



State of the natural environment in the North West

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Contents

Foreword	1
1 Why the natural environment matters	2
2 State of our natural assets	3
2.1 Landscape and geodiversity	3
2.2 Biodiversity	6
2.3 Enjoying the natural environment	12
2.4 Valuing the natural environment	14
3 The vision for the region's natural environment	15
3.1 Achieving the vision for the North West	15
3.2 Landscape	16
3.3 Biodiversity	17
3.4 Marine	20
3.5 Reconnecting people and nature	22
3.6 Integrated land management and land use	26
3.7 Spatial planning and sustainable development	29
3.8 Building a greener North West: Green Infrastructure delivery	30
3.9 Adapting to climate change	33
4 Conclusion	36

Foreword

The current economic and political climate presents considerable challenges for both people and the natural environment in the North West. The impacts of climate change and the challenges of re-building economic productivity demand a long term and sustainable response. The solution lies, we believe, in moving to a greener economic model that recognises the value of and conserves the natural environment and provides new jobs, cleaner energy, sustainably-produced food, greener housing and climate security.

We also need to quickly focus on how we are going to cope with or adapt to the 50 years, at least, of climate change that is now unavoidable. There is growing evidence that global temperatures are changing far faster than previously thought.

Showing how a healthy natural environment makes a real difference to people's lives remains an important challenge for the environment sector, especially in times of economic uncertainty. We will continue to work closely at regional and local levels to ensure that the natural environment is at the forefront of discussions to help shape spatial planning regimes.

A high-quality natural green space is an integral part of our natural health service and makes a major contribution to the physical and mental health and wellbeing of the nation. We will continue to make the case for increased investment in the natural environment near to where people live.

The challenge for all concerned is to reconcile conflicting demands on the natural environment from housing, energy, food production, water supplies and other pressures, and continue to improve the life prospects and wellbeing of people.

Our Environmental Stewardship schemes, complete with a new targeting regime, will play an important part in this, investing an additional £12 million over the next year into local economies and making a tangible difference to the natural environment across the region.

Natural England published the *State of the Natural Environment 2008* in May last year and information relating specifically to the North West can be found at: http://www.naturalengland.org.uk/regions/north_west/sone/default.aspx. The report demonstrated that the natural environment in England is much less rich than 50 years ago and remains under pressure from a significant range of threats, particularly on our landscapes and biodiversity. This report builds on that work and brings together further evidence on the natural environment in the North West. It also explores the challenges and opportunities to conserve our wildlife and landscapes in the long term.

This report shows that where strong partnerships exist, we can, and do, make a huge difference to the natural environment. Wildlife-rich landscapes are not 'extras'. They make a real difference to people's lives and the delivery of integrated and sustainable development.



Liz Newton
Regional Director

1 Why the natural environment matters

The state of the natural environment matters to everyone in the North West. It is an essential regional asset that provides the foundations for our economic and social wellbeing. The environment provides multiple goods and services to society that are fundamental to human wellbeing. These goods and services are collectively known as 'ecosystem services' and are generally organised into four groups, each an interrelated layer:

- Supporting services which provide clean air, clean water and productive soils.
- Regulatory services which provide security against the impacts of climate change and flooding.
- Provisioning services that support economic activity such as sustainable energy production.
- Cultural services such as places to experience and enjoy the natural world and which contribute to people's health and wellbeing.

The North West is one of the most diverse English regions with features ranging from large conurbations to remote uplands to over 1,300 km of coastline. Twenty nine per cent of the region is covered by designated landscapes. The Lake District National Park, parts of the Yorkshire Dales National Park, the north-west fringe of the Peak District National Park, and all or part of four designated Areas of Outstanding Natural Beauty are found within the North West. Around 80% of the coastline is included in European Sites (Special Protection Areas and Special Areas of Conservation), designated for their wildlife importance. These include the Sefton Coast Special Area of Conservation and the Mersey Estuary Special Protection Area.

The North West has a population of 6.9 million, making it the largest region outside of London and the South East. Despite extensive urban areas around Manchester and Merseyside, the North West is predominantly rural. Four fifths of its land is agricultural, with 40,000 people employed in the agriculture sector and 2,800 in forestry. The region has some of the most fertile and productive agricultural land in the country and some of the harshest in terms of soils, topography and climate.



Formby coast

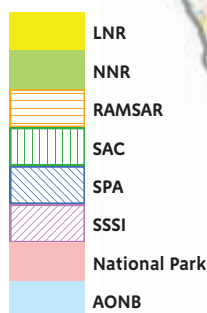
2 State of our natural assets

2.1 Landscape and geodiversity

Mountains, sea, estuaries, rivers and lakes are significant features in the region's landscape, contrasting with, and often visible from, the great metropolitan areas of Greater Manchester and Merseyside. Human occupation and activities based on the marine and terrestrial resources of the region have resulted in diverse cultural landscapes and seascapes, from wild moorlands, through Pennine mill towns, old deer parks and parklands, pastoral farmland, intensive arable and horticulture, and regenerating industrial and commercial centres, to the spectacular coastlines of mudflats, cliffs and, perhaps more in the future, offshore wind turbines.

- 29% of our region is designated as protected landscape compared to 23% for England overall, with 11% and 18% by area for Areas of Outstanding Natural Beauty (AONBs) and National Parks respectively.
- The Lake District is the largest of England's National Parks covering 229,159 ha.
- There are 187 Sites of Special Scientific Interest (SSSIs) designated for their geodiversity, reflecting the variety and complexity of the physical landscape, with 89% in favourable or recovering condition. The North Pennines AONB is also designated as a European Geopark.
- Almost 35% of all English common land is in the North West, with the uplands containing fewer but larger commons than the south of England.
- A high rainfall and west coast location ensure ever-changing atmospheric conditions, including spectacular sunsets. We have the largest area of standing open water and canals, concentrated in the mountainous Lake District and in lowland meres, mosses and ponds.

Figure 1
Designated sites in the North West



Source: Natural England, 2009

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Natural England 100046223 2009

0 50 Km

- Hadrian's Wall and Liverpool Mercantile City are World Heritage Sites, with the Lake District ('a superlative example of man's harmonious interaction with his natural environment') and the Castlefield, Ancoats and Worsley areas of Manchester ('the archetype city of the Industrial Revolution') as Candidate Sites.
- St Bee's Head on the west coast of Cumbria is a Heritage Coast.
- Historic designed parklands on the English Heritage Register, of national or international importance, are scattered throughout the North West.

Countryside Quality Counts (CQC) data provides evidence about the ways the English countryside is changing, using a range of information sources including agri-environment records. The first assessment was between 1990 and 1998. The second assessment between 1999 and 2003 suggested a similar pattern to the first, showing that in 15 of the 29 National Character Areas (NCA) in the region, about half were being 'maintained' or were 'enhancing'. In other words, change was either negligible, or was positive and generally consistent with landscape character. It also indicated, however, that for about a third of the region (12 NCAs), landscape character was 'diverging' from the NCA description, particularly in the more densely populated areas, and some lowland areas (2 NCAs) were described as 'neglected'.

