varied over the last decade high quality malting barley is a notable local crop favoured by the soils and climate of north Norfolk. When arable margins are high compared to livestock enterprises, the availability of suitable grazing livestock has made it harder to manage valued conservation habitats such as heathland, downland and grazing marshes. There has been a consequent decline in the quality and quantity of some habitats over many years. However, agri-environment schemes have contributed to conservation and enhancement of landscape, biodiversity and the historic environment and there may be opportunities for new approaches to habitat creation and management, and linking isolated habitats, using socio-economic drivers.

Woodland, copses and even individual trees make an important contribution to the area's landscape character, although it is not rich in woodland generally, particularly ancient woodland. The economic viability of woodland for timber products is relatively low at present but woodland can provide recreational and wildlife benefits as well as supporting income from shooting or other activities. There is also scope for more woodland in appropriate locations, as well as for improved management for a range of uses.

Like agriculture, fishing still has a key role to play in the area's natural beauty. Now based mainly on shellfish and much reduced in economic importance, local fishing activity has shaped the character of coastal settlements. It still contributes to that character in many cases, through activity at harbours and beaches, and through quays, boat and building styles. The area is widely recognised for the quality of its local seafood.

#### Vision: in 2034...

Agriculture will still be the prime means of maintaining the natural beauty of the majority of the area's countryside. Farming and forestry will provide an economically sustainable livelihood through producing crops for a wide range of uses including food and biofuels as well as providing recreational opportunities and habitats for wildlife. Economic sustainability will be assisted where necessary through environmental grants to enable farmers and land managers to maintain and enhance specific landscape features, habitats and species and heritage assets, and use of this support will be actively encouraged.

Farming, the management of woodland and food production in general, including some new crops that are being grown in response to climate change and market demand, will be in tune with the local climate and soil characteristics.

Crop and animal production methods will not impact adversely on water resources and quality, soil structure and local eco-systems and at least maintain, and often enhance, landscape character, local distinctiveness, biodiversity and heritage assets through a mixture of smaller tenant and family owned farms sitting alongside larger estate-based businesses. Farm businesses in the area will be considered to demonstrate good practice and to be at the vanguard of sustainable agricultural management.

Fishing will be an environmentally sustainable and economically viable activity, at least in combination with other economic activities, and will continue to contribute positively to the distinctive character of the area.

#### Key issues for 2014-19 plan

Agricultural changes driven by a range of drivers (CAP reform, agri-environment schemes review, market forces / commodity prices, climate change) may have impacts of on the viability of farming businesses, existing landscape character, biodiversity and the historic environment.

The area's chalk rivers have been affected by run-off of silt and artificial nutrients from farmland and by modification of their courses and profile to improve drainage, affecting diversity of river habitats and species. Many farmland ponds have been filled in or have effectively disappeared through neglect as they are no longer relevant to current farming

Major impacts of climate change on agriculture and woodlands are likely to be over a longer timescale than the five years of the AONB management plan, but adaptation is needed to mitigate predicted impacts, which could include new diseases and invasive species. Changes in temperature, rainfall patterns and extreme weather events (drought, flood and storms) may all affect viability of current crops, cultivation methods and irrigation.

Changes in freshwater and marine ecology linked to climate change are likely to be more rapid than for terrestrial species. For marine habitats and species acidification is an additional factor; marine impacts may increasingly affect the local fishing industry through changes in traditional target species.

Although woodland is not a major feature of the AONB, opportunities exist for improving it as an economic resource as well as benefitting biodiversity, landscape and recreation, and climate change mitigation and adaptation.

#### Objectives 2014-19: by 2019...

**OF1** High take-up of a revised agri-environment scheme, which is appropriate to the area and supports AONB objectives, delivering landscape, biodiversity and historic environment enhancements and supporting sustainable agricultural enterprises, will be in place in the area

**OF2** Improved efficiency of water use and storage, and management of soil and nutrient run-off by agriculture in the area will be in development, reducing impacts on ground water, rivers and other water dependent features, respecting landscape character and contributing to Water Framework Directive and biodiversity objectives **OF3** Changes to new types of crops, such as energy crops, will have taken landscape and ecological character and the historic environment into account

**OF4** There will be increased and improved management of woodland in the area with benefits for biodiversity, businesses and recreation, and development of local supply chains for woodland products

**OF5** The local fishing industry will have remained viable economically and as a way of life and measures / initiatives to support adaptation, if necessary, and sustainability of the local fishing industry will have been continued

#### Policies 2014-19

Members of the Norfolk Coast Partnership, including the staff team will, cooperating where necessary...

**PF1** Aim to develop and maintain understanding of the key issues affecting local farming, farmland habitats and wildlife under changing circumstances within the framework of the new Common Agricultural Policy and influence the development and implementation of the new agri-environment scheme in the area to benefit farming in the AONB and farmland landscapes, habitats and wildlife and its historic environment features

**PF2** Continue to develop support for grazing infrastructure and local grazing networks as a means of maintaining specific areas of distinctive agricultural landscapes and habitats, including historic environment features, and meeting conservation objectives

**PF3** Support development and diversification associated with farming, forestry, fishing and other marine industries which respects, and ideally contributes to, conserving the special qualities of the area, including their enjoyment and understanding

**PF4** Promote and support the development of sustainable practice in farming, forestry and fishing, including through promotion of appropriate grant schemes and advice, and support for cooperation to develop local initiatives and marketing of sustainable local products

**PF5** Promote and implement an integrated catchmentbased approach to all aspects of water management throughout the area to achieve benefits for landscape, biodiversity, the historic environment and the economy

### 4.4 Sustainable communities

#### Introduction

The natural world touches our lives every day and we rely on the natural systems that support us. Our natural environment underpins our health, wealth and happiness and gives us a sense of place, pride and identity. A healthy natural environment can support economic growth and social regeneration, improve public health, improve educational outcomes, reduce crime and antisocial behaviour, improve quality of life and help communities adapt to climate change. Good businesses recognise that maintaining and enhancing natural capital, the services and materials provided by the environment are essential for them as well as for communities.

