



# State of the natural environment in London: securing our future

[www.naturalengland.org.uk](http://www.naturalengland.org.uk)



# Contents

Foreword	1
1 London's natural environment	2
2 Natural London, Wild London	4
3 Natural London, Active London	12
4 Natural London, Future London	19
Annexes	25



# Foreword

The natural environment faces a number of unique challenges in London that demand a long term and sustainable response.

Perhaps the greatest challenge we face is to ensure the benefits of the natural environment are recognised and raised up the agenda at a time when the global economy is centre stage. The natural environment underpins our health, wellbeing and prosperity.

We need to find ways of conserving and enhancing our green spaces and natural assets in light of the knowledge that London is set to continue to grow for the foreseeable future.

We must take opportunities to connect more Londoners with their natural environment to encourage awareness of the benefits it can bring to health and quality of life.

We need to quickly focus on how we are going to 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 and that green spaces in towns and cities are an important way of dealing with this.

This report on the state of the natural environment in London shows there is much work to do. It highlights Natural England's position on some of the most crucial issues concerning the natural environment in London. It describes how we will work with a range of people and organisations to deliver our vision for Natural London, helping to ensure London is a world leader in improving the environment.



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Alison Barnes  
Regional Director

# Chapter 1

## London's natural environment

Although one of the largest urban areas in Europe, almost two thirds of the area of London is green space. This resource includes extensive areas of green belt, many municipal and historic parks, woodland, chalk downland, heathland, commons, grazing marsh, gardens, reservoirs, and the corridors of the River Thames and its tributaries. Consequently, despite a very high proportion of developed land, our city has a wide ecological range and varied landscapes. These areas support a surprising variety of plant and animal species including peregrines, water voles and stag beetles.

### Natural environment – benefits for London

London's unique natural environment provides the foundations for our economic and social wellbeing. It provides essential public services including:

- The basic necessities of life – clean air, clean water and productive soils.
- Security against climate change – moderating temperature extremes and helping to protect against the risk of flooding.
- Our natural health service – contributing to the health and wellbeing of Londoners, free for everyone to use.
- A sense of place – promoting and underpinning local identity and civic pride.

### Natural London

To secure these benefits for the natural environment, Natural England launched our vision for '**Natural London**' in September 2008, delivered through three integrated programmes.

#### Natural London Programmes

**Natural London, Wild London:** seeks to ensure that London's unique habitats and the wildlife they support are robust and healthy, supporting partners to carry out good land management while encouraging people to enjoy and appreciate the capital's best wildlife and finest landscapes.

**Natural London, Active London:** seeks to promote and secure accessible natural green space in the places where people live, work and play, encouraging people to use and appreciate the natural environment for the benefits it offers to their health and wellbeing.

**Natural London, Future London:** seeks to secure a Green Infrastructure (comprising the green space network and a greening of the built environment) that contributes to climate change adaptation and enhances biodiversity, landscape and access to the natural environment.

The work of these programmes in practice is demonstrated through the case studies in this document.

### London's People and Governance

The London region is complex and diverse in many ways. London has a unique institutional framework – the only region with a directly elected Mayor and regional assembly (see [www.london.gov.uk](http://www.london.gov.uk)). London has the most diverse set of communities measured both in terms of socio-economics and ethnicity and, of course, London is predominantly urban.

#### The facts:

- 33 London boroughs
- 7.2 million residents (estimated to rise to 8.5 million by 2026)
- 1.73 million children and young people under the age of 18
- a population density of 60 per ha
- almost 40% of the population living in inner boroughs
- 25% black and minority ethnic population
- over 300 languages spoken by pupils in London schools
- 1 million daily commuters
- 26 million tourists (including day-trippers) annually
- the most affluent and the most deprived wards in England
- the worst air quality in England.

### The state of London's natural environment

This analysis describes where London is meeting the challenge of harnessing the benefits of its natural environment and where more needs to be done.

Urgent and concerted action is required to ensure that a high quality natural environment is available for the people of London to enjoy. This is central to London's aspiration to excel amongst global cities. Working with the unique demography and governance that characterises London means that this challenge is complex and can only be met through collective action.

© WWT



London's Wetland Centre

### Our challenge to all

Our overarching aim is to ensure that the natural environment is at the heart of our city today and in the future. As we endeavour to achieve this aim, we call on public and private bodies, decision makers and those representing the people of London to respond to the challenges identified for us all within this document. We must seize this opportunity and, in meeting the challenges outlined, secure the future of London's natural environment for its intrinsic value, the wellbeing and enjoyment of people and the economic prosperity that it brings.

# Chapter 2

## Natural London, Wild London

### Wild London – current status

Most of London's most important habitats and species are found within statutory sites (Sites of Special Scientific Interest (SSSIs)) and non-statutory sites (Sites of Importance for Nature Conservation (SINCs)). The London Biodiversity Action Plan and complementary Borough Biodiversity Action Plans detail priority habitats and species and the actions required to protect them.

In London there are 36 SSSIs and over 1,300 SINCs. Five SSSIs in the capital are also sites of European importance; three are Special Areas of Conservation protecting habitats and species and two are Special Protection Areas for birds. There are two National Nature Reserves in London; Ruislip Woods and Richmond Park. Park Wood, a component of Ruislip Woods SSSI, supports the largest area

of ancient semi-natural woodland in London at 112 ha (and is also the 100th largest block of such woodland in England). Two of London's existing World Heritage Sites (Kew Gardens and Greenwich Park) comprise extensive areas of natural green space and the proposed World Heritage Site, 'Darwin's Landscape Laboratory' in Bromley encompasses two SSSIs.