Figure 2 CQC 2nd assessment agriculture



Figure 3 CQC 2nd assessment boundaries



Figure 4 CQC 2nd assessment semi-natural habitats

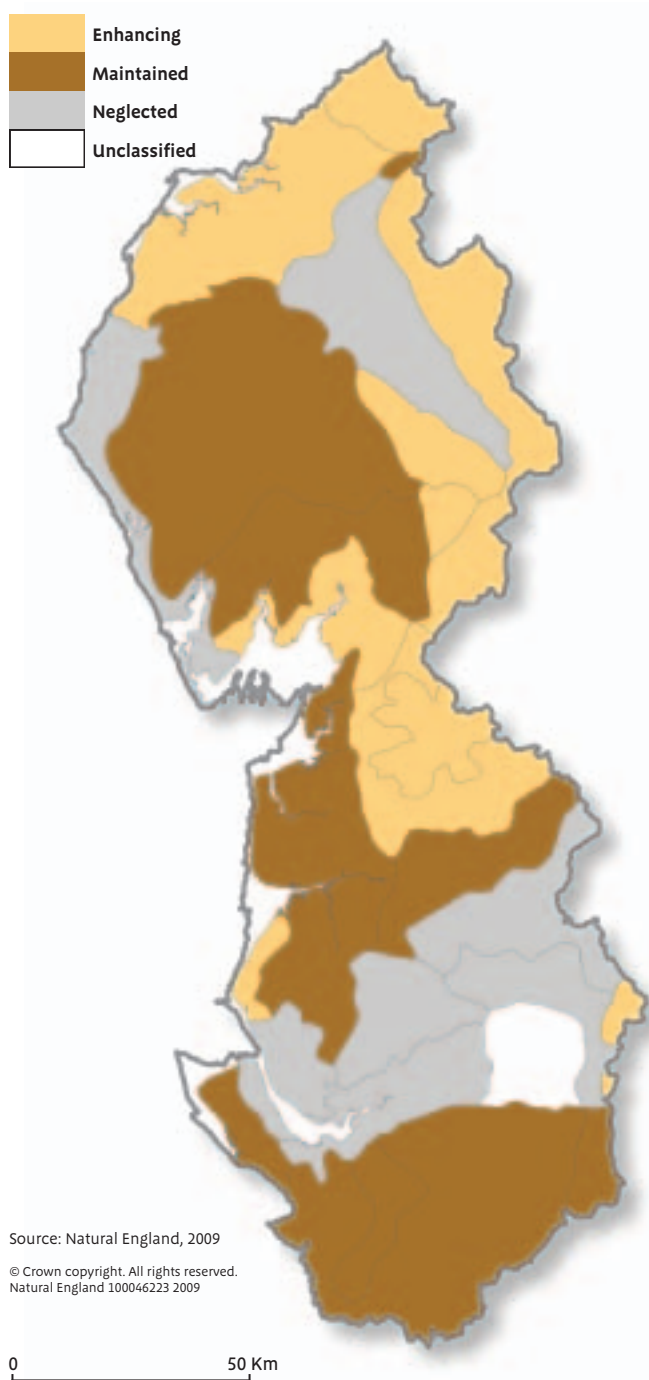


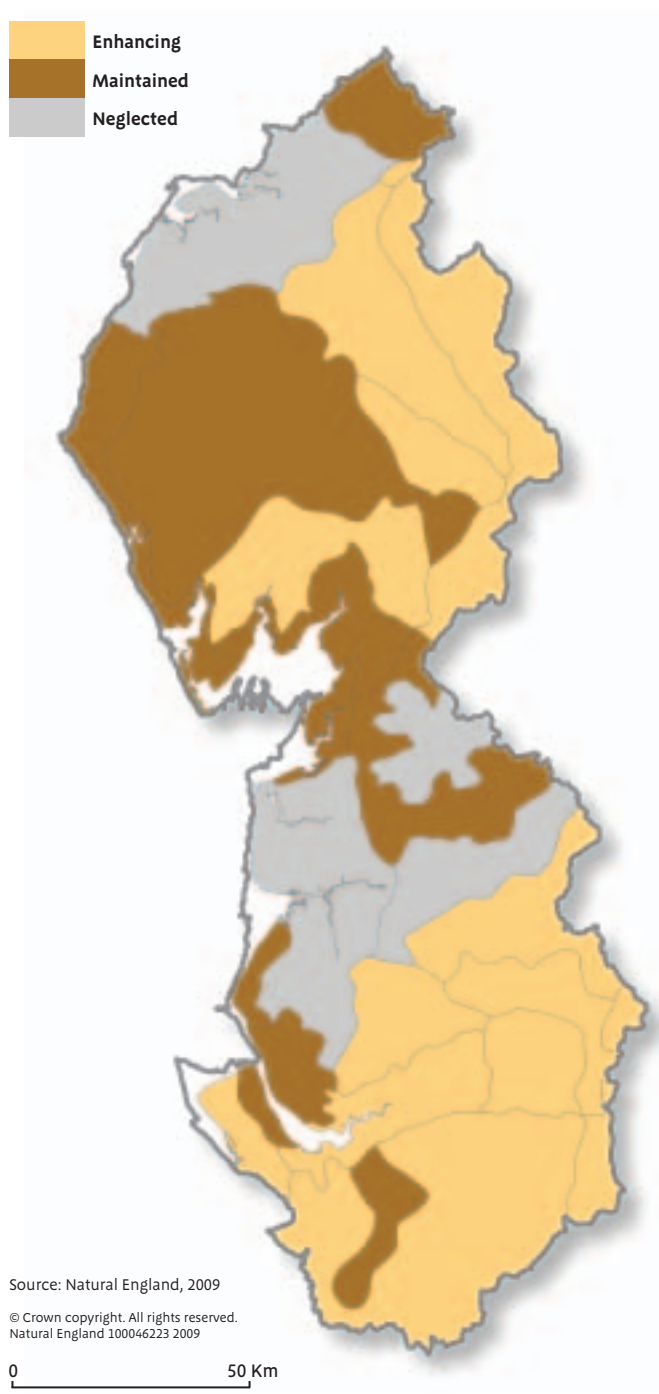
Figure 5 CQC 2nd assessment settlement and development status



CQC also looked at change by topic, and a regional breakdown indicates a more complex situation. Whilst woodland and trees are ‘enhancing’ or ‘maintained’ in most NCAs including urban ones, a different picture has emerged for boundaries, including stone walls, hedgerows and hedgerow trees, hedge banks and ditches. Outside protected landscapes, these features are identified as generally neglected. Further analysis and updating from 2003 onwards is now underway, taking the effects of the new Environmental Stewardship schemes into account.

Landscape character is being maintained in our protected landscapes such as the Cumbria High Fells NCA, which makes up a large part of the Lake District, and in the Forest of Bowland NCA. However, the landscapes of all areas are vulnerable to climatic change, and remain under pressure.

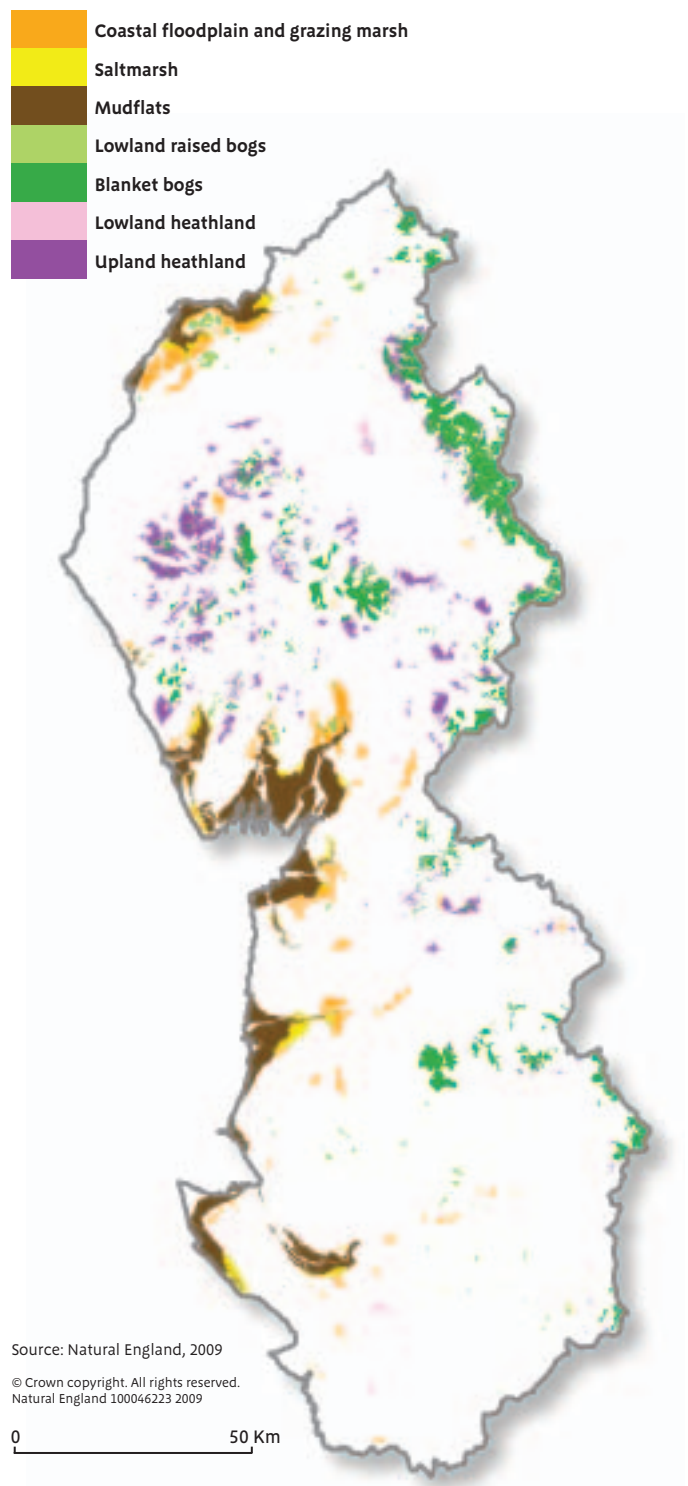
Figure 6 CQC 2nd assessment trees and woodland status



2.2 Biodiversity

The North West is rich in wildlife and habitats, and 35 out of the 40 UK Biodiversity Action Plan (BAP) terrestrial and freshwater habitats are found within the North West. The region holds significant proportions of the England resource for some habitats, particularly those found in the uplands, coast and estuaries and

Figure 7 BAP habitats in the North West



lowland wetlands. Examples include around 18% of the English resource of upland heathland, 25% of blanket bog, 20% of sand dunes, 34% of intertidal mudflats and saltmarsh, and 56% of lowland raised bog.

On average around 60% of this biodiversity habitat area lies within statutory designations of Sites of Special Scientific Interest (SSSIs), Special Protection Area (SPA), Special Area of Conservation (SAC) and/or Ramsar Sites and is thus protected by legislation. The region has the largest area of SSSI with 200,000 ha covering 18% of the region; of this 13% is also designated as SPA, SAC or Ramsar Site. This demonstrates the range and quality of biodiversity and geology in the region. The largest SSSIs cover intertidal or high moorland areas; elsewhere sites tend to be small and fragmented, particularly in the south of the region. The remaining 40% of biodiversity habitat area lies outside statutory designations and is largely unprotected.

At a regional level, the North West Biodiversity Forum (NWBF) actively promotes delivery of UKBAP, England Biodiversity Strategy targets and regional biodiversity targets. In addition five sub-regional partnerships (Cheshire, Greater Manchester, North Merseyside, Lancashire and Cumbria) have produced Local Biodiversity Action Plans (LBAPs) promoting delivery of national, regional and local habitat and species targets. The North West biodiversity targets cover 25 habitats or habitat groups. These targets include maintaining extent and achieving condition of approximately 287,000 ha and restoration and expansion of approximately 19,000 ha of habitat by 2015. During 2008/09 Natural England contributed almost 9,000 ha towards maintaining extent and achieving condition of BAP habitat through new Higher Level Stewardship agreements.

Natterjack toads

©Natural England/Mike Downey



Some individual species have specific types of protection regardless of where they occur. In the UK many species are protected by the Wildlife and Countryside Act 1981 whilst some of the rarest plants and animals in Europe are specially protected by legislation arising out of the Habitats Directive (The Conservation (Natural Habitats &c.) Regulations 1994). The North West contains some European protected species – for example, parts of Sefton coast and Cumbria are strongholds for amphibian species including the natterjack toad and great crested newt.

Whilst there is significant effort underway throughout the region to conserve our biodiversity, we face major challenges in order to stop further losses, re-establish lost wildlife and enable it to adapt to the pressures of climate change. The following section contains information and trends relating to major habitats, bird populations and Sites of Special Scientific Interest (SSSIs).

Wetlands, openwater and rivers

The North West has the largest area of wetlands of all regions, almost 29% of England's wetlands by area, dominated by blanket bog (55%) which forms peat landscapes in wet areas. Although significantly smaller, there are also important areas of lowland raised bogs, which represent almost 56% of England's resource by area. Over 80% of the region's blanket bog within SSSI is in favourable or recovering condition compared to 54% for lowland raised bog.

The North West has a greater area of designated rivers and open waters than any other English region. 644 km of river in Cumbria are designated as Special Areas of Conservation while many of the major lakes and larger tarns of the Lake District are SSSIs (1328 ha). Two Cumbria rivers remain a stronghold for the declining native white-clawed crayfish, while one of the rivers has the largest population of freshwater pearl mussels in England. The Cheshire Meres and Mosses are also notable for the large number

of open water sites. Sadly, much of the area of freshwater SSSIs (over 80%) is in unfavourable condition because of a wide range of factors that include diffuse agricultural pollution, leaking septic tanks, invasive species of plants and animals, water abstraction, and flood defence works and other channel modifications. There have, however, been significant improvements in water quality in SAC designated rivers as sewage works have been upgraded by United Utilities, in line with tighter discharge standards that have followed on from the Environment Agency's Review of Consents under the Habitats Regulations. These achievements follow general improvements in water quality in recent decades that have led to recoveries in fish populations, and have helped the otter to spread back across its historical range.