The interaction of people with their environment, resulting in living, working landscapes that respond to environmental, social and economic changes, has made the area what it is today. As well as clear differences in the character of buildings and settlements, different local customs, festivals, historical associations and language all contribute to the area's distinctive and diverse cultural character. Common rights are important in embodying traditional relationships with the land, particularly in the western part of the North Norfolk Heritage Coast. Maintaining natural beauty includes maintaining its distinctive communities, and sustainable communities will only be possible if their economic and social needs are met at the same time as they continue to adapt to change.

This Management Plan focuses on the conservation and enhancement of the area's special qualities of natural beauty, the pressures that affect them or may do so in the future and their management in order to meet the purpose of designation of the area. Although the importance of social issues in the area are recognised by the Norfolk Coast Partnership, it is beyond the scope of this plan to put forward policies and actions to address most of these issues, since they do not directly affect the area's natural beauty. The relevant partners have policies and mechanisms to manage them, however, and will do so whilst taking account of the area's sensitivities and managing potential impacts on its natural beauty.

Two key issues that do relate more closely to natural beauty, however, are affordable housing and second homes. The availability of affordable housing and local jobs are inseparable, although the need for affordable housing in different parts of the area varies. The main issue for this plan is how affordable housing is provided while respecting the area's character (*see section 4.2*). A study in 2005 investigated the subject of affordable housing in the AONB.<sup>41</sup>

Houses bought and used as second, holiday or retirement homes contribute to the shortage of affordable housing in many areas. This in turn contributes to young people moving away from the area and results in changes in the area's age profile and in the structure of its communities. Empty second and holiday-let houses also tend to affect community vibrancy and character, especially in the winter months. There are local initiatives in place or in progress to provide affordable local housing, in addition to provision as part of commercial housing development schemes.

There can be tension and differences between people moving to the area and families who have lived here for generations, and a weakening of the character of local communities, but 'incoming' people can also bring valuable new perspectives, skills, knowledge and employment opportunities which benefit the area, as well as helping to build support and understanding of the AONB.

Coastal settlements have long existed with the risks of flooding and erosion, but the difficulty of managing this while maintaining functioning coastal communities is increasing under the pressures of increased rates of sea level rise and communities need support in adapting to change.

#### Vision: in 2034...

The Norfolk Coast will be a living, working area with individuals and communities working together where necessary for the benefit of the whole community or a wider area.

The economy will be broadly based, with a range of environmentally sustainable economic activities, including opportunities to earn a living through 'traditional' activities for the area as well as activities based on new technology and communications, and others that draw on and support the area's distinctive and special features. Tourism will remain an important part of the local economy, generating money that benefits a wide section of the local community.

Appropriate tenures of housing, including affordable housing will be available for people working locally. Although diverse in terms of age, income and occupation, communities will include people with family ties to the area and people will share an understanding and appreciation of the area's special qualities.

The area will be widely recognised as leading in environmentally sustainable practice, including mitigating climate change. While adapting to climate and coastal change, the area will be maintaining characteristic and viable coastal settlements and infrastructure. Various forms of renewable energy will be produced and used in locations and in ways that are consistent with the key qualities that give the area its special character. Effective local food and products networks will be in operation, with local producers working together to promote their products and the links to the area. Networks and services providing alternative low-impact forms of transport to the car, reducing congestion and the need for additional car parking, will be available and widely used by both visitors and residents.

Pollution from all local sources will be avoided or its impacts minimised. Water quality will be high and water will be used and managed efficiently with maximum benefits to the local environment. Generation of waste will have been minimised and waste will be used as a resource wherever possible.

## Key issues relating to natural beauty for 2014-19 plan

The area has large numbers of second / holiday homes, particularly in some coastal settlements, which affects the cost and availability of housing for local workers and others e.g. new businesses and their owners.

The shortage of both affordable housing and secure, full-time, well-paid local jobs in the area affects the ability of young people with family connections to live and work in the area, affecting the character of communities.

For a sustainable future for the area and its communities, all aspects of sustainable development (economic, social and environmental), within which conserving natural beauty needs to be included and integrated, need to be taken into account. Communities need planning and support to achieve this.

Coastal communities are additionally affected by coastal change, which will be increased by sea level rise. They need support for planning and adaptation to coastal change.

#### Objectives 2014-19: by 2019...

**OC1** The area will be improving as an environment for local businesses and availability of local jobs, assessed against regional averages

**OC2** Public transport and other alternatives to car travel in the area will have been maintained and improved as a service for both local residents and visitors

**OC3** Pupils in all schools in the area will have been involved in learning about its special qualities

OC4 Further understanding and means of supporting

coastal communities in adapting to coastal change will have been developed

#### Policies 2014-19

Members of the Norfolk Coast Partnership, including the staff team will, cooperating where necessary...

**PC1** Support opportunities for economic growth that invest in the natural capital and sustainable management of the special qualities of the AONB

**PC2** Promote and support services and products from the local area and use these whenever possible, especially those that are sustainable and high quality, and which contribute to maintaining natural beauty in some way, in order to support the local economy and jobs and to reduce 'supply miles'

**PC3** Continue to develop understanding amongst second home owners to enable them to contribute to maintaining sustainable local communities and natural beauty

**PC4** Continue to involve and develop communication and cooperation with local people and communities in the work of the Norfolk Coast Partnership

**PC5** Support the development of renewable energy in the area in ways and locations that contribute to the area's local economy and jobs and maintain its natural beauty

**PC6** Continue to investigate and develop ways of securing a mix of different housing tenures which will enable local people or those with local connections to live and work in the AONB, in ways that maintain the area's natural beauty

**PC7** Manage traffic and transport issues, including car parking and provision and promotion of effective public transport and other non-car means of travel, to reduce traffic congestion at peak times, conserve tranquillity and manage pressures on sensitive sites in the area

**PC8** Involve local communities in the development of plans and projects that may affect them, for example Shoreline Management Plans, and inform them of progress on plans and programmes

**PC9** Support the provision of necessary facilities and new development to meet proven needs of local communities and businesses, in ways that maintain the area's natural beauty, including the provision of fast broadband throughout the area

**PC10** Seek to maintain support for community projects in the area that contribute to AONB objectives and sustainable development, including through availability of grants

### 4.5 Access and recreation

#### Introduction

The area has long had a strong attraction for visitors based on its qualities of tranquillity, its beaches, its sense of remoteness and wilderness (for parts of the coast), the character and charm of its landscapes and settlements, and its wildlife. Historical and cultural attractions such as Castle Rising castle, Sandringham House, Holkham Hall, Blakeney Guildhall, Binham Priory, Felbrigg Hall and the North Norfolk Railway add to this attraction, as does its reputation for high quality local produce and eating places.