As London is predominantly urban, it does not have extensive areas designated for natural landscape value. Only a small part of the Kent Downs Area of Outstanding Natural Beauty falls within London. Nevertheless London has a unique character shaped by its many natural features – not least the River Thames – which provide places and spaces many regard as vital to their sense of place and quality of life.

Ruislip Woods SSSI

© Natural England



Brent Reservoir SSSI – designated for its breeding bird community, with views of Wembley

## Biodiversity

There are a number of nationally important Biodiversity Action Plan (BAP) habitats in the city. Examples include woodland (5,000 ha), acid grassland (1,500 ha), chalk grassland (200 ha), coastal and floodplain grazing marsh (800 ha), heathland (50 ha), ponds (411 ha), rivers and streams (600 km) and reedbeds (130 ha).

These habitats provide vital places to live for a wide variety of species. Some are very common while others are nationally rare, such as the tower mustard plant and the stag beetle (over 30% of whose national population is found in London). Some once common species are now becoming rarer in the capital, such as the house sparrow, while other species have special legal protection, such as bats and reptiles.

London's rich and diverse wildlife is under constant pressure from human activity. Climate change will further increase this pressure. The London Biodiversity Partnership seeks to address this by working to increase understanding of London's habitats by assessing their condition. It is also actively working towards targets to maintain, enhance and increase the wildlife value of London's habitats by 2015 (see Annex 1).

While progress continues to be made towards meeting the 2015 targets with some, such as the enhancement of coastal and floodplain

grazing marsh, overreaching their target; others, such as the restoration of heathland, woodland and lowland meadow, will be more difficult to achieve without concerted action from a wide variety of people and organisations both public and private. A Regional Delivery Framework, mapping areas for habitat creation and enhancement is due in June allowing us to target activity. This, together with increased mobilisation of partners, use of the Biodiversity Action Reporting System to monitor results and improved access to funding will help us to achieve these targets, and to plan ahead for 2020.

### Biodiversity

#### Challenge to All

- Statutory agencies, local authorities and business to deliver the agreed London Biodiversity Targets for 2015.

#### Success measure

- London Plan biodiversity targets are met or exceeded.

#### Natural England's response

- We will work with partners to increase and enhance the wildlife value of London's habitats, focusing on acid grassland, chalk grassland, heathland, reedbed and standing water.

## Sites of Special Scientific Interest

London's 36 Sites of Special Scientific Interest (SSSIs) support a wide range of nationally and internationally important habitats and species. Natural England is charged by Government to work with land managers to bring 95% of all SSSIs (by area) into favourable or recovering condition by 2010 through our advice and grant funding. In the region, 76% are currently in this Public Service Agreement (PSA) target condition (see Annex 2 for explanation).

Condition	Area (ha)	Percentage
Favourable	1,266	34%
Unfavourable recovering	1,550	42%
<b>Meeting PSA target</b>	<b>2,816</b>	<b>76%</b>
Unfavourable no change	863	23%
Unfavourable declining	40	1%
<b>Not meeting PSA target</b>	<b>903</b>	<b>24%</b>

Although the majority of London's SSSI sites are in 'favourable' or 'recovering' condition, a small number of large grassland sites are in 'unfavourable condition' (see Annex 3) and account for a large proportion of the land not meeting the PSA target. For example, the extensive acid grassland at Richmond Park SSSI shows signs of undergrazing despite the presence of large herds of fallow and red deer. A cattle grazing trial is underway over four hectares of grassland to establish whether a change in management will result in an improvement in condition. This will also help to gauge public acceptability of cattle grazing. On other sites, the lack of a traditional agricultural infrastructure (grazing animals, machinery) and expertise contribute to these management problems.

© Natural England



Fallow deer grazing, Richmond Park SSSI

### Protected sites

#### Challenge to All

To secure:

- protection of London's network of protected sites (including SSSIs) from development.
- connection of these sites with the wider landscape, creating robust natural areas that can be enjoyed and appreciated by Londoners.
- resources to ensure long-term management and enhancement of these sites.

#### Success measure

- London's SSSIs are in favourable condition, connected to the wider landscape and enjoyed and appreciated by Londoners.

#### Natural England's response

We will:

- monitor the condition of SSSIs and work with land managers to maintain and enhance the quality of sites;
- encourage SSSI owners and occupiers, where appropriate, to apply for the Higher Level Stewardship Scheme<sup>1</sup> to restore, maintain and enhance SSSI habitats and species.



### Case study: Wildspace

A project based around one of London's most high profile SSSIs and linked to regeneration of the area, Wildspace aims to provide a natural environment-focused visitor destination for Londoners.

A partnership (comprising Havering Council, Thurrock Council, RSPB, London Thames Gateway Development Corporation, Thurrock Development Corporation, Natural England, Environment Agency and Veolia) is developing a flagship conservation park known as *Wildspace for a World City*. Centred around the Inner Thames Marshes SSSI (also known as Rainham Marshes), the objective is to transform the image of the area and provide an internationally celebrated ecological and leisure resource for the emerging communities of London Riverside.

The areas between Rainham, Purfleet and the River Thames will be joined and managed as a single unit which celebrates the unique natural and cultural heritage of the Thames Marshes. This historic landscape and its diverse natural and cultural heritage will be protected and made accessible to all through high quality access, facilities and interpretation.