Heathland

The North West holds a significant proportion of heathlands, particularly in the uplands which hold around 18% of England's upland heathland resource. By area 78% of the region's upland heath within SSSI is in favourable or recovering condition. Upland heathland primarily occurs in the Lake District and in the Forest of Bowland. Unfavourable condition in upland heathlands is largely associated with overgrazing, drainage and inappropriate burning. Partnerships between farmers and land owners have been very successful in reversing these trends particularly through changes in agricultural management and restoration projects. Hen harriers have a stronghold in the Forest of Bowland where over two thirds of all breeding attempts in England between 2002-08 were recorded. Bowland's hen harriers have bred successfully largely due to sympathetic gamekeepers and landowners, including grouse moor owners and United Utilities plc.

Woodlands

The North West is the English stronghold for many important woodland types that are characteristic of the region, for example upland oak woodland that is rich in lower plants, ash woodland on limestone, wet woodland and lowland mixed woodland. There are 4,964 ha of



Pink-footed geese on Crossens Marsh, Ribble Estuary SSSI

woodland within SSSI, much of which is of international importance and has been designated as Special Areas of Conservation. South Cumbria is one of the most wooded parts of England and contains many woodland SSSIs. Overall, however, the North West as a region has a relatively low level of cover with less than 15% of the England native woodland resource. In these other areas, it is important to protect the remaining fragments, particularly of ancient semi-natural woodland, and join them up through appropriate new native woodland creation. By area, 69% of our SSSI woodlands are in favourable or recovering condition. This is low in relation to other habitats, and is therefore a priority for joint working between Natural England and the Forestry Commission. The key issues are the impact of non-native species and lack of natural regeneration due to overgrazing by sheep and deer. It is likely that the effects of the high deer numbers have been under-recorded so far.

Coast and estuaries

The North West coast and estuaries support internationally important populations of wildfowl and wading birds. They include 5 out of the top 10 estuaries in the UK for the numbers of wintering waterfowl which they support. Together they form the second largest gathering of winter waterfowl in the

Western Palearctic (area covering Europe, NW coast of Africa and northern Asia) and are an important point on the global migration route for birds known as the East-Atlantic flyway. Over 80% of the length of the coastline is within sites designated for their European wildlife importance. By area 97% of coastal SSSI is in favourable or recovering condition. The region also has a high proportion of sand dunes, with 20% of the England resource, and some of the most extensive intertidal mudflats and saltmarsh in England.

Marine

The Cumbrian shores have extensive boulder clay scars or skears, with nationally important reefs of the honeycomb worm and rich mussel beds. The undersea landscapes off the North West coast are largely plains of muddy sands, sands and gravels. The muddier areas support burrowing shellfish such as the Dublin Bay prawn and sea pens. At the entrance to Morecambe Bay, the Lune Deep is a deep channel gouged in the sea bed during the last ice age, through which strong tidal streams flow. The shallow water sandbanks off Blackpool and around Liverpool Bay support a rich marine life including Venus clams and in winter are hotspots for up to 16,000 common scoter sea duck, which dive to feed on the seabed.

The rich marine life provides food for other seabirds such as gulls, guillemots and red-throated divers. The undersea landscapes also provide important spawning and nursery areas and fisheries for many commercial species of fish. Larger wildlife to be seen off the coast includes bottlenosed dolphins, harbour porpoises and basking sharks.

Sites of Special Scientific Interest

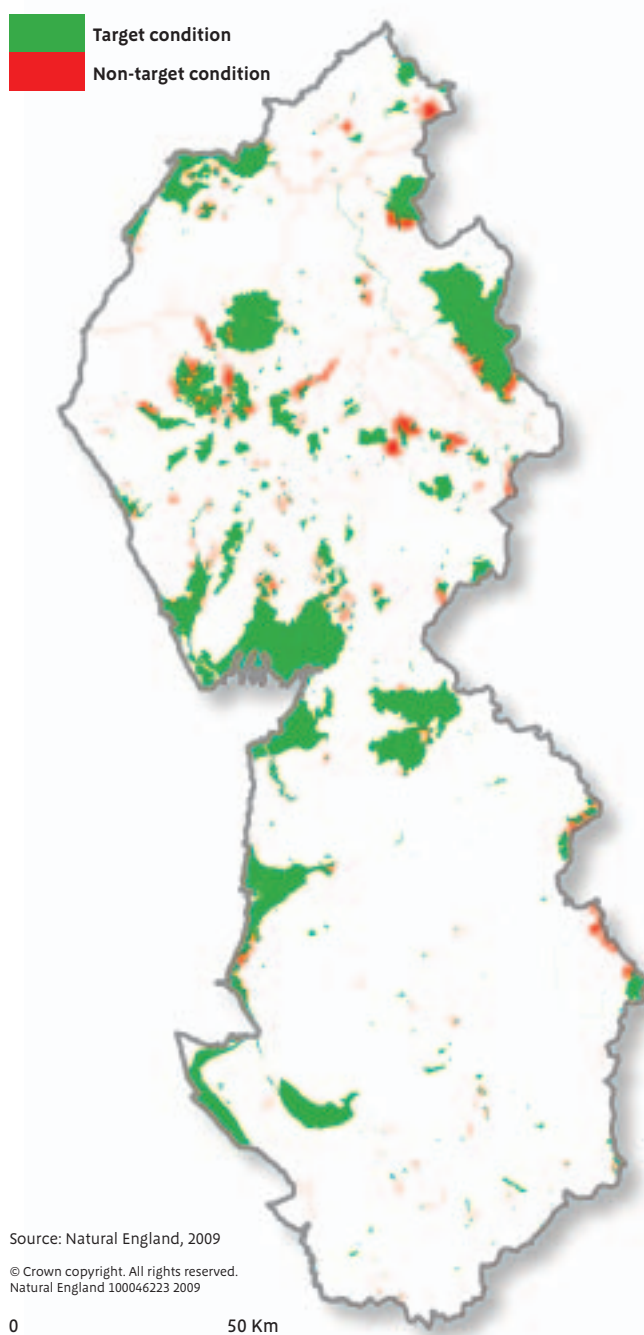
Sites of Special Scientific Interest (SSSIs) are nationally important nature conservation sites. They support England's best wildlife and geology and include many of our most spectacular natural assets. Public Service Agreements (PSA) were first introduced to modernise and improve the Government's performance on the issues that matter most to the public (including health, crime, education and the environment). Ambitious and publicly accountable targets have been set, one of which is to bring 95% of all nationally important wildlife sites (SSSIs) into favourable condition by 2010.

Of the nine English regions, the North West contains the largest area of land (200,000 ha) designated as Sites of Special Scientific Interest. With 90.25% in favourable or recovering condition we lead the way on the health of these sites, a direct result of successful partnership working with land managers and many organisations across the region. This includes some excellent examples of landscape-scale delivery such as Helvellyn and Fairfield SSSI, a major landscape-scale grazing restoration project which has involved farmers and National Farmers Union, commoners, Lake District National Park Authority, National Trust, and United Utilities to make it happen.

The key pressures and risks on the natural environment in the North West include habitat loss and fragmentation from development, agricultural intensification, water abstraction and drainage, inappropriate coastal management, air pollution, water pollution from point and diffuse sources, recreational pressure and human disturbance. A further issue is the need to reverse the fragmentation of

biodiversity in the lowlands of the region. This is especially true in the south of the region, where areas of biodiversity interest are frequently small and fragmented, rendering the species they support vulnerable to damage from external influences. This effect of fragmentation is likely to be exacerbated by climate change as the local environmental conditions necessary for a species survival change, but the isolation of the species population prevents dispersal to more suitable habitat.

Figure 8 SSSI condition



Farmland birds

Birds are considered to be a good indicator of the broad state of wildlife and countryside because they inhabit a wide range of habitats, tend to be near the top of the food chain, are popular and have long time series of data. The UK Index of Wild Bird Populations is one of the Government's headline indicators for sustainable development.

Between 1994 and 2006, the North West population indices increased for all native bird species (+23%) compared to the national indices, which had seen a slight decline. During the same period indices for woodland birds increased (+32%). The indices for 19 of the 29 individual woodland bird species included in the index increased by 10% or more.

The population of farmland birds in the North West showed the index increasing by 8% between 1994 and 2006, differing from the national index, which had seen a slight decline. The indices for 8 of the 18 individual farmland

bird species included in the index increased by 10% or more. Greenfinch, goldfinch and stock dove all saw a rise of 50% or more in their populations. Tree sparrow populations nearly doubled in number, whilst the population of corn bunting decreased by more than 50%.

In all cases, the indices were above the national index; however, indices should be used with caution as they are subject to large sampling uncertainties and mask some significant declines in BAP species.

Natural England is able to offer advice and payments to farmers to change their management practices on parts of their farms. This involves a) reducing the number of grazing animals during the nesting season to prevent birds' nests being trampled, b) controlling drainage so that water stays in natural hollows to make sure the soil is soft enough to allow birds to probe the soil and mud for food, and c) delaying the cutting of hay and silage until July to allow chicks to mature (see Case study 1).

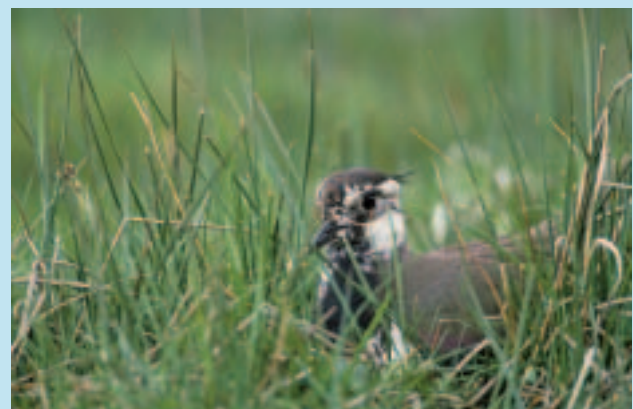
Case study 1 Wet grassland for breeding waders

In two areas of Cumbria, The Holme Dub valley near Abbeytown and Pow Beck Valley near St Bees, a number of farmers have joined Environmental Stewardship schemes so that large areas of land on adjoining farms are being managed for wading birds.

Both projects started in 2001 following on from meetings with small groups of farmers. Some immediately offered to manage land for wading birds, others delayed joining until they saw the effect of the management on their neighbour's farms. Farmers went to a local RSPB reserve to learn how to identify the different species of wading birds (lapwing, curlew, snipe, redshank) and what conditions each species requires. Over the years farmers and their advisers have gained experience of managing wet grassland for

breeding birds, leading to improvements in grazing and water control management.

Volunteers from the Cumbria Bird Club visit each field six times throughout the year to count the birds and report on the conditions in the field. This helps Natural England and the farmers to decide if any changes to management are required.