The Peddars Way and Norfolk Coast Path National Trail<sup>42</sup> provides a key coastal access route through the area from Sedgeford to Cromer, the new English Coast Path which secures opportunities for the public to enjoy the natural environment continues east of Cromer and other local and regional trails provide further opportunities. The Norfolk Coast Cycleway<sup>43</sup> runs through the area, forming part of the Sustrans<sup>44</sup> National Route 1 and Regional Route 30, and has numerous associated loops and links. Norfolk County Council manages trails and public rights of way in Norfolk; the Rights of way Improvement Plan 2007-17<sup>45</sup> contains objectives and actions for improvements to public access and rights of way in the county.

Parts of the area, particularly the North Norfolk Heritage Coast, are heavily used for a wide range of recreational activities, by local people and those who live within easy travelling distance as well as visitors from further away, either on day visits or longer stays. The effects of increasing numbers of visitors and recreational use on the area was one of the main concerns that led to the setting up of the Norfolk Coast Project as a partnership of organisations for its management in 1991.

These activities benefit the health, well-being and quality of life of those taking part, as well as helping to support the local economy in many cases. Those using the marine environment are especially important and well established, in particular sailing, but also including other forms of boating, windsurfing, wildfowling and angling. The area is also popular for more informal activities such as short walks, walking dogs, cycling, browsing in villages and scenic drives, by both local residents and visitors.

The tourism industry, for which the area's environment and natural beauty is the key asset, now plays a more important part in the local economy than 'traditional industries' such as farming, fishing and boat building, although its strength is linked to their influence and products. A study in 2000<sup>46</sup> estimated that annual visitors to six nature reserves on the north Norfolk coast spent £5.3 million on the day of their visit and £20.8 million during their trip as a whole. Another study in 2006<sup>27</sup> estimated the annual economic value of tourism in the area as £163 million, supporting over 3,500 jobs. Tourism supports many local jobs directly as well as other businesses indirectly, and helps to support community services such as village shops, post offices and pubs. It also helps to support conservation and management activity on important nature and historic environment sites in the area.

However, visitors can generate conflict with nature and historic environment conservation objectives, with tranquillity and with local communities, depending on numbers, locations and activities. In order to work towards a truly sustainable tourism destination, tourism businesses and site managers need to be actively involved in understanding the behaviour and impact of visitors, both positive and negative, and in visitor management plans and policies that help to inform visitors of ways to enjoy the area while minimising impacts and maximising benefits.

Traffic levels and infrastructure can have significant impacts on landscape and tranquillity, and the majority of visitors still reach and move around the area via the road network, although many alternatives are available including the excellent Coasthopper bus service.<sup>47</sup>

#### Vision: in 2034...

The Norfolk Coast will be a place where people can refresh both body and soul. Tourism, recreation and enjoyment of the area will provide benefits to both its communities and landscape.

Tourism businesses, visitors and residents will understand the area's special qualities of landscape, wildlife and cultural and historic heritage and their sensitivities and support their conservation through how they use, and promote use of, the area. Tourism businesses will understand the value of the natural capital that underpins their businesses and be actively contributing to initiatives that conserve and enhance natural beauty and support local communities.

Recreation by both visitors and local residents, including long-standing traditional activities for the area, will be managed in a way that provides opportunities for all users to experience and enjoy the special qualities of the area without conflicting with those qualities or with other people's enjoyment of them. Public access routes and areas, both statutory and discretionary, together with non-car forms of transport, will form an integrated network which is widely used by both local residents and visitors. Information on these, and on areas suitable for a variety of recreational activities, will be easily and freely available to the public.

## Key issues relating to natural beauty for 2014-19 plan

Understanding and support for the area's special qualities by people who use the area and enjoy these qualities is needed to ensure these qualities are conserved and enhanced.

Some habitats and species, particularly in coastal locations, are currently affected by human disturbance, largely as a result of lack of understanding of the pressures caused by recreational activities. Beachnesting birds are a particular cause for concern, as are impacts on sensitive habitats such as saltmarsh and sand dunes.

Housing development locally and in nearby growth areas, combined with predictions that changing climate may increase numbers of coastal visitors, suggests that visitor numbers are likely to increase in future, which may potentially increase pressures on sensitive habitats and species.

Awareness of wildlife, landscape and historic environment sensitivities, and of ways to enjoy the area sustainably, need raising to encourage sensitive behaviour by visitors and recreational users, with consistent messages communicated throughout the area.

High levels of car traffic in peak periods causes congestion and parking problems in coastal settlements, and affects tranquillity, landscape and settlement character.

Some parts of the area are more sensitive and under pressure from visitor numbers, while other parts are less sensitive and could potentially accommodate more visitors without detracting from natural beauty, with economic benefits.

#### Objectives 2014-19: by 2019...

**OR1** Information on current and future site user numbers, behaviours, visit profiles and recreational activities, particularly those that may affect coastal Natura 2000 sites, will have been further improved and used to develop information for the tourism sector, visitors and recreational users, and management of pressures on sensitive sites **OR2** Cooperation will have been further developed between the tourism sector, conservation organisations and local communities to develop understanding and more sustainable enjoyment of the area by visitors and local residents, and to manage pressures on key sites, particularly for coastal Natura 2000 sites, by providing clear and consistent information and guidance

#### Policies 2014-19

Members of the Norfolk Coast Partnership, including the staff team will cooperate and share information to...