*Wildspace* will set new standards in nature conservation as a centrepiece of a 'Green Infrastructure approach' and central to the East London Green Grid, the strategic master plan for Green Infrastructure delivery in East London. See:

[www.ltgd.org.uk/news/wildspace.aspx](http://www.ltgd.org.uk/news/wildspace.aspx)

[www.london.gov.uk/mayor/auu/docs/riverside\\_strategy.pdf](http://www.london.gov.uk/mayor/auu/docs/riverside_strategy.pdf)

### Integrated delivery

**Wild London** – enhancement of SSSI and complementary habitat creation on adjacent land.

**Active London** – access and outreach project aiming to raise awareness amongst hard-to-reach and diverse communities in East London. Extensive new access/walking/cycling routes – to be promoted as 'wild and healthy' exercise.

**Future London** – *Wildspace* will inform and shape the regeneration of London's riverside by providing the hub of a Green Infrastructure<sup>2</sup> framework and creating a sense of place which will be reflected in the redevelopment of adjacent industrial land.



© Dave Rogers

Lapwing and chicks



© Natural England

Rainham Marshes

## Land management in an urban context

Managing land for environmental benefits (such as achieving favourable condition on SSSIs or creating new BAP habitat) requires a different approach in an urban rather than rural context. London differs from other regions in that there are few large commercial farm holdings but numerous smaller holdings which have diversified their business. A significant proportion of land which is not currently farmed but has potential to be managed more sensitively for the natural environment is owned by the London Boroughs.

Much of this land requires active management to maintain its conservation value, for example hay cutting and grazing. The key problems here are principally economic and logistical. Many sites in London are small and fragmented and the de-coupling of land management in urban areas from the agricultural sector means there are considerable challenges in achieving positive management of such sites. The main issue is ensuring the appropriate infrastructure for land management is in place such as local grazing stock, machinery and access.

Funding available through agri-environment schemes<sup>3</sup> is one of the mechanisms by which we can deliver environmental benefits in the city. There are currently 81 agri-environment agreements in London covering a total of 5,204 ha. This is composed of:

- 44 Classic Scheme agreements (Countryside Stewardship Scheme) which cover an area of 1,017 ha
- 5 Higher Level Stewardship (HLS) agreements covering 986 ha
- 30 Entry Level Scheme (ELS) and 2 Organic Entry Level Scheme (OELS) agreements together covering 3,201 ha.



Grazing stock on Walthamstow Marshes

### Land management

#### Challenge to All

- To secure greater co-ordinated action and targeting of initiatives by London's land managers to achieve the greatest results for the natural environment.

#### Success measures

- Increased percentage of land in positive management for the natural environment.
- London's land managers work together, in a co-ordinated way, to maximise positive results for the natural environment.

#### Natural England's response

We will:

- set up a London Grazing Animals Project steering group to co-ordinate the introduction and ongoing grazing of key sites in the capital;
- work in conjunction with landowners to secure benefits through the Environmental Stewardship scheme and explore possible innovative projects that deliver the aims of agri-environment schemes in an urban context, such as educational access on farms.

## Landscape and geodiversity

Unsurprisingly, London is characterised more by its townscapes and buildings than by its natural landscapes. The spread of London has largely confined areas of open countryside to its fringes. Nevertheless, the underlying geology and topography of the city can still be discerned and many natural features such as river valleys and ridges, although constrained and enclosed by the built environment, are traceable amidst and beneath suburbia. The River Thames and its numerous tributaries form a major landscape feature which has shaped the history and identity of the capital.

The European Landscape Convention promotes landscape protection, management and planning. It encourages public engagement and stakeholder involvement to develop a wider understanding and appreciation of all landscapes. Consequently, London's landscapes should be characterised as much by natural areas (heaths, commons, rivers, floodplains etc) as by iconic built localities (eg Docklands).



© Lydia Thornley

Fossil at Gilbert's Pit

Under the surface of the capital, the rocks and the geological processes that shape them together make up London's geodiversity. Geodiversity provides raw materials and supplies water; it affects where and how we can build; it determines biodiversity, cultural heritage and a sense of place. Seven of London's SSSIs (Abbey Wood, Elmstead Pit, Gilbert's Pit, Harefield Pit, Harrow Weald, Hornchurch Cutting and Wansunt Pit) are designated for their geological importance. However, there is limited awareness of London's geodiversity and London is the only region that does not have an established network of Regionally Important Geological/geomorphological Sites (RIGS).

View over London from Primrose Hill



© Paul Losse



View from One Tree Hill

## Landscape and geodiversity

### Challenge to All

- To collectively value London's natural landscape for the benefits it delivers for the capital's economy and the contribution it makes to a sense of place and quality of life – its 'natural signature'.
- To reflect this contribution in public policy, plans and actions taken to shape London's places.

### Success measures

- London's landscapes are understood to be characterised by the natural environment, not just the built environment.
- London's geodiversity is conserved and valued.

### Natural England's response

We will:

- lead a partnership to develop and promote a vision for London's 'natural signature' to be expressed in London's first natural landscape framework;
- work with the London Geodiversity Partnership to conserve and enhance the capital's geodiversity, promoting the Mayor's geodiversity policy and guidance to borough planners;
- advocate the need for a Geodiversity Action Plan and a suite of Regionally Important Geological/geomorphological Sites (RIGS).

## Case study: Lee Valley and the Olympics

*Building upon a network of existing Green Infrastructure, the Olympics and the Olympic Park provide an opportunity to further promote the health and social inclusion benefits of accessible natural green space.*

The Lee Valley to the north and south of the Olympic Park in Stratford contains a wide variety of green spaces and important wildlife habitats, but it is the most fragmented part of the Lee Valley Regional Park and many of the green spaces here are inaccessible or unwelcoming. It is also an area where neighbouring local communities are largely categorized as deprived, scoring poorly in terms of mental and physical health and wellbeing and access to nature.