Lapwing

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2.3 Enjoying the natural environment

The region provides superb locations with a fantastic range of access and recreational opportunities within a unique setting. From the flat, lowland areas in the south of the region to the large expanses of moorland and high fells in the north and the vast stretches of coastline, the region offers a wide range of different recreational experiences for those with different abilities and access needs. Even our large urban areas contain a wealth of different access and recreation opportunities with high quality local and accessible green space provided for its inhabitants. The region has:

- Around 20,290 km of public rights of way (the total for England and Wales is around 225,000 km).
- 263,200 ha of land designated as access land under the CRoW Act 2000.
- 85.6 km of permissive access under agri-environment schemes (Higher Level Stewardship).
- 3 National Trails pass through the region – Pennine Way, Pennine Bridleway and Hadrian’s Wall.
- 8 Regional Parks under development (Croal Irwell, East Lancashire, Mersey Waterfront, Morecambe Bay & Duddon, Ribble Coast & Wetlands, Weaver Valley, West Cumbria Energy Coast, Wigan Greenheart) covering over 413,000 ha.
- 1,387 km of coast including 6 km of Heritage Coast.
- 26 Doorstep Greens and 35 Millennium Greens (78 ha) and 44 Country Parks with Green Flags Awards (5,315 ha) all providing opportunities for people to use green space close to where they live.
- 31 National Nature Reserves (NNRs) covering 18,415 ha, including the vast Ribble Estuary NNR which is one of the largest single areas of saltmarsh in England.
- 114 declared Local Nature Reserves (LNRs) covering 3,230 ha.
- 3 established Community Forests: the Red Rose Forest, the Mersey Forest and the Pennine Edge Forest which are helping to increase tree cover, improve habitats and provide diverse opportunities for outdoor activities close to centres of conurbations.

Hurstwood Thistle, Pennine Bridleway National Trail



17.7% of our region has open access, compared with 6.5% for England overall, with the largest areas in the uplands and commons. We have worked with various access authorities on the use of CRow rights through local monitoring projects, which has helped to increase the accessibility, safety and promotion of access land in the North West.

The Pennine Bridleway Way National Trail is the first purpose built long distance trail. To date 208 km of trail and link routes have been completed and are well used by local and visiting horse riders, cyclists and walkers. We are working with Oldham, Rochdale and Tameside within the region and Yorkshire Dales and Derbyshire outside of the region to create trail loops accessible by public transport from Manchester, Leeds and Sheffield to rail stations close to the Bridleway.

Although leisure time has increased there is a trend away from participation in the outdoors and physical activity at a level that promotes health. There are striking differences in recreational participation rates relating to geographical and socio-economic factors.

Health inequalities are most concentrated in the areas of most social deprivation and in the North West this also equates to areas of poor environmental quality. According to the Office for National Statistics (2001 census) the region exceeds the UK average for long term illnesses. In addition, 23.6% of men and 23.8% of women in the North West are classed as obese and over 10% of reception class children are obese. We lead on the *Walking the way to Health Initiative* (WHI), which is the largest national body promoting and setting the standards for led health walks. We have exceeded our target to increase active WHI members by 20% in 2008-09. Around 10,000 walkers with a range of health problems participate in these health walks (more than any other region) on a regular basis to get fit in the natural environment. We are also funding three year Green Exercise pilots in each region to connect people to nature in their local area through informal exercise (see Case study 2).

Case study 2 *Health on Wheels*

Natural England is funding *Health on Wheels* a Green Exercise Pilot Project, run by the charity Cycling Projects, within the areas of Salford, Warrington and the Wirral. The project aims to promote cycling as an accessible, fun and credible form of activity to those currently leading sedentary lifestyles or with specific medical needs such as cardiac rehabilitation and adult mental health, whilst being inclusive of those with disabilities, differing needs and ethnicity. The project also aims to reconnect people with their local green space by following traffic-free routes in their locality, ideal for people who are returning to cycling, or who just want to increase their physical activity in the outdoors.

Wheels for All sessions offer cycling opportunities for anyone who isn't able to manage a two wheeled bike to experience the benefits of cycling through the use of a range of adapted cycles. In partnership with Warrington Borough Council's Arts and Sports Engagement Team (ASET) and Warrington PCT, the project has delivered a highly successful *Wheels for All* programme at Victoria Park Arena since August 2007.

Health on Wheels session in Birkenhead Park



©Ilan Lancaster

2.4 Valuing the natural environment

The natural environment including air, water, soils, landscapes and biodiversity provide crucial ecosystem services to the region. In addition to the welfare benefits provided by the natural environment, there is growing recognition of the contribution that it makes more broadly to the economy. A high quality natural environment is increasingly seen by many as part of the infrastructure for a successful economy (see Case study 3). For example, a high quality natural environment directly supports employment, attracts businesses to the area and supports the tourism industry in many regions. However, the natural environment is not routinely considered in day-to-day decision-making in ways that reflect its true or full value. Goods and services provided by the natural environment do not tend to be traded in

markets which means they do not have *prices* (and so are often undervalued). Without some form of corrective measures, the actions of individuals may not result in the best outcomes for society as a whole, resulting in the provision of too few goods and services from the natural environment and too few resources being channelled towards protection and conservation efforts.

Direct employment in nature and landscape conservation in the North West is estimated to support some 39,000 full-time equivalent jobs. When activities that are closely linked to the management of the natural environment in the agriculture, food, forestry, fisheries and tourism sector are also included, employment is estimated at around 100,299.

Case study 3 *Natural Economy North West*

The *Natural Economy North West* (NENW) project is an innovative three-year partnership programme (2006-09) which aims to maximise the economic benefits from existing and new investment in the region's natural environment. It is established as a multi-agency/cross-sectoral partnership led by Natural England, the Northwest Regional Development Agency and the SITA Trust. Its purpose is to deliver Transformational Action 113 ("develop the economic benefits of the region's natural economy") in the Regional Economic Strategy.

NENW has worked with the Northwest Regional Development Agency to bring together the evidence on the economic benefits of Green Infrastructure. This work is summarised in a report entitled *The Economic Value of Green Infrastructure*. The summary publication demonstrates how Green Infrastructure can be a dynamic force that underpins economic success and social wellbeing, when properly planned.

At Bold Moss, a former colliery site has been transformed into a community woodland and nearly 600 new homes built. The District Valuer concluded that, after allowing for the other variable factors and the general trend in property values, the regeneration scheme and development of a community woodland directly enhanced existing property values in the surrounding area by approximately £15 million and new developments worth £75m had been attracted. This demonstrates how Green Infrastructure can contribute dynamically to the prosperity of the region. By changing perceptions it can help attract and retain investment, whilst ensuring that new development maintains the network of green and blue spaces that acts as the link between our urban centres. The *Economic Value of Green Infrastructure* report can be downloaded at www.naturaleconomynorthwest.co.uk

3 The vision for the region's natural environment

The North West's natural environment is valued both in its own right and for the services it provides such as clean water, productive soils and flood and carbon management. It also underpins our economic activity, provides security against climate change, contributes to the region's health and wellbeing and is the backdrop to our cultural identity.

Our vision for the North West is for it to be a prosperous, environmentally healthy and socially vibrant region, where the environment is recognised as a key asset and one where:

- The natural environment is a key consideration of all land use planning in the region and, through this, the environment is protected and enhanced.
- The region's population makes increasing use of the natural environment for recreation, health and enjoyment.
- The region's coastal areas are sustainably managed and our offshore marine environment receives the same protection as our terrestrial environment through the establishment of a network of Marine Protected Areas.
- The region's designated landscapes are protected and enhanced and all landscapes are considered important to decision making.
- Biodiversity thrives across the region – our best wildlife sites are protected, and isolated and fragmented habitats are reconnected to increase biodiversity and resilience to climate change impacts.
- Our farmed landscapes are managed to contribute to a thriving rural economy rich in wildlife, water resource management and historical heritage, and are robust to impacts of climate change.

- The social and economic value of the natural environment is recognised in regional plans, strategies and frameworks.
- Our partners and customers are inspired to take action for the natural environment.

3.1 Achieving the vision in the North West

Our approach to conservation has evolved over the last 60 years, following the National Parks and Access to the Countryside Act 1949, and has unashamedly focused on protected areas and sites. Whilst this approach has been largely successful within these designated sites, many habitats and species outside these areas are in decline. Development and economic decisions have an important part to play in shaping the region's natural environment. Urgent and coordinated action is needed now if we are to address the problems that face our land and seas. Natural England is actively engaged with partners to help produce the New Regional Strategy and, together with the Environment Agency, Forestry Commission and North West Environment Link, has developed a 'Future Vision for the North West' which sets out principles for economic growth that can be achieved hand in hand with environmental sustainability.

The wealth of natural assets in the North West makes it even more important that Natural England focuses on those activities that will make the most difference to the natural environment. In this section we have set out our approach to addressing the most pressing challenges facing the natural environment in the North West. However, we cannot do this alone and your support is needed if we are to work together to take some difficult decisions that will enable us to integrate the needs of the natural environment with those of agriculture, business and the rights of people for housing, jobs and a decent quality of life.

3.2 Landscape

Traditionally landscape conservation has been a priority activity in our designated landscapes such as National Parks and Areas of Outstanding Natural Beauty (AONBs). However, Natural England believes that a fuller and wider appreciation of the importance of landscape conservation would benefit the whole region because:

- Landscape character and cultural heritage are key contributors to our identity, influencing sense of place, shaping the settings of people's lives and providing a critical motivation to their engagement with the natural environment.
- Sustainable, integrated land use planning (as well as land, water and resource management) requires a landscape scale perspective.
- Landscapes contribute to a wide range of ecosystem goods and services.

What Natural England will do in the region

Natural England is committed to the implementation of the European Landscape Convention. To that end we will:

- Support the North West Landscape Partnership to help deliver the European Landscape Convention.
- Develop a Regional Landscape Character Framework to help with regional and sub-regional landscape planning and awareness of landscape as a unifying framework for all land use sectors.
- Work with the regional planning body on the implementation of Regional Spatial Strategy landscape policies, and on the development of the new Regional Strategy which integrates land use planning and economic strategies.
- Review the outcome of the South Downs Public Inquiry, to decide how to progress the review of landscape designations between the Lake District and Yorkshire Dales National Parks.

Ennerdale Water and Fells, Lake District



©Natural England/Ian Crosher



Lancashire Mosslands

Your support:

If you are a politician

- Understand that landscapes exist everywhere and, whether natural or man-made, are everyone's shared inheritance.
- Actively support the Regional Landscape Partnership and the aims of the European Landscape Convention.