**PR1** Continue to improve communication of the area's special qualities, including seascapes

**PR2** Continue to improve understanding about current and future visitor numbers, behaviours, visit profiles and recreational activities, particularly for coastal Natura 2000 sites

**PR3** Investigate and seek to secure funding contributions from new housing development, both within and outside the area, that are likely to provide sources of recreational pressures on Natura 2000 sites, to enable their mitigation

**PR4** Develop consistent messages with the tourism sector and local communities about promotion of the area that takes into account sensitivity to visitor and recreational pressures and capacity to manage these

**PR5** Work with tourism businesses to develop and promote ways for visitors to contribute to conserving and enhancing the features and qualities that bring them to the area, and to maximise benefits and minimise impacts from visitors to communities

**PR6** Develop integrated and holistic management of recreation activities along the area's coast to provide opportunities that do not impact on sensitive sites, especially coastal Natura 2000 sites

**PR7** Ensure that opportunities, information and incentives for visitors to enjoy the area without using the car, including new public access links, are easily available and increased where appropriate

**PR8** Encourage the provision of appropriate levels and types of visitor facilities and information at key sites, including public lavatories and facilities for visitors with restricted mobility, together with information that promotes the aims of the AONB management plan in a coordinated way and ensure that opportunities and information are easily available for all actual and potential users to enable enjoyment of the range of the area's natural beauty sensitively and encourage suitable activities away from sensitive areas

# **5. MONITORING AND REVIEW**

This document, i.e. the Strategy, including the visions, objectives and policies, will continue to be reviewed at five-yearly intervals, so the next plan will be published in 2019. A new five year Action Plan will also be prepared as part of this review, based on the objectives and policies. This will enable the plan to continue to adapt to changing circumstances as necessary.

## Monitoring the condition of the area's natural beauty

Monitoring of the condition of the area, in terms of the state of its natural beauty, is covered in Section 3 'A special place'. The assessment of current condition is based on a set of indicators, which are limited by currently available information and by resources required to survey and set up new indicators specifically for the area and to repeat surveys at five yearly intervals.

The current condition includes some assessment of trends, where information is available to support this. The assessment will be repeated before the next review of the Management Plan i.e. at approximately five years from the assessment presented in this plan, and published as part of the review. In this way, the condition monitoring will continue to provide input to management of the area. Fixed-point photography of key views in the area has been developed as part of the 2009-14 action plan to contribute to monitoring of change and the Action Plan for 2014-19 may contain actions to further improve information for monitoring the condition of the area's natural beauty.

Over time this will enhance our understanding of what is happening in the area, how it is changing and the causes of the changes. Information will enable more effective partnership working by providing a sound basis for making decisions on how to try to influence and manage those changes.

#### Monitoring implementation of the Management Plan

The objectives, policies and actions within the 2014-19 Management Plan have all been formulated with the intention of conserving and enhancing the area's natural beauty, which is the focus of the plan. It may not always be possible to relate observed improvements in the condition of natural beauty to specific policies or actions, but maintenance and improvement of the area's natural beauty observed through condition monitoring should provide a strong indication that policies and actions are having a positive effect. Similarly, negative changes will highlight aspects where further consideration is required, both in the current Action Plan and in the next five year plan.

In the revised Strategy (this document) the objectives and policies are drawn from the issues (including those arising from condition assessments), and from the vision for the AONB and its management. An Action Plan based on these objectives and policies has also been developed by Partnership representatives. The action plan sets out specific actions agreed by the Partnership and assigns lead partners and indicative timescales to these actions looking five years ahead. Other key plans and initiatives that have an important influence on the area, and which may help to implement policies and achieve objectives are summarised in Appendix 1 of the Strategic Environmental Assessment (SEA) for this strategy.

While objectives and policies will remain unchanged over the five years of the plan, the Action Plan will be reviewed and updated at least annually to take account of actions completed and to allow review and updating of actions and priorities.

Monitoring of progress on the Action Plan will be done through a review by the Partners and there will be a publicly available document to show actions completed, in progress, modified or added. An annual progress report will also be published.

## **APPENDIX 1** – GLOSSARY OF TECHNICAL TERMS

The following brief definitions and information are intended to assist non-specialist readers with the more technical terms used in this document:

#### Affordable housing

A range of types of affordable housing are defined in the Government's National Planning Policy Framework (2012) as follows:

Social rented, affordable rented and intermediate housing, provided to eligible households whose needs are not met by the market. Eligibility is determined with regard to local incomes and local house prices. Affordable housing should include provisions to remain at an affordable price for future eligible households or for the subsidy to be recycled for alternative affordable housing provision.

Social rented housing is owned by local authorities and private registered providers (as defined in section 80 of the Housing and Regeneration Act 2008), for which guideline target rents are determined through the national rent regime. It may also be owned by other persons and provided under equivalent rental arrangements to the above, as agreed with the local authority or with the Homes and Communities Agency.

Affordable rented housing is let by local authorities or private registered providers of social housing to households who are eligible for social rented housing.

Affordable Rent is subject to rent controls that require a rent of no more than 80% of the local market rent (including service charges, where applicable).

Intermediate housing is homes for sale and rent provided at a cost above social rent, but below market levels subject to the criteria in the Affordable Housing definition above. These can include shared equity (shared ownership and equity loans), other low cost homes for sale and intermediate rent, but not affordable rented housing.

Homes that do not meet the above definition of affordable housing, such as "low cost market" housing, may not be considered as affordable housing for planning purposes.

#### Agri-environment schemes

Grant schemes supporting farmers and land managers in providing environmental benefits according to set criteria as part of farming or management operations. In England, from 2015 this is known as the Countryside Stewardship Scheme.