The Olympics provides a catalyst for improving the Green Infrastructure of this part of the Lee Valley. London's biggest park will return a large section of the River Lee (and associated watercourses) to both people and nature. Natural England has been instrumental in ensuring plans for this new green space meet our standards for access and nature.

Looking for wildlife in the Lee Valley



© Andrew Dumbleton

Natural England is working with local organisations to realise the opportunities provided by the Olympic Park to:

- increase and improve access to Walthamstow Reservoirs;
- develop the concept of a Lower Lee Valley Park to the south of the Olympic site where the river is currently at its most deficient in access, connectivity and green space;
- prepare an Upper Lee Valley Landscape Strategy that will inform future Green Infrastructure development .

Our vision for the Lee Valley is that it will become fully accessible to a broad range of people and wildlife all the way from outside London to the shores of the Thames. We can make a significant contribution to this through targeted interventions.

### Integrated delivery

**Wild London** – supporting the creation of Biodiversity Action Plan habitats in the Olympic Park.

**Active London** – improving access to the reservoirs and ensuring the Olympic Park meets natural health service objectives.

**Future London** – ensuring the natural environment aspirations of the Olympic Park are incorporated into the wider regeneration of the Lower Lee Valley.

# Chapter 3

## Natural London, Active London

### Active London – current status

London has a long tradition of provision of access to natural green space. The Thames Path National Trail runs from the capital's western boundary to the Thames Barrier at Greenwich. The network of publicly accessible green spaces includes a suite of internationally famous parks and gardens, hundreds of local parks, 140 Local Nature Reserves covering over 2,500 ha, 15 country parks, 80 km of canals and over 100 community gardens.

Green space makes up 60% of the area of the London region, which is the wealthiest region

in the United Kingdom in terms of Gross Domestic Product (GDP) per capita. However these facts mask the reality that London is a region of stark polarisation in terms of wealth and deprivation.

- 26% of London's neighbourhoods are amongst the top 20% most deprived communities in the country
- 45% of children in inner London live in poverty
- 1 in 10 Londoners live in social housing.



Alongside the apparent richness in green space there is marked inequality in terms of the opportunities to access the natural environment: 23.3%<sup>4</sup> of London (excluding Green Belt and Metropolitan Open Land) is in an 'area of deficiency' in access to nature, ie more than 1 km walking distance from a site of borough importance for nature conservation. The 2001 census<sup>5</sup> estimated that 1.75 million Londoners live within an area deficient in access to nature. Poorer communities are less likely to have easy access to open space, whether a private garden or public green space.

Children and young people represent 24% of London's population. Nearly half of 7-14 year-olds in London surveyed for *Playday 2006* did not play outside as much as they would like, 10% higher than the UK average.

## Routes and rights of way

London has a comprehensive network of Public Rights of Way such as footpaths and bridleways. This network serves to link many of the green spaces across the capital and offers walkers, cyclists, horse riders and those with mobility problems a range of recreational options. Incorporated within this network are a number of defined walking routes such as the Capital Ring, Green Chain, London Loop, Lee Valley Walk, Jubilee Walkway and the Thames Path National Trail. These defined routes cover in excess of 500 km in the capital and offer an important recreational resource to Londoners and tourists alike.

All 20 Outer London Boroughs have a statutory duty to deliver Rights of Way Improvement Plans (ROWIPs) that highlight the local authorities' intentions to better manage and integrate rights of way and green space locally. These plans should nest closely with Open Space Strategies within the boroughs. As of April 2009 only 5 plans were complete, 8 were in draft and 7 not produced at all.



© Sam Lyme

Signpost in Oxleas Woods

## Routes and rights of way

### Challenge to All

- To work with local authorities to ensure that the published plans for improving parks, open spaces and rights of way are delivered and successfully connect people to the natural environment in their neighbourhoods, while making improvements to the quality of natural green space in London.

### Success measure

- Rights of Way links to the green space network are promoted, increased and improved.

### Natural England's response

- We will provide guidance to local authorities on access, ensuring ROWIPs are delivered and add real value to rights of way networks locally, whilst also testing the role for Local Access Forums in improving community engagement.

## Case study: *Neighbourhoods Green*

*An initiative aimed at improving and enhancing quality of green space around housing estates.*

The quality of people's homes is influenced by the spaces around them. There is increasing recognition that well-designed, well-managed green spaces next to housing developments are crucial to contributing to people's quality of life and making neighbourhoods more enjoyable to live in.

*Neighbourhoods Green* aims to highlight the importance of green spaces for the residents of social housing and to raise the quality of their design, management and safe use within social housing providers. Natural England is working with 9 social landlords from across London to deliver action through a 'Natural Estates' project. The work has involved estate green space surveys and consultation with housing estate communities. The intention is to deliver community action to improve the biodiversity of estates, to ensure that the communities are involved and directly own 'their' local natural green space, in turn benefiting them through direct links to the natural environment.



Clapton Park Estate

Natural England will continue to invest in the *Neighbourhoods Green* partnership to expand activity in order to demonstrate the potential that social housing and its green space holds, not only for biodiversity and accessible natural green space but also for addressing climate change adaptation issues (eg the role that green space plays in cooling estates). Partners include the Notting Hill Housing Group, the Peabody Trust, CABE Space, Natural England and Groundwork London.

[www.neighbourhoodsgreen.org.uk/ng/](http://www.neighbourhoodsgreen.org.uk/ng/)

### Integrated delivery

**Wild London** – promotion of *A Natural Estate* guidance for improving estate biodiversity and opportunities for links to higher quality local habitats.