If you are a local authority, National Park Authority or are responsible for AONBs

- Recognise the need to put people at the heart of spatial planning and sustainable development, recognising that landscapes, and people's interest in landscape, extend beyond administrative boundaries.
- Embed delivery of objectives for protection, enhancement and restoration of landscapes within strategies, plans and policies.

If you work in a government agency

- Increase mutual understanding of landscape as a unifying framework, and work together where interests overlap, for the benefit of all its aspects.

If you are involved in regional strategic planning and decision making

- Support us in working towards a better landscape, historic landscape and geodiversity evidence base for regional spatial planning.
- Support delivery of landscape objectives as part of sustainable economic development.

3.3 Biodiversity

The continuing loss of biodiversity is critical, not just because of the intrinsic value of nature, but also because of the resulting decline in vital 'ecosystem services'. The future diversity of the region's habitats and species is dependent on the action we all take today. The UK Government has committed to halt the loss of biodiversity by 2010 and this is being delivered through the English Biodiversity Strategy (EBS) and the UK's Biodiversity Action Plan (BAP). EBS has five major aims: to protect the best wildlife sites, promote recovery of declining species and habitats, embed biodiversity in all sectors of policy and decision making, enthuse people and develop the evidence base.

Whilst we are making progress in achieving our targets within designated sites, outside these areas many habitats and species are in decline. Moreover, as the climate changes there is more reason than ever to ensure that the natural environment is healthy and has the capacity to adapt to climate change. We therefore need to take a long term view for the management of habitats and species, that will secure connectivity and the healthy functioning of landscape-scale ecosystems that will be resilient to climate change (see Case study 4).

Case study 4 Restoring wetlands in the Lancashire Mosslands

The Lancashire Mosslands are now largely arable, horticulture and dairy farming. Fragments (totalling just over 500 ha) of lowland raised bog have survived but this entire habitat has been modified by past drainage and peat cutting.

As part of the national *Wetland Vision* project the Lancashire Wildlife Trust, Environment Agency and Natural England are working together to revive the fortunes of this critically endangered habitat. Recent works have helped restore Heysham Moss, Red Moss, Bryn Marsh & Ince Moss and Astley & Bedford Moss, covering a total of 99 ha. This has included scrub removal and the construction of dams and bunds to hold back water and re-wet the moss.

The works will help re-establish *Sphagnum* moss and cotton grass on the degraded mossland. Critically, restoration of bog habitat will stop the drained bogs emitting carbon and turn them back in to carbon sinks. The project has also helped raise awareness of the importance of bogs for biodiversity and climate change and promotes the use of peat-free alternatives for gardening.

The Wildlife Trust has three dedicated project officers and a much wider support team working on this project. Together they have been working with local schools, landowners and businesses to raise awareness of the importance of mossland habitats.

What Natural England will do in the region

We are working to secure our agreed contribution to key national biodiversity and SSSI targets to improve the quality of biodiversity in the region. To this end we will:

- Secure 65% of Natural England-led priority habitats in beneficial management and 70% of Natural England-led priority species meeting recovery plan objectives.
- Secure favourable management on an additional 6,000 ha of SSSI, reaching a regional target of 93% by March 2010.
- Support the North West Biodiversity Action Plan (BAP) and opportunity mapping for the region. Ensure that 5 Local Biodiversity Action Plan (LBAP) partnerships have business plans and ensure that the 5 Local Record Centres meet their standards of service.
- Influence regional policies and frameworks to take action to conserve and enhance regional habitats and species.
- Target Environmental Stewardship to ensure that biodiversity is a key objective in HLS and ELS agreements.
- Support and strengthen partnerships adopting and delivering landscape scale approaches to habitat creation and restoration. Including projects funded through the Wetland Vision such as the Morecombe Bay and Meres and Mosses partnerships.
- Work in partnership to develop an improved evidence base on quality and extent of BAP habitats and species to enable appropriate target setting and monitoring of BAP delivery, and to inform planning decisions.
- Bring significant areas of land into positive environmental management through Environmental Stewardship, and within this, gain 95% of SSSI in favourable or recovering condition by December 2010.
- Work with the Environment Agency and other partners to deliver targets in the North West and Solway Tweed River Basin Management Plans (to be finalised in 2009) that will benefit coastal waters and freshwaters throughout the region.

Your support:

If you are a politician

- Be aware of the economic benefits derived from the natural environment and its contribution to sustainable economic development.
- Be aware of the contribution that biodiversity makes to enhancing the quality of life of local communities by improving the quality and interest of green space and the countryside.

If you are a government agency, local authority, National Park Authority or are responsible for AONBs

- Embed delivery of objectives and targets for protection, enhancement and expansion of biodiversity resources within strategies, plans and operations.
- Avoid adverse effects on protected sites from activities influenced by your organisation.
- Embed the requirements for climate change adaptation of biodiversity resources within strategies, plans and operations.
- Support delivery of biodiversity on local wildlife sites via local area agreements.
- Ensure that the biodiversity duty introduced in the Natural Environment and Rural Communities (NERC) Act, for local authorities to have regard to the conservation of biodiversity in exercising all of their functions, is fully implemented.
- Ensure biodiversity enhancement is incorporated within Green Infrastructure planning.
- Contribute to achieving and maintaining favourable condition on SSSI and support landscape-scale delivery projects.
- Support regional and local biodiversity partnerships in their work to coordinate and report delivery of England Biodiversity Strategy objectives and targets.

If you are involved in regional strategic planning and decision making

- Support delivery of England Biodiversity Strategy objectives and targets as part of sustainable development within plans, strategies and operations alongside objectives for promoting economic growth.
- Ensure regional strategic planning avoids adverse effects on protected sites and embeds climate change adaptation requirements.
- Ensure biodiversity is incorporated within the regional evidence base underpinning regional strategic planning.
- Support the engagement in regional planning of the North West Biodiversity Forum, and the regional biodiversity partnership.

If you are an NGO

- Engage in implementation of the England Biodiversity Strategy framework for delivering biodiversity.
- Help us advocate the protection and enhancement of biodiversity, particularly outside statutory designations, within development planning and control, and land use initiatives.

3.4 Marine

The region's maritime environment contributes to the regional economy through fisheries, renewable energy, tourism, ports and marine technology development. However, sustainable management of the marine environment has lagged behind terrestrial habitats and currently only 2% of UK seas (out to 200 miles) and 8% of the seas around England (out to 12 miles) have any form of protection. Recent evidence indicates that there has been a significant decline in the quality of our marine environment mainly through damaging human activities including fishing, land based pollutants, aggregate extraction, and coastal development. The increasing impacts associated with climate change threaten to make this worse.

Existing marine protected areas (MPAs) are not sufficient to bring about the necessary recovery of our marine ecosystem. The proposed Marine and Coastal Access Act will provide the legal mechanism and driver for the designation of a new type of marine

protected area, Marine Conservation Zones (MCZs). The Act will also implement a planning system for the marine environment, improve fisheries regulation and create a Marine Management Organisation.

A well managed MPA network is fundamental to the recovery and conservation of both biodiversity and ecological processes and will make an essential contribution to sustaining marine ecosystem health. Such a network is essential to ensure that healthy ecosystems have the capacity and resilience to adapt to ongoing climate change. There will be intrinsic benefits to biodiversity and the range of goods and services that the marine environment provides. The network will also provide opportunities for people to experience and enjoy a healthy marine environment and instil a sense of stewardship. The network will contribute to the UK Government's vision to recover and protect the richness of our marine wildlife and environment and to delivering our international commitments.



©Paul Kay

Honeycomb worm reef



Mersey Estuary

What Natural England is doing in the region

We are working to ensure that our seas are protected, allowed to recover and managed sustainably, to halt the decline in biodiversity and to strengthen their resilience to climate change. To this end we will:

- Ensure that the North West's existing European marine sites are being managed effectively through continuing to work with coastal partnerships, Management Groups and other stakeholders.
- Plan and deliver informal and formal stakeholder consultations on two new offshore European marine sites: Liverpool Bay potential Special Protection Area (for common scoter and red-throated diver) and Shell Flats & Lune Deep potential Special Area of Conservation (for subtidal sandbanks and reefs).
- Set up an Irish Sea Marine Conservation Zone project which will, with strong stakeholder participation, develop recommendations on the Marine Conservation Zones needed to complete the Marine Protected Area network.
- Involve members of the public in events to raise awareness of the region's undersea landscapes, leading to increased public support for measures to protect and recover the richness of our seas, including Marine Protected Areas.
- Ensure that shellfisheries and other fisheries in European marine sites (including Morecambe Bay) are managed sustainably.
- Ensure that the development of the marine renewables industry in the eastern Irish Sea is undertaken in ways which safeguard the natural environment whilst optimising the contribution made to climate change mitigation.
- Influence and demonstrate marine planning to help secure an ecosystem approach to management of the marine environment including support through the submission of an Irish Sea Maritime Planning Interreg bid.
- Contribute to a multi-year programme to provide data on the state of the seas in designated and undesignated areas.

Your support:

If you are a politician

- Be aware that a well planned and managed MPA network will benefit the intrinsic biodiversity and the range of goods and services that the marine environment provides.
- Support a fit for purpose Marine and Coastal Access Bill that facilitates the delivery of an ecologically coherent network of well managed MPAs in its passage through Parliament.
- Be aware that recent research, co-funded by Natural England, Defra and the Joint Nature Conservation Committee (JNCC), has found that there is broad public support in the UK for the UK-wide network of MPAs that will be provided for under the Bill.

If you are a government agency, local authority, National Park Authority or are responsible for AONBs

- Support a fit for purpose Marine and Coastal Access Bill that facilitates the delivery of an ecologically coherent network of well managed MPAs in its passage through Parliament.
- Support the effective management of the region's existing MPAs, including recognising the contributions made by estuary and coastal partnerships.

If you are involved in regional strategic planning and decision making

- Be aware that a well planned and managed MPA network will benefit both intrinsic biodiversity and the range of goods and services that the marine environment provides.

If you are an NGO

- Support a streamlined designation process with Natural England responsible for the confirmation of Marine Conservation Zones.

If you are a user of the marine environment

- Recognise that MPAs are essential for the recovery and protection of the marine environment.
- Participate in the process of developing recommendations for Marine Conservation Zones to ensure that these are based upon best available information, build consensus as far as possible, and minimise conflict and maximise potential synergies between ecological and socio-economic considerations.

3.5 Reconnecting people and nature

The North West region has some of the poorest health in England. The lowest life expectancy at birth, for both males and females, of any local authority in England are found in the North West. Many of today's preventable health problems are concentrated in the most deprived areas of the region, where a combination of environmental, social and economic factors lead to relatively poorer health and lower life expectancy. The poor state of the region's

housing has been recognised as a factor contributing to health inequalities.