#### Biodiversity, Biodiversity Action Plan (BAP)

Shorthand for biological diversity, defined in the Convention on Biological Diversity as:

the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

Biodiversity Action Plans (national, regional and local) were the response to the 1992 Convention on Biological Diversity, focusing on characteristic and rare habitats and species for that area and how to conserve these assets.

The 'UK Post-2010 Biodiversity Framework', published in July 2012, succeeds the UK BAP and 'Conserving Biodiversity – the UK Approach', and is the result of a change in strategic thinking following the publication of the CBD's 'Strategic Plan for Biodiversity 2011– 2020' and its 20 'Aichi Biodiversity Targets', at Nagoya, Japan in October 2010, and the launch of the new EU Biodiversity Strategy (EUBS) in May 2011. However, BAP habitats and species remain relevant as priorities for conservation.

#### **Biofuels and biomass**

Biofuels are gases or liquids – for example methane, alcohols and biodiesel (which may be made from agricultural crops or waste).

Biomass is solid material e.g. woodchip or dried vegetable material such as elephant grass (miscanthus), used to provide heat by burning, which may also be used to produce electricity.

#### Bronze Age

In Britain this refers to the period of approximately 1,700 years from around 2500 BC until around 800 BC (around 4,500 to 2,800 before present). It was preceded by the Neolithic era and was in turn followed by the Iron Age era. It was marked by the use of copper and then bronze by the prehistoric Britons to make tools also saw the widespread adoption of agriculture. During the British Bronze Age, large megalithic monuments similar to those from the Late Neolithic continued to be constructed or modified, including such sites as Avebury, Stonehenge and Silbury Hill. This has been described as a time "when elaborate ceremonial practices emerged among some communities of subsistence agriculturalists of western Europe".

#### Carstone

Carstone is an iron-rich sedimentary sandstone conglomerate formed between about 103 and 110 million years ago during the Cretaceous period. It varies in colour from light to dark rusty ginger and can be found used as a building stone in Bedfordshire, Cambridgeshire and extensively in the historic buildings of North-west Norfolk. One of the oldest exposed geological strata in the AONB, spectacularly seen underlying the younger Red Chalk and upper Cretaceous Chalk in Hunstanton cliffs.

#### Chalk river

Chalk rivers are fed primarily by springs emanating from chalk aquifers, producing clear waters and a generally stable flow and temperature regime, which potentially support a rich and distinctive ecosystem of plant and invertebrate life and higher animals.

English chalk rivers are all located in the south and east, from Dorset to East Yorkshire and constitute the principal resource of chalk rivers in Europe. The small rivers that flow into the North Sea through the AONB are all chalk rivers, although their quality varies because of drainage operations and pollution.

#### Coasthopper

A successful bus service currently operated along the Norfolk coast. Runs very regular services between Hunstanton and Sheringham, with connections and extensions on some services to King's Lynn and Cromer.

#### Countryside and Rights of Way (CROW) Act

Passed in 2000, the Act consists of four parts. Part I contains measures to improve public access to the open countryside and registered common land ('open access'); Part II amends the law relating to rights of way; Part III amends the law relating to nature conservation by strengthening protection for Sites of Special Scientific Interest and provides a basis for the conservation of biological diversity; Part IV provides for better management of Areas of Outstanding Natural Beauty, including a duty of care for public bodies and a duty to produce AONB Management Plans.

#### Ecosystem

An ecosystem is a community of living organisms (plants, animals and microbes) in conjunction with the nonliving components of their environment (things like air, water and mineral soil), interacting as a system. These biotic and abiotic components are regarded as linked together through nutrient cycles and energy flows. As ecosystems are defined by the network of interactions among organisms, and between organisms and their environment, they can be of any size but usually encompass specific, limited spaces (although some scientists say that the entire planet is an ecosystem).

#### Environmental Stewardship (ES)

Agri-environment scheme for England introduced in 2005 and administered by Natural England, replacing previous Countryside Stewardship scheme. To be replaced in 2015 by a new Countryside Stewardship scheme following CAP reform.

#### European Marine Site

A marine area, including intertidal areas, designated under the European Union Habitats Directive and the UK Conservation (Natural Habitats, etc.) Regulations 1994 as a Special Area of Conservation or a Special Protection Area.

Unlike on land where SACs and SPAs are underpinned by Sites of Special Scientific Interest (SSSIs), there is no existing legislative framework for implementing the Habitats Directive in marine areas. Therefore the Regulations have a number of provisions specifically for new responsibilities and measures in relation to marine areas.

The Wash and North Norfolk Coast European Marine Site consists of a large marine and intertidal area from Gibraltar Point on the northern edge of the Wash to Weybourne on the north Norfolk coast.

#### Geodiversity, geomorphology

Geodiversity may be defined as the natural range (diversity) of geological features (rocks, minerals, fossils, structures), geomorphological features (landforms and processes), soil and natural water features that compose and shape the physical landscape.

Geomorphology is the physical features and natural processes operating on the surface of the Earth which enable us to understand landforms and their origin.

## Glacial, glaciation, glacio-fluvial (see also Ice Age)

Terms referring to a period of time marked by colder temperatures and the advance of glaciers

and ice sheets. Also referring to the physical processes associated with the activity and impact of glacier ice.

The term glacio-fluvial refers to meltwater streams associated with glaciers and ice sheets and the deposits and landforms they produce.

#### Greenhouse gases

Gases in the atmosphere, both natural and produced by man's activities, that allow radiation from the sun to reach the Earth's surface but reflect the different frequencies of heat radiation that are emitted back from the Earth. Greenhouse gases are essential to maintaining the temperature of the Earth but an increase in their concentration causes warming of the atmosphere. The most prominent greenhouse gas is carbon dioxide, which is produced by burning fossil fuels such as coal, oil and gas but other gases such as methane, although present in lower concentrations, have a more powerful greenhouse effect.

#### Heritage Coast

Heritage Coasts are the finest scenic areas of undeveloped coast in England and Wales. These nonstatutory definitions have been agreed between the former Countryside Commission and local authorities. 32% (1,027km) of English coastline is defined as Heritage Coasts, most of which are within National Parks or Areas of Outstanding Natural Beauty.