**Active London** – co-ordination of parts of the *Neighbourhoods Green* partnership and implementation of the *Natural Estates* programme through *Access to Nature* funding and exploration of bespoke *Walking the way to Health* schemes.

**Future London** – development of a *Neighbourhoods Green*, '*Neighbourhoods Cool*' climate change adaptation project.



Clapton Park Estate – demonstrates the potential of *Neighbourhoods Green*



## Health and the natural environment

In London a unique set of factors interplay to influence the population's health. London has an extremely diverse, highly mobile, expanding and ageing population which presents particular challenges for public health needs. Additionally, issues linked to socio-demographic factors such as deprivation, unemployment and social isolation have led to health inequalities across the capital. This widening 'health gap' has a marked geographical variation in London. For example, in Brent, male life expectancy decreases by each southward Bakerloo line station, with Harlesden having 10 less years compared to Northwick Park<sup>6</sup>.

Unhealthy weight gain and lack of physical activity among both adults and children is one of the most significant public health challenges for London. Sport England's *Active People* survey for 2006 found that 50% of London's adult population reported having done no physical activity at all in the preceding 12 weeks; only 21% reported doing 3 x 30 minute moderate intensity exercise sessions a week; and just 12% reported doing 5 x 30 minute moderate intensity exercise sessions a week<sup>6a</sup>.

WHI walkers, Brent



© Natural England

Despite the publication of guidance from the National Institute for Health and Clinical Excellence (NICE) (*Promoting and creating built or natural environments that encourage and support physical activity*) and the launch of *Healthy Weight, Healthy Lives: A Cross-Government Strategy for England*, there is still more to be done to tackle the obesity problem and encourage people in London to be more physically active. Our *Walking the way to Health Initiative* (WHI)<sup>7</sup> is one very positive way that links between the natural environment and health can be made. As of 1 May 2009 there are 47 WHI schemes in London involving 317 walk leaders. 175 walks are held each week, which has mobilised 1,893 people.

The natural environment can play a significant part in health improvement as well as a preventative role when addressing three of London's top public health priorities:

- Soaring rates of mental illness (London has a considerably higher percentage of inpatients admitted for psychotic diagnosis – 23% compared to the national average of 14%)<sup>8</sup>
- higher rates of childhood obesity
- low levels of physical activity.

## Health and the natural environment

### Challenge to All

- To work with GPs, Primary Care Trusts, local authorities and others to put in place programmes that use the natural environment to provide health solutions for Londoners and increase activity in London's natural environment to achieve health gains where most needed.

### Success measure

- There is greater participation in healthy walking and green exercise schemes utilising London's natural environment.

### Natural England's response

We will:

- increase the volume of *Walking the way to Health* schemes in partnership with local authorities and others;
- work with the Greater London Authority (GLA), local authorities, Primary Care Trusts, GPs and NHS London to increase GP patient recommendations that lead to an increase in physical activity undertaken in the natural environment for health gains;
- collaborate with NHS London and others to support work to realise a 2012 health legacy;
- work with the GLA to ensure the role of health and the environment is fully recognised within Mayoral policy;
- complete an audit of green exercise provision in London, with a view to making stronger links to that provision in areas with the greatest health need.

## Access to nature

Even where good quality green space is freely accessible the profile of the users may not reflect the profile of the surrounding community. Barriers to using green space are various and, in a region as culturally and socially diverse as London, identifying solutions to tackle these barriers and work towards equality of opportunity is important.

During 2007/2008 Natural England's Access to Natural Greenspace Standards (ANGSt)<sup>9</sup> were piloted in London through 19 projects designed to enhance naturalness, access and community connection across a range of sites. One example, at East Reservoir in Hackney, involved working alongside the London Wildlife Trust to undertake an extensive community engagement exercise and, from this, to build a range of activities such as after school and gardening clubs to help encourage greater use of the site. This is leading to increased ownership and use of the site, increasing the extent to which the diverse local community appreciate this natural green space.



Camley Street Local Nature Reserve, Kings Cross

© Natural England



Exploring Deptford Creek

## Access to nature

### Challenge to All

- To ensure that engaging local communities in increased ownership of their local green space and improving the quality of the natural environment in these spaces is a priority for all who manage and have influence on these spaces in London.

### Success measures

- The quality of London's natural green space is improved.
- Use of London's landscapes and wildlife-rich places reflects London's social and ethnic diversity, with resources targeted towards deprived and socially excluded communities.
- Londoners use natural green space more often, enjoying and appreciating its benefits.

### Natural England's response

We will:

- work with local authorities and others through the London Parks and Green Spaces Forum to improve the quality, quantity and usage levels of green space near to where people live. This will include support for seminars, research and publications;
- continue to invest in the *Neighbourhoods Green* partnership and its *Natural Estates* project. Working with 9 social landlords and local authorities from across London to deliver improvements in green space quality and engage local residents with their local green space;
- seek to widen activity on London's estates to consider climate change adaptation techniques;
- continue to manage the *Access to Nature* grant scheme, which awards grants of £50,000 to £500,000 to projects delivering community activity, providing new opportunities for people from all backgrounds to enjoy, explore, learn about and be involved with the natural environment;
- deliver a range of *Natural Play* projects across London and work with a selection of schools connecting children to their local natural environment.