70% of the UK population are sedentary thus creating many major avoidable health problems such as obesity, diabetes Type 2, heart disease and some cancers. In addition, poor mental health affects millions of people – this not only reduces wellbeing but is associated with poor physical health. It is estimated that inactive people cost the UK economy some £8.5 billion each year. Motivating just 10% of the inactive population

Case study 5 Carlisle Physical Activity Care Pathways Project

We are working in partnership with Carlisle City Council, Fusehill Medical Group and the Carlisle Doorstep Walks group to promote healthy walking as part of the *Physical Activity Care Pathways Project*, an initiative to increase levels of activity in sedentary adults.

A large poster has been displayed in Fusehill surgery waiting room to attract and motivate new walkers. It details several easy walking routes across the city from Fusehill including a green space walk around Melbourne Park, a city walk to the Lanes Shopping Centre and Railway Station and a riverside walk to Brunton Park, Carlisle United's Football Stadium.

Patients are also being referred to the Carlisle Doorstep Walks group. The group is part of the national *Walking the way to Health Initiative* (WHI) which has over 530 schemes across the country. This is a pilot project at present but it is hoped that longer-term more referrals will take place to the health walks and they will become a fundamental part of the GP surgery referral programme.

©Natural England/Sarah Warrener



Ainsdale Sand Dunes NNR

to actively use the natural environment would save around £500 million and 6,000 lives annually. The escalating cost of health care means that in the future there will be more emphasis on prevention rather than cure, with people needing to become more engaged and interested in their own health.

What Natural England is doing in the region

In the North West we are working to maximise the contribution of the natural environment to people's health and wellbeing, by raising awareness, understanding and sharing the benefits that contact with nature can bring through childhood, working life and into active ageing. In parallel we are promoting the natural environment as a preventative health solution with health care professionals (see Case study 5). We will:

- Continue to support and develop the *Walking the way to Health Initiative* (WHI) by increasing active WHI membership and participation in health walks.
- Promote the use of the Outdoor Health Questionnaire within WHI schemes to underpin our role in providing evidence of the health benefits of walking in the natural environment.
- Use practical projects such as our Green Exercise pilot *Health on Wheels* to deliver benefits for people and to learn lessons to illustrate how partners can deliver health through the natural environment.
- Provide volunteering opportunities through our sites and projects, and through support of the regional volunteer partnership, increase the number and diversity of people actively engaged to conserve and enhance the natural environment.

Our National Nature Reserves (NNRs) provide opportunities for people to visit some of our best wildlife sites and we will be looking to develop the visitor experience on selected sites this year. We want to encourage more of the 1.5 million people living within 5 km of the Pennine Bridleway to use public transport and get out on their bikes and explore the countryside. Our work with regional partners including local access authorities is also helping to improve the quality of access and build greater awareness to encourage more people to use the existing access at a local and regional level. We will:

- Support the submission of high quality *Access to Nature* applications in the region by building strong partnerships through promotion and working alongside applicants.
- Ensure that Environmental Stewardship (HLS) access agreements are targeted into areas where access provision is needed most, and improve opportunities for

children to increase their understanding and appreciation of the natural environment through farm visits.

- Explore new ways to get children engaged with the natural environment through ongoing management of our regional *Natural Connections* pilot project.
- Identify the extent of our access and recreation resource, and then develop and deliver a recreation strategy to meet the needs of those living in the North West.
- Undertake statutory duties and other management activities to ensure the availability of optimum amounts of accessible Open Access land.
- Ensure that the statutory framework for 'access to the coast' is tested and in place in the region to enable delivery of coastal access to begin in 2010/11.
- Continue to progress the development and management of the Pennine Bridleway National Trail through the region.



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Your support:

If you are a politician

- Acknowledge and champion the role that the connection between people and a high quality natural environment can play in creating strong and healthy communities.
- Recognise the potential for the health sector, including the Department of Health, Primary Care Trusts and individual health care professionals, to promote the use of the natural environment as part of the healthcare prescribed to patients.
- Support Government legislation to create new powers to improve coastal access at a national scale.

If you are a local authority

- Improve the quality and quantity of access and green space close to where people live to create opportunities for people to be more active in the outdoors in their local environment.
- Recognise the importance of contact with the natural environment to contribute to and deliver your own social, economic and environmental priorities.
- Provide sufficient resources to deliver your commitments (set out in published strategies such as Rights of Way Improvement Plans) to improve public rights of way and other opportunities to access quality green space and ensure that they are fully integrated with other policies, plans and projects (such as local transport plans, local area agreements).
- Assist planners and developers to improve existing or provide new and high quality accessible green space into the layouts of new developments, and in transport and Green Infrastructure plans.
- Encourage schools and young people to use the natural environment to benefit social, physical and mental development.

If you are involved in regional strategic planning and decision making

- Recognise that we can use the natural environment to provide children with contact with the natural outdoors which benefits their mental and physical health, furthers their social and cognitive development and will help increase physical activity and combat obesity.
- Recognise that increased contact with the natural environment results in more productive, active and fulfilling lives for adults.
- Understand that healthy ageing depends on close and frequent contact with the natural environment, preventing disease and bringing a better quality of life.
- Recognise the economic and social potential from providing high quality green spaces near to where people live and from improving the quality of the North West's natural environment (eg by promoting underused natural green areas, attracting investment and developing the region's image as a green, healthy place to live, work, invest, visit and study).

If you work in the health sector

- To consider the use of the natural environment as a real alternative to conventional drug treatment for a range of conditions such as mild depression.
- Encourage GPs to promote physical activity in the natural environment through incentives added into the 2009 review of their contract.

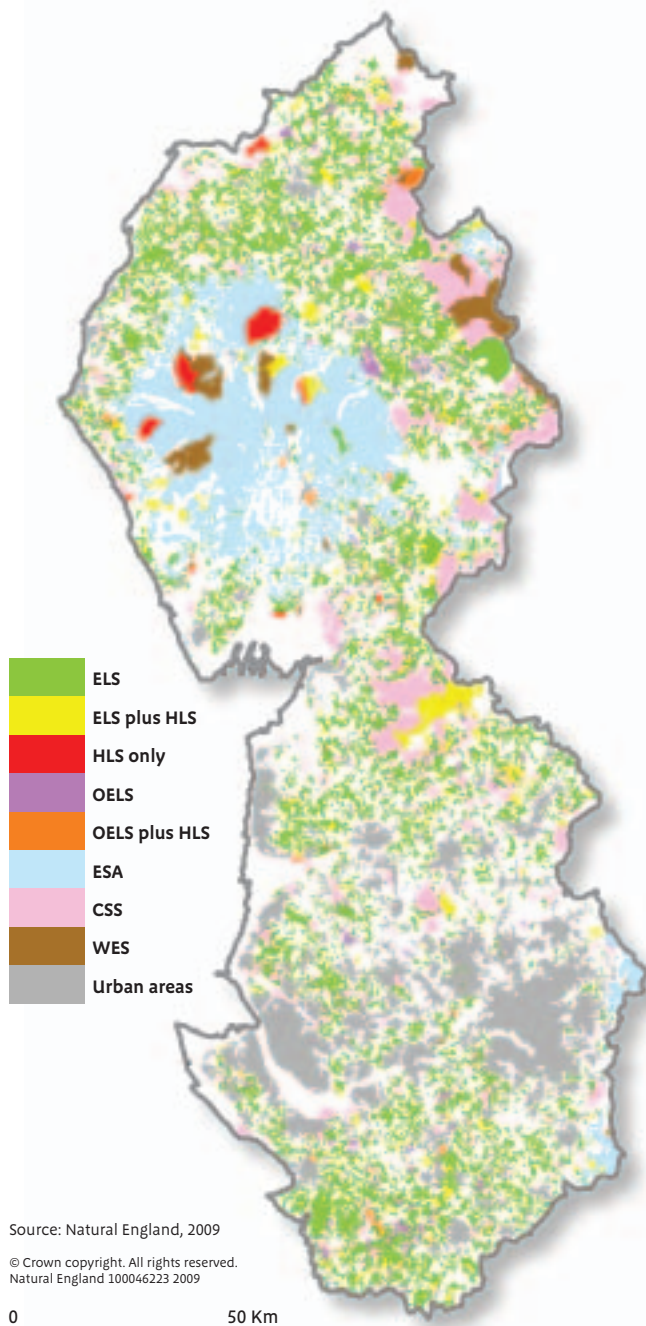
If you are an NGO

- Invest in programmes that connect people to the natural environment and deliver health improvements to communities most in need.

3.6 Integrated land management and land use

Farming makes a significant contribution to safeguarding and enhancing our natural environment and cultural landscape heritage and underpinning healthy and vibrant communities. Pressures due to an increasingly competitive global market for agricultural products, demanding expectations from consumers for high quality and low price, changing regulatory and tariff

Figure 9 Agri-environment Schemes coverage



regimes and the uncertainties of climate change are putting more pressure on farmers. Both Environmental Stewardship and the older agri-environment schemes (Countryside Stewardship and Environmentally Sensitive Areas) offer opportunities for business diversification through financial reward for undertaking good environmental practice schemes (see Case study 6). Those farmers and land managers who combine long term stewardship of the land with real business innovation have never been more important. We need to assist farmers and landowners to manage the land more sustainably in order to provide greater profit, and reward the environmental and societal benefits that flow from high standards of stewardship.

What Natural England is doing in the region

Over the next three years there will be unprecedented levels of RDPE funding for environmental improvements in the countryside. In 2009/10 we have £11 million for new CSS/ESA/HLS activity covering both new HLS agreements and capital work additions to existing schemes and £1.4 million for new OELS/ELS agreements. This is in addition to annual commitments to existing agreements of £30.2 million.

We will influence the farming community to continue with environmentally friendly farming methods during a period of economic change within the industry and ensure that environmental outcomes are maximised to deliver value for money for the tax payer by:

- Bringing significant areas of land into positive environmental management through the Environmental Stewardship Scheme, thereby contributing to the objective of 95% of SSSI in favourable or recovering condition by 2010.
- Taking full advantage of EU funds through maximising spend of the RDPE budget.
- Promoting ELS, HLS and 'sustainable farming'

Case study 6 Agri-environment schemes in the North West

More than 68% of land area in the North West is managed under some form of voluntary environmental scheme (see Figure 9). This includes:

- Entry Level Stewardship (ELS) including Organic ELS – 390,096 ha worth £11.07 million in annual payments in 2008/09.
- Higher Level Stewardship – 44,188 ha worth £5.08 million in annual payments in 2008/09.
- Classic schemes (Countryside Stewardship Scheme and Environmentally Sensitive Areas) – 222,035 ha with £14.06 million in annual area payments in 2008/09.
- Wildlife Enhancement Scheme – 52,750 ha.