#### Ice Age

An informal term for the Pleistocene period as a whole, lasting from c.2.5 million to 12,000 years ago, during which the world's climate markedly oscillated between colder (glacial) and warmer (interglacial) phases. Also sometimes used to refer to one of the colder glacial phases.

#### Marine Protected Area (MPA), Marine Conservation Zone (MCZ)

A Marine Protected Areas (MPA) is a clearly defined geographical space in the marine environment, recognised, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values.

The main types of marine protected areas in English waters are:

- European Marine Sites giving legal protection to species and habitats of European importance
- Marine Conservation Zones and SSSIs with marine

components giving protection to species and habitats of national importance

The Wash and North Norfolk Coast European Marine Site overlaps with the AONB in its intertidal area. There are currently no MCZs designated around the AONB, although there are some candidate sites.

#### Mesolithic, Neolithic, Palaeolithic

Three divisions of the Stone Age, characterised by the use of stone tools by humans.

The end of the Palaeolithic is traditionally positioned some 12,000 years ago, coinciding with the end of the Ice Age (the Pleistocene) but the beginnings of the Palaeolithic are more mysterious, perhaps over 3million years ago. During this long period, many different species of humans populated Earth, lived on a nonproductive economy (scavenging, hunting, gathering), and based most of their technology on stone toolmaking.

In the Neolithic, from around 6000 to 4500 years ago there were farmers in settlements with domesticated animals and wheat, with over 100 kinds of tools and with pottery.

The Mesolithic, from around 12,000 to 6,000 years ago, was a transitional period between the two and happened at different times in different places. Mesolithic tools are small tools produced by chipping, and are hunter-gatherer tools, often arrowheads and points. Neolithic tools are often polished and far more varied. They are tools of more settled societies with some agriculture.

#### Moraine

An accumulation of unconsolidated soil and rock formed by the eroding and transporting action of a glacier or ice sheet. Terminal moraines are deposited at the leading edge of a glacier or ice sheet.

#### Natura 2000

A European Union wide network of sites designated as Special Protection Areas or Special Areas of Conservation, which are intended to form a coherent ecological network of protected areas to conserve and enhance special and characteristic biodiversity and assure the long-term survival of Europe's most valuable and threatened species and habitats. The establishment of this network of protected areas fulfils a European Community obligation under the UN Convention on Biological Diversity.

#### Photo-voltaic

Photovoltaic panels convert sunlight directly into electricity, unlike solar thermal panels that work by heating a liquid by exposing it in a thin layer to sunlight. A typical example of a device powered by photovoltaic cells is a solar powered calculator. Photovoltaic arrays consist of a large number of panels mounted just above ground level, usually covering several hectares.

#### Renewable energy

The most common definition is that renewable energy is from an energy resource that is replaced by a natural process at a rate that is equal to or faster than the rate at which that resource is being consumed.

Renewable energy (sources) or RES capture their energy from existing flows of energy, from on-going natural processes, such as sunshine, wind, wave power, flowing water (hydropower), biological processes such as anaerobic digestion, and geothermal heat flow.

Most renewable forms of energy, other than geothermal and tidal power, ultimately come from the Sun.

Some forms are stored solar energy such as rainfall and wind power which are considered short-term solar-energy storage, whereas the energy in biomass is accumulated over a period of months, as in straw, or through many years as in wood.

#### **Rural Development Programme**

The England Rural Development Programme is the instrument by which the UK Department for Environment, Food and Rural Affairs (Defra) fulfills its rural development obligations in England, as set out by the European Union under the Common Agricultural Policy with funding from the European Commission.

The programme provides money for projects to improve rural life and businesses (administered through Local Action Groups) and to promote environmentally friendly ways of managing land and to sustain existing and create new areas of woodlands (administered by natural England and the Forestry Commission). There are separate rural development programmes for Scotland, Wales and Northern Ireland.

#### Seascape and skyscape

Seascape, like landscape is about the relationship between people and place and the part it plays in forming the setting to our everyday lives. Seascape results from the way that the different components of our environment – both natural and cultural - interact together and are understood and experienced by people.

Seascape is defined by Natural England in its position statement on All Landscapes Matter (2010) as: "An area of sea, coastline and land, as perceived by people, whose character results from the actions and interactions of land with sea, by natural and/or human factors".

A skyscape is a view in which the sky plays a significant or dominant role in the experience, either during daylight or at night, in which the colours and forms of sky and clouds or star constellations are an essential and dominant aspect of the viewing experience.

#### Setting (of heritage assets)

The significance of a heritage asset derives not only from its physical presence and historic fabric but also from its setting – the surroundings in which it is experienced. Setting is defined in the National Planning Policy Framework (NPPF) as "The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of the asset, may affect the ability to appreciate that significance or may be neutral."

This may form an important part of its historic environment and context, or affect the quality of people's experience of the asset. The careful management of change within the surroundings of heritage assets therefore makes an important contribution to the quality of the places in which we live.

## Sustainable / sustainability / sustainable development

Any activity which we can predict will have unacceptable environmental or social consequences in the future, or which will not be possible to maintain financially, is not a sustainable activity.

Sustainable development has been defined in many ways, but the most frequently quoted definition is from *Our Common Future* (1987), also known as the Brundtland Report:

"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

the concept of **needs**, in particular the essential needs of the world's poor, to which overriding priority should be given; and

the idea of **limitations** imposed by the state of technology and social organisation on the environment's ability to meet present and future needs."

The five principles from the UK Sustainable Development Strategy still form the basis for sustainable development in the UK and devolved administrations under the Government's refreshed vision for sustainable development. These are *living* within environmental limits; ensuring a strong, healthy and just society; achieving a sustainable economy; using sound science responsibly; promoting good governance. Sustainable policy must respect all five of these principles, though some policies, while underpinned by all five, will place more emphasis on certain principles than others.