## Case study:

### **Wandle Valley Regional Park**

*An initiative aiming to connect spaces and places along the Wandle Valley to create a Green Infrastructure network and a landscape with a common identity across four boroughs.*

The Wandle Valley follows the course of the River Wandle from Croydon through Sutton, Merton and Wandsworth to the River Thames. It has been identified as a potential regional park in the London Plan. Regional Parks in London are identified as large areas (over 400 ha) of linked open space that can provide and combine a range of functions. The London Plan recognises Wandle Valley's potential to address London's identified deficiency in open space and contribute to regeneration of the south sub-region. Natural England is a key contributor to the Wandle Valley Steering Group. We are funding a landscape character assessment of the Wandle Valley to help identify and promote the proposed park's natural signature and provide guidance as to how to reconnect local communities to their hidden river valley. This project will facilitate the next stage of the Wandle Valley Regional Park's development by informing the vision and means by which the regional park will be delivered.

[www.wandlevalleypark.org.uk](http://www.wandlevalleypark.org.uk)

### **Integrated delivery**

**Wild London** – river restoration and water vole conservation projects. Validating the 'natural signature' concept (see page 10).

**Active London** – reducing areas of deficiency (areas lacking accessible natural green space) and establishing *Walking the way to Health Initiative* (WHI) schemes.

**Future London** – securing additional natural green space and biodiversity/landscape enhancement through influencing regeneration projects. Providing an opportunity for roll out of a strategic Green Infrastructure plan (a 'green grid' approach) beyond East London, with a particular focus on climate change adaptation.



River Wandle

© Natural England

# Chapter 4

## Natural London, Future London

### Future London – current status

The spatial planning process and the emerging climate change adaptation agenda provide the levers and mechanisms to shape and influence the design and management of London's green spaces and public realm. The creation of a 'Green Infrastructure' will help us to achieve our objectives for biodiversity, landscape and access to the natural environment.

### Climate change

London's climate is changing. Current modelling predicts, for example, a dramatic reduction in summer rainfall; an increasing incidence of heavy winter rainfall; and an increase in the number of very hot summer days<sup>10</sup>.

The natural environment in urban areas is particularly vulnerable to the effects of climate change: climate change impacts are amplified (urban centres are hotter; storm water run-off is more intense; winter frosts are rarer); habitats and green spaces are more fragmented and the recreational pressure upon them more concentrated. Consequently, climate change presents some serious challenges for London's natural environment.

The need to address climate change also presents opportunities. The greening of the urban environment can provide a means by which habitats and natural features can be created or better managed. About 38% of London's area (excluding private gardens and water) is green space<sup>11</sup>, this resource could play a significant role in adapting London to the impacts of climate change<sup>12</sup>.

© Livingroots



Bishops Square roof garden



## Climate change

### Challenge to All

- To promote new approaches to the design and management of London's natural places and green spaces to support adaptation to climate change.

### Success measure

- Green roofs, river restoration, naturalistic sustainable drainage systems (SuDS) and tree-planting within the urban fabric, will be standard climate change adaptation techniques.

### Natural England's response

We will:

- work with the Mayor and other partners to implement the urban greening programme proposed by the Mayor's Climate Change Adaptation Strategy;
- help deliver the London Rivers Action Plan;
- contribute to the development of the methodology and guidance for local authorities for National Indicator 188: Adapting to Climate Change.<sup>13</sup>

### Case study: *Mayesbrook Park*

*Transformation of a traditional urban amenity park into a climate-proofed urban green space. A delivery project of the East London Green Grid.* <sup>14</sup>

The Mayesbrook Park project aims to create the first demonstration site in London for adapting an urban park to the impacts of climate change through river restoration and the creation of a future-proofed woodland and formal gardens. Importantly from the outset it will engage local schools and the wider community, building awareness of the concepts of quality Green Infrastructure, climate change adaptation, healthy living and biodiversity. Local school children are being engaged and contributing their views and thoughts on the park and the future plans. The project will depend upon a wide partnership of both public and private sponsors working with the local community.

Key partners are the Environment Agency, London Borough of Barking and Dagenham, Thames Rivers Restoration Trust, London Wildlife Trust and Natural England.

Mayesbrook Park has been named as one of the winning candidates under the London Mayor's Priority Parks Initiative, which will provide significant additional funding to the project.

### Integrated delivery

**Wild London** – river restoration and creation of new Biodiversity Action Plan habitats including acid grassland. Enhancement of a poor quality Local Nature Reserve in southern part of park.

**Active London** – roll out of London region's Natural Connections project engaging local schools with river restoration park improvements. Providing a focus for expansion of *Walking the way to Health* schemes in the borough.

**Future London** – park transformation aiming to be a climate change adaptation exemplar.



Mayesbrook Park – site of a proposed climate change park

© Natural England



## Green Infrastructure

A fifth of London's wards require regeneration, 42 locations are designated as areas for growth, and London's population is predicted to grow to about 8.5 million by 2026<sup>15</sup>. As 20th century models of urban development become increasingly unsustainable, London will require continued improvement not only to its public transport infrastructure<sup>16</sup> and digital infrastructure<sup>17</sup> but also to its network of Green Infrastructure.

London's existing arrangement of parks and green spaces is a legacy of an era when their primary function was recreation and protection of heritage, both of which are important and still valid purposes. However, as the demographics and economy of the city change, new layouts and management approaches are required to accommodate the need to promote walking and cycling, to allow wildlife to move and disperse, to accommodate the impacts of climate change and to provide space for relaxation and contemplation.

## Green Infrastructure

### Challenge to All

- To roll out the approach to Green Infrastructure developed for the East London Green Grid across the whole of London.

### Success measure

- Green Infrastructure and biodiversity conservation features will be integrated into the design of all new developments and new urban landscapes.