Under these schemes land managers have created 14,352 km of hedgerow, 2,741 km of ditches, 38.2 ha of woodland and 209 skylark plots providing important habitats for endangered birds and mammals and conserving locally distinctive landscapes.

through the developing Land Management Advice Service and local teams.

- Significantly improving the uptake of Environmental Stewardship in general and HLS in particular.
- Resolving the way forward for expiring classic schemes in a manner that maintains the value of the public investment in the environment already made.
- Preparing for implementation of Uplands ELS in early 2010.

We are also working to ensure that water companies can deliver their statutory obligations for Natura 2000 sites, SSSIs and Biodiversity Action Plans (BAP). To this end we will:

- Influence the landscape scale Price Review (PR09) projects to ensure best environmental, carbon storage and landscape gain can be made from them.
- Ensure Catchment Management Proposals can deliver multiple benefits including improvements to biodiversity and SSSI condition, restoration and better management of habitats, positive impacts on flood storage, improvements to water quality, increased carbon storage, and improvements to upland landscapes.

©Natural England/Paul Clendell



Cutting silage near windfarm, Askham in Furness

Your support:

If you are a politician

- Support our work to promote better integration of RDPE Axis 2 (HLS) with Axis 1, other Axis 2 and Axis 3 activity wherever possible.

If you are a local authority, National Park Authority or are responsible for AONBs

- Help promote agri-environment schemes both to land managers in your area and among your own staff. For land managers it represents a business opportunity. There are synergies with your own agenda and we should be looking to make links and explore the potential of HLS in particular to contribute to these.

If you are a government agency

- Identify synergies, overlaps and potential for HLS to deliver your objectives and opportunities to be involved in promotion and delivery.

If you are involved in regional strategic planning and decision making

- Recognise that the natural environment is a significant component of sustainable development and there are national objectives for maintaining and enhancing its landscape and biodiversity value.

If you are involved in land management

- Consider the diversification and underpinning opportunities that involvement in Environmental Stewardship could offer you.
- Our soils, vegetation and coastal systems store significant amounts of carbon and play a vital role in regulating our climate. By helping to protect these ecosystems from degradation and loss, land managers can help mitigate the impacts of climate change and secure improvements in water quality.

If you are an NGO

- Encourage farmers and land managers to participate in ES schemes to deliver critical environmental protection in high value areas.

If you are involved in water industry planning

- Secure good land management on a catchment scale that delivers multiple benefits including improvements to biodiversity and SSSI condition, restoration and better management of habitats, positive impacts on flood storage, improvements to water quality, increased carbon storage, and improvements to upland landscapes.
- Adopt a 'climate proofing' approach to schemes to ensure that water quality and water resources improvements remain robust to climate change, promote less energy intensive water and sewerage treatment options and contribute to the requirements for climate change adaptation at the landscape scale.
- Ensure schemes will meet wider Biodiversity Action Plan objectives.

3.7. Spatial planning and sustainable development

Economic growth and development have an extremely important part to play in shaping the region's natural environment. Regional investment decisions for transport, energy, water supply and wastewater treatment as well as for major development and housing, can have a major impact on the character and quality of our landscapes and biodiversity.

The challenges facing the natural environment are complex and increase year on year and it is clear that none can be dealt with in isolation. We aim to integrate the needs of the natural environment with those of business, requirements of people for housing, jobs and a decent quality of life to ensure a sustainable future.

Burr Country Park, Bury



©Natural England/Martin Moss

What Natural England is doing in the region

We are working to ensure that the statutory planning system fully reflects the natural environment in striving to achieve truly sustainable development. Our particular focus this year will be working with the North West Development Agency, 4NW (the Regional Leaders Forum) and other partners to ensure that the new Regional Strategy takes full and appropriate account of the natural environment, as well as positively reflecting its interconnectivity with economic and social development. This will include helping to ensure that statutory environmental assessment processes are rigorously followed and helping to shape policy development. In addition we will:

- Continue to influence local development frameworks and act as a consultee for major development proposals.
- Work towards implementation of existing Regional Spatial Strategy policies such as EM1 (integrated environmental management) through working with partners to maximise benefits.
- Use our statutory responsibilities to ensure that mitigation to avoid adverse impacts on designated sites of European importance, as set out in the Regional Spatial Strategy (RSS), is implemented.

Your support:

If you are a politician

- To recognise the value of the natural environment for its own sake as well as its contribution to economic and social wellbeing and ensure this informs regional policies.

If you are a local authority, National Park Authority or are responsible for AONBs

- Fully reflect the natural environment in community strategies, local strategic partnerships, local area agreements, development frameworks and development control decisions.

If you are a government agency or are involved in regional strategic planning and decision making

- Recognise that the natural environment is a significant component of sustainable development and there are national objectives for maintaining and enhancing its landscape and biodiversity value.
- Develop visions, principles and policies that recognise the value of the natural environment to the region's quality of life including its contribution to, and interconnectivity with, social and economic development.
- Support and further develop concepts such as Green Infrastructure, ecosystem services and regional landscape character frameworks as important contributors to regional spatial planning as well as ensuring that statutory assessment processes are properly undertaken and help to shape emerging policy.
- Understand that new development should be phased to allow for provision of water supply and wastewater treatment infrastructure ahead of development and without environmental harm.

3.8. Building a greener North West: Green Infrastructure delivery

The need for Green Infrastructure to be planned, delivered and maintained is as significant as other forms of infrastructure planning. The North West Green Infrastructure Guide defines Green Infrastructure as “The region's life support system; a network of natural environment components and green and blue spaces that lies within and between the North West's cities, towns and villages, and which provides multiple social, economic and environmental benefits”.

New housing and Growth Points present an opportunity for safeguarding, enhancing or creating Green Infrastructure but at the same time must be delivered within environmental limits. In the North West, the 6 Growth Points

(Greater Manchester, Central Lancashire, Carlisle, West Cheshire, Mersey Heartlands (Liverpool – Wirral) and Mid-Mersey (Halton/St Helens/Warrington) plan to deliver nearly 160,000 new homes by 2016. The Growth Points initiative offers a great opportunity to improve the sustainability of the new communities it will create, and raise the quality of place for many areas and aid their regeneration.

Growth Points should deliver improved provision of Green Infrastructure to ensure development is of a high quality and able to support community needs for access to nature. In addition they should provide opportunity for health-benefiting physical activity and contribute to delivering new housing areas that are climate change proofed for human comfort.



Everton Park, Liverpool

Case study 7 The benefits of good quality urban green spaces: Mesnes Park, Newton-le-Willows, Merseyside

Good quality urban green spaces can provide significant economic, environmental, social and health benefits. Green and recreation spaces can attract businesses to an area and in some cases have been a key component of the economic success of new developments.

Between 1996 and 2001 £1 million worth of improvements were made to Mesnes Park including: new sports facilities, a footpath network, and new woodlands and a wildflower meadow to extend the park from 5 to 8.5 ha.

180,000 people now enjoy the park each year compared with 15,000 previously, and properties on or adjacent to the park have a 15% premium over similar properties further away. Higher property prices are not a benefit *per se* but are a partial reflection (proxy) of the value of some of the benefits that residents receive as a result of being in close proximity to good quality green space. Using differences in property prices as a measure of value is likely to provide an underestimate and will not include an assessment of the benefits for non-resident visitors.

Source: CABE SPACE (2005) Does Money grow on Trees, Commission for Architecture and the Built Environment.

High quality Green Infrastructure also contributes to the setting and quality of people's living and working environments, generating economic benefit. Research shows that an important factor in the North West's success in attracting investment and creating new communities is the high quality of the environment (see Case study 7).

What Natural England is doing in the region

We are continuing to advocate the incorporation of Green Infrastructure planning into regional and sub-regional policies and regeneration plans to bring about significant landscape, biodiversity and access benefits whilst contributing to social and economic goals. To this end we are working with all relevant agencies in the development and assessment of options to ensure Growth Point schemes are sustainable, help to improve environmental quality and are

realistic in terms of infrastructure, particularly transport and do not result in unacceptable environmental impacts. We will:

- Ensure joined up and consistent engagement between the Defra family of agencies (Natural England, Environment Agency and Forestry Commission) and the Growth Points.
- Provide advice to local authorities on the implementation of the Regional Spatial Strategy Green Infrastructure policy.

Your support:

If you are a politician

- Recognise that the provision of Green Infrastructure should be an integral part of the creation of sustainable communities throughout the North West.
- Be aware that an assessment of environmental capacity should be central to decisions on future development.

If you are a local authority

- Ensure that green infrastructure is a primary consideration in planning, developing and maintaining new development; it should be multi-functional, seeking the integration and interaction of different functions on the same site and across a Green Infrastructure network as a whole.

If you are a government agency

- Regard Green Infrastructure as essential as any form of built infrastructure such as roads, power and other utilities.
- Be aware that Green Infrastructure not only contributes to the setting and quality of people's living and working environments, but delivers positive benefits for the natural environment and people's enjoyment of it.

If you are involved in regional spatial planning

- The requirements included in the published Regional Spatial Strategy (Sept 2008) to avoid adverse effects on the integrity of European Sites from new Growth Points should be fully implemented.
- Policies and decisions on development proposals should conserve and enhance valued environmental assets by seeking first to avoid loss or harm before considering the need for mitigation or compensatory measures. A Green Infrastructure strategy can provide the basis on which to make such decisions.

If you are involved in housing development

- Include the provision of multifunctional Green Infrastructure as an integral part of all new development to enhance the quality of the development and deliver a wide range of benefits for people and the natural environment.

- Influence local authorities to include Green Infrastructure in local development frameworks, local area agreements & local strategic partnerships.
- Support the development of sub-regional Green Infrastructure frameworks for all five of the North West sub-regions to inform and aid the development of more local strategies, plans and proposals.

3.9 Adapting to climate change

Climate change represents the most serious long term threat to the natural environment. Changes in temperature, rainfall, sea levels, and the magnitude and frequency of extreme weather events are already impacting upon our wildlife and landscapes (see Case study 8). These impacts may create both opportunities and threats to the natural environment. Even the most optimistic climate change predictions show us being locked into at least 50 years of unstable climate, so adaptation is vital.