#### Tranquillity

Tranquillity is often thought of as a peaceful, calm state, without noise, violence, worry, etc and the undeveloped countryside and coast is often associated with tranquillity.

Work undertaken by the Campaign for the Protection of Rural England (CPRE) sought to quantify tranquillity on an objective basis, using people's perceptions and including a wide range of factors such as naturalness, openness, distance from noise, development, numbers of people, light pollution etc. This culminated in a tranquillity map for England's in 2008.

#### UKCIP and UKCP09

The UK Climate Impacts Programme (UKCIP) was established in 1997, based at the Environmental Change Institute at Oxford University, to help coordinate scientific research into the impacts of climate change and to share the outputs in ways that are useful to organisations in adapting to those unavoidable impacts.

UK climate projections were initially produced in 2002 (UKCP02). Following discussions between Defra, the Met Office Hadley Centre and UKCIP to discuss possible improvements, UKCP09 was produced in 2009, funded by a number of agencies led by Defra. It is based on sophisticated scientific methods provided by the Met Office, with input from over 30 contributing organisations. UKCP09 can be used to help organisations assess potential impacts of the projected future climate and to explore adaptation options to address those impacts.

There have been developments in climate modelling since its release but UKCP09 continues to provide a valid assessment of the UK climate and can still be used for adaptation planning. Options to update UKCP09 are currently being explored by government.

### **APPENDIX 2** – REFERENCES

The following reference numbers refer to superscript numbers in the main document text, in the form of web site addresses since these are generally the most easily accessible source of the information. For sources not available via the web, or if you are unable to access information by this means, Norfolk Coast Partnership staff will be pleased to help you gain access to the information you require if you contact the office (see contact details in explanatory notes at the front of the strategy).

#### SECTION 2 'Setting the Scene'

1. National Parks and Access to the Countryside Act, 1949: http://www.legislation.gov.uk/ukpga/Geo6/12-13-14/97/contents

2. See Landscapes for Life (National Association for AONBs) web site for further information: http://www. landscapesforlife.org.uk

**3. Designation History of the Norfolk Coast AONB** (Ray Woolmore / Countryside Agency, 2001). Summary in supporting information to this plan on the Norfolk Coast Partnership web site http://www. norfolkcoastaonb.org.uk. Full document including copies of original documents available for viewing at the Norfolk Coast Partnership office, copy with references only available on request.

**4. Heritage Coasts.** Further information on Heritage Coasts in England can be found via the Natural England web site: http://www.naturalengland.org.uk/ ourwork/conservation/designations/heritagecoasts/

**5. Countryside and Rights of Way Act, 2000:** http://www.legislation.gov.uk/ukpga/2000/37/contents

6. Further details of 'duty of regard' for public bodies under section 85 of the Countryside and Rights of Way Act (2000) are available on the Norfolk Coast Partbership web site, http://www. norfolkcoastaonb.org.uk

**7. Norfolk Coast AONB Management Plan 2009-14** can be found on the Norfolk Coast Partnership web site, http://www.norfolkcoastaonb.org.uk

**8. Structure of the Norfolk Coast Partnership:** can be found on the Norfolk Coast Partnership web site, http://www.norfolkcoastaonb.org.uk

**9. Norfolk Coast Partnership annual accounts:** can be found on the Norfolk Coast Partnership web site, http://www.norfolkcoastaonb.org.uk

**10. Information on Norfolk Coast Partnership externally funded projects** will be available in the new web site structure based on the final AONB Management Plan 2014-19 at http://www. norfolkcoastaonb.org.uk

**11. Norfolk and Suffolk Broads Act, 1988:** http:// www.legislation.gov.uk/ukpga/1988/4/contents, see also the Broads Authority web site, http://www.broadsauthority.gov.uk/home

12. Wash and North Norfolk European Marine Site Management Scheme: http://www. washandnorthnorfolkcoastems.co.uk/

**13. East Inshore and Offshore Marine Plan** (Marine Management Organisation) https://www.gov.uk/ government/publications/east-inshore-and-east-offshore-marine-plans

**14. National Planning Policy Framework, 2012:** https://www.gov.uk/government/publications/nationalplanning-policy-framework--2

**15. Current local plans** for the relevant local authorities:

• Norfolk County Council: (Minerals and Waste Development Framework): http://www.norfolk.gov.uk/ Environment/Planning/Mineral\_and\_waste\_planning/ Minerals\_and\_waste\_development\_framework/index. htm

• North Norfolk District Council: http://www.northnorfolk.gov.uk/planning/10106.asp

• Borough Council of Kings Lynn & West Norfolk: http://www.west-norfolk.gov.uk/default. aspx?page=26543

• Great Yarmouth Borough Council: http://www. great-yarmouth.gov.uk/work/strategic-planning/localplan/index.htm

• **Broads Authority:** http://www.broads-authority. gov.uk/planning/future-planning-and-policies/localdevelopment-framework.html

**16. Supporting information for the 2009-14 Norfolk Coast AONB Management Plan**, which remains relevant to the 2014-19 plan, can be found on the Norfolk Coast Partnership web site: http://www. norfolkcoastaonb.org.uk

**17. Annual progress reports** can be found on the Norfolk Coast Partnership web site: http://www. norfolkcoastaonb.org.uk

**18. Associated guidance for the AONB management plan** can be found on the Norfolk Coast Partnership web site: http://www.norfolkcoastaonb.org.uk

#### SECTION 3 'A Special Place'

**19. National Character Area (NCA) profiles** can be found on Natural England's web site: http://www. naturalengland.org.uk/publications/nca/#profiles

The key NCAs for the Norfolk Coast AONB are: NCA76 North West Norfolk; NCA77 North Norfolk Coast; NCA78 Central North Norfolk

The AONB also includes parts of other NCAs: NCA46 The Fens; NCA79 North East Norfolk and Flegg; NCA80 The Broads

**20. Integrated Landscape Character Guidance for the Norfolk Coast AONB** can be found on the Norfolk Coast Partnership web site: http://www. norfolkcoastaonb.org.uk