### Natural England's response

We will:

- work with the Mayor to promote and support the development of *Green Infrastructure Supplementary Planning Guidance* that promotes the roll out of the Green Grid concept across London;
- use our statutory role to ensure that key development proposals contribute to the implementation of East London Green Grid and the Thames Gateway eco-region;
- continue to develop the *Design for Biodiversity* initiative to provide technical guidance for integrating biodiversity and Green Infrastructure into the urban fabric.



## Place-making

Policy frameworks developed by regional government, local government and public bodies shape the place in which we live to a significant extent. By providing a unique 'natural signature' for parts of our city, London's diverse natural environment and distinctive places and spaces can play a major part in shaping or establishing a sense of place.

Place-making is an approach to building communities which draws on the unique identity of local places. The majority of London's policy frameworks recognise the role of the natural environment in creating a sense of place and are beginning to include natural environment benefits as positive factors for economic and social wellbeing.

From a place-making perspective, London's unique 'natural signature' is faring relatively well. There has been no significant loss in the amount of Green Belt or land of nature conservation value in recent years<sup>18</sup>. However, this broad-brush analysis masks more subtle changes, particularly at the local level, which may have significant impact on the quality and character of the neighbourhoods in which we live.



© Natural England

Mint Street Park

## Place-making

### Challenge to All

- To work with planners and decision makers to secure the natural environment as a defining feature across London, so that its benefits are widely enjoyed and contribute to quality of life and a sense of place.

### Success measures

- Existing biodiversity and landscape assets are safeguarded through regional strategies, land allocation and development control policies.
- Londoners' sense of place is underpinned by an understanding of their natural environment and the benefits it provides.

### Natural England's response

We will:

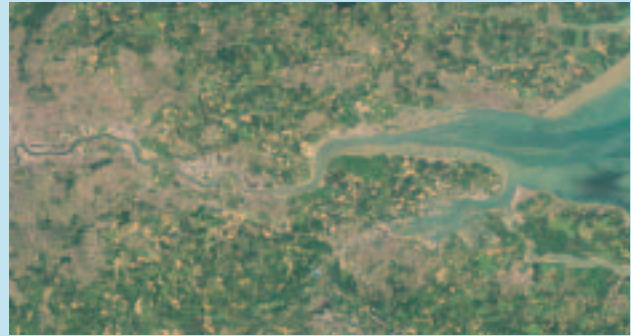
- work with the Greater London Authority, London Boroughs and their Local Strategic Partnerships to ensure that natural environment objectives are reflected in the full range of plans and strategies, including the London Plan, Local Development Frameworks, Sustainable Community Strategies and Open Space Strategies;
- continue to support the development of initiatives, such as the Wandle Valley Regional Park, to ensure joined up management of the green space network and to deliver multifunctional landscapes.

### Case study: Thames Gateway in London

A major regeneration initiative which aims to deliver sustainable development through adherence to a set of 'eco-region' principles.

The Thames Gateway stretches 40 miles along the estuary from Canary Wharf in London to Southend in Essex and Sittingbourne in Kent. It is Europe's largest regeneration programme dealing with the twin drivers of a) industrial decline and b) demand for new housing and infrastructure to service the London's financial sector and the logistics and high-tech industries locating within the east Thames corridor.

The components of the Thames Gateway of most significance to Natural England are the concepts of 'eco-region' and 'Parklands'. These concepts aim to ensure that the natural environment and sustainability objectives are integral to the regeneration of the Thames Gateway by building on the success of the green grid networks and by addressing wider issues of: urban design and sustainability; establishing the Gateway as a low carbon region; developing the area as a new model for the management of waste and water resources; and working with the natural environment to minimise and manage flood risk.



© CLG

Aerial view of the Thames Gateway

### Integrated delivery

**Wild London** – targeting delivery of agri-environment schemes to deliver new and improved Biodiversity Action Plan habitats and improving SSSI management condition.

**Active London** – reducing areas of deficiency, promoting *Walking the Way to Health* scheme and raising awareness of the benefits of the natural environment to health and wellbeing.

**Future London** – implementing Green Infrastructure through regeneration and renewal. Ensuring climate change adaptation interventions and urban greening initiatives deliver benefits for biodiversity, landscapes and establishing London's 'natural signature'.

[www.thamesgateway.gov.uk](http://www.thamesgateway.gov.uk)

[www.communities.gov.uk/docments/thamesgateway/pdf/parklandssummary.pdf](http://www.communities.gov.uk/docments/thamesgateway/pdf/parklandssummary.pdf)



© Greening the Gateway Partnership

Thames Gateway – Rainham Marshes

# Annexes

## Annex 1 London Biodiversity Action Plan: 2015 Targets

Habitat type	Target to increase by 2015	Target to enhance by 2015
Coastal and floodplain grazing marsh	10 ha	30 ha
Chalk grassland	25 ha	n/a
Acid grassland	20 ha	5 ha
Heathland	30 ha	n/a
Reedbeds	10 ha	n/a
Open landscapes with ancient/old trees	20 ha	2 ha
Woodland	20 ha, of which 5 ha is wet	n/a
Meadows and pastures	20 ha	5 ha
Tidal Thames	1 saltmarsh and/or mudflat	n/a
Rivers and streams	restore 15 km	n/a
Eutrophic standing waters	n/a	6 sites
Mesotrophic lakes	n/a	5 sites
Ponds	33 new ponds per year	
Fens	10 ha	n/a

n/a = not available



Veteran oaks in Richmond Park

© Natural England

## Annex 2 SSSIs – condition definition of terms

### SSSI condition

The Government has a Comprehensive Spending Review 2004 (CSRO4) Public Service Agreement (PSA) target to achieve 95% of SSSI area in favourable or recovering condition by December 2010. Under the Comprehensive Spending Review 2007 (CSR07), this PSA target has also become a key indicator of Defra's Departmental Strategic Objective for 'a healthy, resilient, productive and diverse natural environment', which relates to the achievement of the cross-government Natural Environment PSA.