Case study 8 Cumbria High Fells (CHF)

The Cumbria High Fells Character Area is one of Britain's most diverse areas of habitat, with significant biodiversity assets including heathlands, arctic and montane communities and blanket bogs. CHF is one of Natural England's four climate change pilot areas, where we have attempted to clarify the potential impacts of climate change on the natural world and identify the options for responding to these changes. The UK Climate Impacts Programme (2002) suggests that the climate in the Cumbria High Fells is likely to become warmer and wetter in winter and hotter and drier in summer, and rainfall intensity will probably increase. There is a range of potential impacts on the natural environment:

- Peat soils and blanket bog will dry out, releasing damaging carbon dioxide into the atmosphere.
- Arctic-alpine species, such as stiff sedge and ringlet butterfly, that are currently found at high altitudes may disappear from the region.
- Some species, such as ruddy darter and the hairy dragonfly will move into upland areas, and will have to compete with species that are already there.
- Some fish species that have survived since the last Ice Age, such as the Arctic char, may be lost.
- Climate change may increase the number of non-native and invasive species which may have impacts on existing species.

The Cumbria High Fells may be more resilient to climate change than the rest of England because of the varied landscape and rich mosaic of habitats. There are practical steps we can take such as improving the condition of all existing upland habitats, and particularly high carbon ones like blanket bog. Also, making sure that grazing regimes (the intensity, seasonality and type of animal) are appropriate and providing a network of native woodlands so that woodland species can move up the fells. Managing the land that drains into rivers, streams and lakes in an integrated way, and letting rivers take their natural courses, will also help to reduce the risk of floods and improve biodiversity.

We are working on an implementation plan with local stakeholders, through the Lake District Partnership, to ensure that this plan builds upon and dovetails with other initiatives.



Successful adaptation is dependent on a healthy, resilient natural environment, characterised by a rich diversity of habitats and species. Climate change adaptation is particularly relevant to the North West as large areas of flood plain are very vulnerable to increased risk of flooding. The region also has large stores of carbon locked up in its peatlands, which are at risk of releasing large amounts of carbon if soils dry.

What Natural England is doing in the region

We are focusing our work on the need to help the natural environment cope with a changing climate, whilst continuing to help to reduce emissions. It is essential that any adaptation action is 'sustainable' and does not add to climate change, cause detrimental impacts or limit the ability of other parts of the natural environment, society or business to carry out adaptation elsewhere. This is a high profile challenge for us and we need to develop a better understanding of the implications and opportunities for the natural environment from adaptation and mitigation. To this end we will:

- Continue to work closely with partners on the implementation of the North West

Climate Change Action Plan through the refresh of the Action Plan this summer, and the development of a regional climate change adaptation strategy.

- Support the development of the region's Ecological Data Network.
- Develop climate-change focussed projects, such as the South Solway peatlands to increase the capacity of peat to store carbon.
- Engage our partners in developing an Uplands Vision for the Lake District and share our knowledge on climate change adaptation strategies based on the Cumbria High Fells pilot.
- Assess which parts of the region are most vulnerable to the impacts of climate change and which are most resilient. We will work with partners to produce adaptation strategies and implementation plans for the natural environment in those areas.
- We will reduce the risk to the natural environment from climate change through our own operations by emission reduction and low carbon operation.

Your support:

If you are a politician

- Ensure that the natural environment is central in climate change adaptation policies and frameworks.
- Recognise the threats from climate change and the role that the environment can play in ameliorating those threats.

If you are a local authority

- Support decisions, and make policy, which anticipate climate change and provide for the adaptation of the natural environment.
- Secure multi-functional Green Infrastructure as an integral part of all new development to provide climate change adaptation capacity for both people and biodiversity.

If you are a National Park Authority or are responsible for AONBs

- Help us to develop an integrated and robust network of habitats functioning across the landscape to conserve wildlife and protect people.
- Manage the natural environment so it is more resilient to climate change.
- Integrate adaptation and mitigation measures into conservation management, planning and practice.
- Support the establishment of ecological networks through habitat protection, restoration and creation in appropriate locations.

If you are a government agency

- Ensure that your policies, programmes and projects are supportive of and compatible with climate change adaptation.
- Develop inter-agency partnerships to deliver wider benefits.

If you are involved in regional strategic planning and decision making

- Take decisions, and make policies, which anticipate climate change and provide for the adaptation of the natural environment.
- Engage with efforts to develop a proper valuation of natural assets, including the ecosystem services they provide.

If you are a land manager

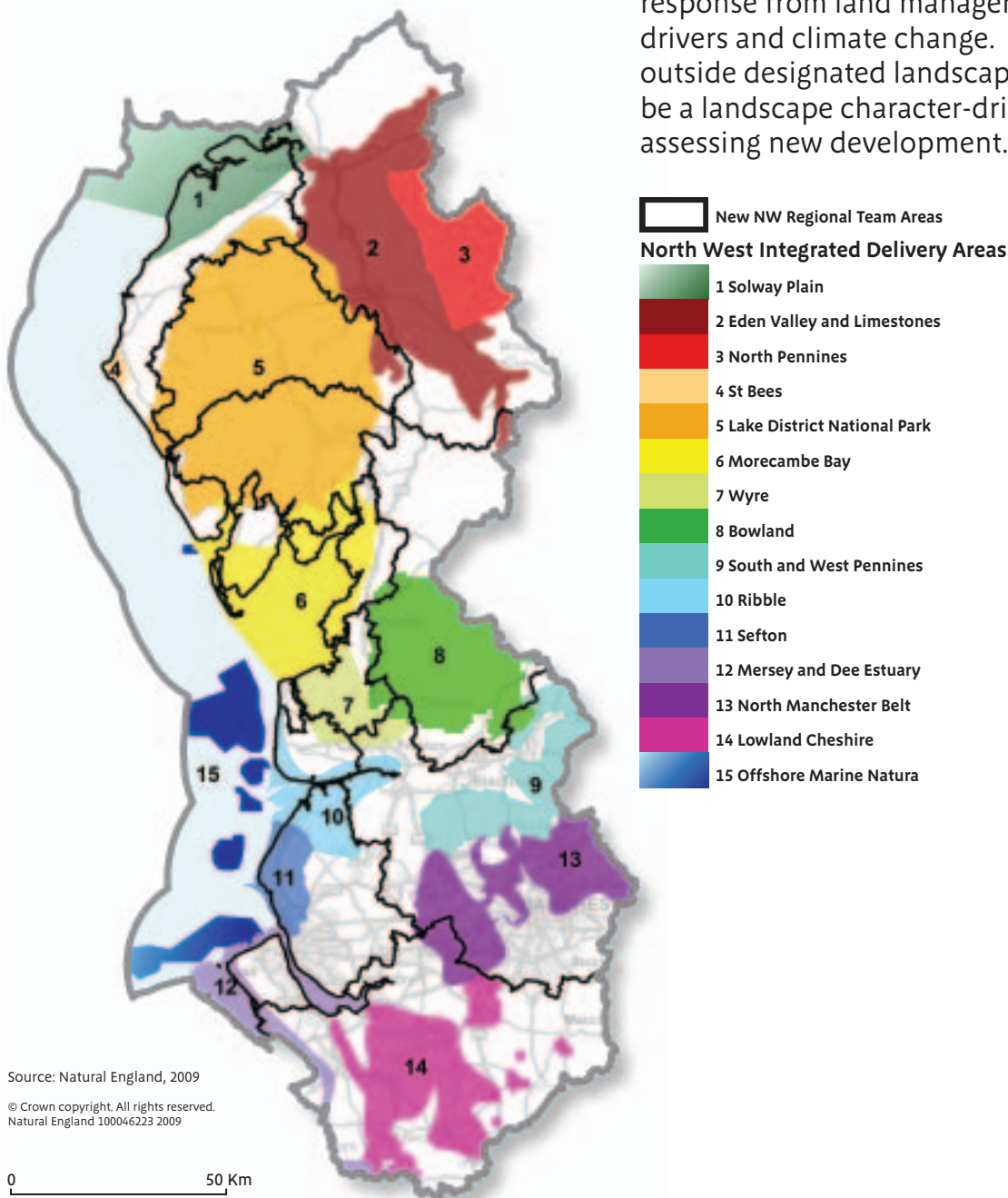
- Use the CALM (Carbon Accounting for Land Management) calculator to measure your farm's carbon output and take steps to reduce your farm's carbon footprint, particularly emissions of nitrous oxide and methane.
- Attend Farm Advice events to hear about ways to save energy and equipment to reduce energy use, as well as on-farm renewable energy generation.

4 Conclusion

The evidence presented in this report demonstrates that in some parts of the region the condition of our natural environment is stable, improving or in good health, but elsewhere there is real cause for concern.

We have a well developed framework for protecting and managing important, valuable and sensitive landscapes. Overall the quality of these protected areas is likely to be maintained during the significant economic development and housing growth described in the Regional Spatial Strategy. However, their character may change as a result of the response from land managers to economic drivers and climate change. Both within and outside designated landscapes there should be a landscape character-driven approach to assessing new development.

Figure 10 Integrated Delivery Areas map



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The region is fortunate in having good quality biodiversity assets which provide a range of economic benefits from tourism attractions and high quality environment for attracting inward investment, to services such as water purification and flood control. While some biodiversity indicators such as woodland bird populations are increasing, other species and habitats are declining. For the 60% of biodiversity habitat within statutory designations, delivery of the targets for maintaining extent and achieving good condition is progressing. For the remaining 40% of area outside these sites, delivery is far more difficult.

Projected economic development and housing growth has the potential to affect biodiversity in terms of water levels and quality, loss and fragmentation of habitats, disturbance from human activities, coastal squeeze, and air quality. Assessment and mitigation to avoid potential impacts will be necessary to meet Government objectives. In addition, climate change is likely to have a significant impact on regional biodiversity in the medium to long term especially in coastal and upland areas, and by exacerbating problems of habitat fragmentation in the lowlands.

To facilitate more integrated delivery across land management, biodiversity, access and enjoyment of the natural environment, we are developing tactical plans for 15 target areas across the North West. Within these areas we will deploy a mixture of levers including advocacy, regulation, advice, direct management and demonstration to deliver our environmental outcomes with others (see Figure 10).

The conservation and enhancement of our natural environment requires a comprehensive understanding of what are often complex processes and interrelationships. We need to better understand the direct and indirect consequences of land use and land management decisions. To do this we require sound evidence across a broad set of issues as well as rigorous analytical tools to bring together and evaluate this evidence. Beyond this we need to work with a broad coalition of partners to tackle challenges and encourage everyone to adopt a more sustainable approach to the use and management of natural resources.

Evidence

For further information about data and links to other reports referenced in this report please see:

http://www.naturalengland.org.uk/regions/north_west/sones/default.aspx

Contacts and further information

For further information on this report contact:

Susan Clark

3rd Floor

Bridgewater House

Whitworth Street

Manchester

M1 6LT

Tel: 0300 0601789

susan.clark@naturalengland.org.uk

Front cover photograph
Walkers on Cat Bells, Lake District
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Natural England is here to conserve and enhance the natural environment, for its intrinsic value, the wellbeing and enjoyment of people and the economic prosperity that it brings.

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