**21. The relevant Shoreline Management Plans** for the Norfolk Coast AONB can be found on the East Anglian Coastal Group (EACG) web site, http://www. eacg.org.uk/ These are:

- SMP4 The Wash (Gibraltar Point to Old Hunstanton)
- SMP5 North Norfolk (Old Hunstanton to Kelling Hard)
- SMP6 Kelling Hard to Lowestoft Ness

22. Intergovernmental Panel on Climate Change, 2013: Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change: http:// www.ipcc.ch/report/ar5/wg1/

23. UK Climate Impacts Programme report (UKCP 2009): http://ukclimateprojections.defra.gov.uk/21712

24. Implications of climate change for the Norfolk Coast Area of Outstanding Natural Beauty, 2013 (report by Climate Resilience Ltd for the Norfolk Coast Partnership; available on NCP web site www. norfolkcoastaonb.org.uk or available from NCP office on request).

**25. Marine and Coastal Access Act, 2009:** http://www.legislation.gov.uk/ukpga/2009/23/contents

**26. East Offshore and Inshore Marine Plans** (Marine Management Organisation), 2014: http://www. marinemanagement.org.uk/marineplanning/areas/ east\_plans.htm

27. Norfolk Coast AONB Tourism Benefit and Impacts Analysis, 2006: on NCP web site www. norfolkcoastaonb.org.uk or available from NCP office on request).

**28. England Coast Path** (Natural England): http:// www.naturalengland.gov.uk/ourwork/access/ coastalaccess/default.aspx **29. Common Agricultural Policy reform:** https://www. gov.uk/government/policies/reforming-the-commonagricultural-policy-to-ensure-a-fair-deal-for-farmersconsumers-and-taxpayers

**30. New Environmental Land Management Scheme** (Natural England): http://www.naturalengland.org.uk/ ourwork/farming/funding/nelms.aspx

**31. Water Framework Directive** http://ec.europa.eu/ environment/water/water-framework/

**32. Common Fisheries Policy reform:** https://www. gov.uk/government/policies/reforming-and-managingmarine-fisheries-for-a-prosperous-fishing-industry-anda-healthy-marine-environment

**33. New Aglia Local Enterprise Partnership:** http://www.newanglia.co.uk/

**34. Norfolk Rural Development Strategy** (Norfolk County Council): http://www.norfolk.gov.uk/Business/ Economic\_intelligence/NCC126058

## SECTION 4 'Themes, objectives and policies'

**35. Norfolk Biodiversity Action Plan** (Norfolk Biodiversity Partnership). Information on biodiversity and its conservation, on action plans for species and habitats in Norfolk, and the Norfolk Non-Native Species Initiative can be found on the Norfolk Biodiversity Partnership's web site – www. norfolkbiodiversity.org

**36. European Landscape Convention, 2000:** http:// www.naturalengland.org.uk/ourwork/landscape/ protection/europeanconvention/

**37. Natural Environment White Paper, 'The Natural Choice', 2011:** http://www.naturalengland.org.uk/ourwork/newp.aspx

**38. Biodiversity 2020: a strategy for England's Wildlife and Ecosystem Services, 2011** (Defra): http://www.naturalengland.org.uk/ourwork/ conservation/biodiversity/protectandmanage/ englandsbiodiversitystrategy2011.aspx

(also provides access to the Natural Environment White Paper 'The Natural Choice', the National Ecosystem Assessment and the Lawton Report 'Making Space for Nature')

**39. Norfolk Historic Environment Record**, Norfolk County Council Historic Environment Service; accessed via the Norfolk Heritage Explorer at http://www. heritage.norfolk.gov.uk or by appointment at the Historic Environment Service's offices

### **APPENDIX 2** – REFERENCES

**40. Based on key habitats information for the AONB** provided by Norfolk Biodiversity Information Service

**41. The Housing Market and Affordable Housing:** a **study of affordable housing provision in a protected area (2005):** available on the NCP web site http://www.norfolkcoastaonb.org.uk

**42. Peddars Way and Norfolk Coast Path National Trail.** http://www.nationaltrail.co.uk/peddars-way-andnorfolk-coast-path

**43. Norfolk Coast Cycleway**. Information, including 'loops and links', can be found on the Norfolk Coast Partnership web site: http://www. norfolkcoastaonb.org.uk **44. Sustrans National Cycle Network**: http://www.sustrans.org.uk/ncn/map/national-cycle-network

**45. Norfolk Rights of way Improvement Plan 2007-17**, Norfolk County Council http://www.norfolk.gov.uk/Leisure\_ and\_culture/Public\_Rights\_of\_Way/index.htm

**46. Valuing Norfolk's Coast** (RSPB, 2000). Now out of print – copy available on request from the Norfolk Coast Partnership office.

**47. Coasthopper bus service:** http://www.coasthopper.co.uk/

### **APPENDIX 3** – LIST OF SUPPORTING INFORMATION FOR THE PLAN

The following documents are available on the Norfolk Coast Partnership web site, www.norfolkcoastaonb.org. uk. They are also available as hard copies on request from the Norfolk Coast Partnership office.

#### Statutory documents:

- Strategic Environmental Assessment (SEA) for the 2014-19 AONB management plan
- Assessment under the Habitats Regulation (AHR) for the 2014-19 AONB management plan
- Equalities Impact Assessment for the 2014-19 AONB management plan

#### Non statutory documents:

- AONB condition assessment for the 2014-19 AONB management plan
- Summary of other conservation designations for the 2014-19 AONB management plan
- Summary of achievements from the 2009-14 AONB management plan
- Significance of the Norfolk Coast landscape (summary)
- Shaping of the Norfolk Coast landscape (summary)
- Designation history of the Norfolk Coast AONB (summary)

### Norfolk Coast Partnership

South Wing, Fakenham Fire Station Norwich Road Fakenham NR21 8BB **T:** 01328 850530 **E:** aonb@norfolk.gov.uk **W:** www.norfolkcoastaonb.org.uk