### Definitions:

#### Meeting PSA target

'Favourable' – special habitat and species features are in a healthy state and are being conserved for the future by appropriate management.

'Unfavourable recovering' – all necessary management measures are in place to address reasons for unfavourable

condition. Special habitat and species features will 'recover' to a healthy state, but in many cases this takes time.

#### Not meeting PSA target

'Unfavourable no change' or 'unfavourable declining' – some beneficial management measures may be in place, but not all; and the condition may be generally improving but we cannot be sure of recovery to favourable condition. Both mean that a site is not being adequately conserved. Special habitat or species features are either in poor condition and not improving across all the reasons for their unfavourable condition, or their quality is bad and getting worse.

'Part destroyed or destroyed' – there has been fundamental and lasting damage which means that special habitat and species features may have been lost forever and we cannot recover their condition.



Bell heather, found on Wimbledon Common



The nationally scarce man orchid – found at Downe Bank and High Elms SSSI

### Annex 3 Condition of London's SSSIs by habitat

Broad Habitat Type	Favourable		Unfavourable recovering		Unfavourable no change		Unfavourable declining		Part destroyed and destroyed	
	Area (ha)	Area (%)	Area (ha)	Area (%)	Area (ha)	Area (%)	Area (ha)	Area (%)	Area (ha)	Area (%)
Acid grassland - lowland	0	0	15	18	725	82	0	0	0	0
Broadleaved, mixed and yew woodland - lowland	818	78	215	21	15	1	0	0	0	0
Calcareous grassland - lowland	74	56	51	39	0	0	7	5	0	0
Dwarf shrub heath - lowland	0	0	84	82	18	18	0	0	0	0
Earth heritage	12	62	0	0	7	35	1	4	0	0
Fen, marsh and swamp - lowland	49	65	25	33	0	0	2	2	0	0
Improved grassland	6	100	0	0	0	0	0	0	0	0
Littoral sediment	10	5	152	79	0	0	31	16	0	0
Neutral grassland - lowland	49	12	274	64	98	23	0	0	8	2
Standing open water and canals	247	29	596	71	0	0	0	0	0	0

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# References

## Page 6

<sup>1</sup> Higher Level Stewardship is one of the 3 tiers of the Government funded Environmental Stewardship Scheme. The Scheme funds the delivery of environmental benefits through agriculture

## Page 7

<sup>2</sup> Green Infrastructure is a network of high quality green spaces designed and managed to deliver a range of necessary functions, including: ecological connectivity, resilience to climate change, access to nature, and a sense of place. Green Infrastructure is integral to sustainable communities, underpinning social and economic improvement

## Page 8

<sup>3</sup> Government funded schemes which fund the delivery of environmental benefits through agriculture

## Page 13

<sup>4</sup> Mayor's State of the Environment Report 2007

<sup>5</sup> 'Improving Londoner's Access to Nature', The London Plan, February 2008

## Page 15

<sup>6</sup> Brent Primary Care Trust 2004

<sup>6a</sup> Sport England, 2006

<sup>7</sup> Natural England's Walking the way to Health Initiative (WHI) encourages people, particularly those who take little exercise, to do regular short walks in their communities to benefit their health and to enjoy local natural spaces

<sup>8</sup> Dr Foster report for the GLA 2003

## Page 16

<sup>9</sup> These standards seek to ensure that: No person should live more than 300 m from their nearest area of accessible natural green space of at least 2 ha in size; there should be at least one 20 ha site of accessible natural green space within 2 km from where people live; there should be one 100 ha site of accessible green space within 5 km from where people live; there should be one 500 ha site of accessible natural green space within 10 km from where people live; at least 1 ha of statutory Local Nature Reserves should be provided per 1,000 of the population

## Page 19

<sup>10</sup> The London Climate Change Adaptation Strategy – draft report. Mayor of London

<sup>11</sup> Connecting with London's Nature – The Mayor's Biodiversity Strategy. GLA. July 2002

<sup>12</sup> Adapting cities for climate change: the role of green infrastructure. Gill, Handley et al. Built Environment. 2007

## Page 20

<sup>13</sup> National Indicator 188 – Adapting to Climate Change aims to ensure local authorities are prepared to manage risks to service delivery, the public, local communities, local infrastructure, businesses and the natural environment from a changing climate, and to make the most of new opportunities. The indicator measures progress on assessing and managing climate risks and opportunities, and incorporating appropriate action into local authority and partners' strategic planning. The impacts might include increases in flooding, temperature, drought and extreme weather events

## Page 21

<sup>14</sup> The East London Green Grid aims to create a network of interlinked, multi-functional and high quality open spaces that connect with town centres, public transport nodes, the countryside in the urban fringe, the Thames and major employment and residential areas

## Page 22

<sup>15</sup> The London Plan. Spatial Development Strategy for Greater London. GLA 2004

<sup>16</sup> Way to Go! Planning for better transport. Mayor of London. November 2008

<sup>17</sup> Connecting the capital: information and communications technology in London. GLA 2004

## Page 23

<sup>18</sup> Greener London – The Mayor's State of Environment Report for London. GLA 2007

## Front cover photograph

View over London from Richmond Hill

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