## DRAFT SUPPLEMENTARY PLANNING GUIDANCE

THE ALL LONDON GREEN GRID

NOVEMBER 2011 PUBLISHED FOR PUBLIC CONSULTATION THE LONDON PLAN (SPATIAL DEVELOPMENT STRATEGY FOR GREATER LONDON)

### MAYOR OF LONDON

## DRAFT SUPPLEMENTARY PLANNING GUIDANCE

ALL LONDON GREEN GRID

NOVEMBER 2011

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#### How to give your views

This draft Supplementary Planning Guidance is published for public consultation until 6pm Thursday 27<sup>th</sup> January 2012. Please send your comments to :

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#### By email

Please send to: <u>algg@london.gov.uk</u> with 'All London Green Grid SPG' in the subject box. Please note, if you send an email it is **not necessary** for you to also send in hard copy.

Any representations made in relation to the draft SPG will be made available for public inspection.

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# FOREWORD

If you were to look down at London from the stratosphere, you would be struck at how green the city is, with a plethora of green and open spaces, formal and informal, large and small, helping to define and shape the form of the city. Down here on the ground, we look to these spaces for all that they add to the quality of the particular places we live in, work in or visit. What we don't do – and this is the aim of this document – is to look at them in a joined up way, making sure the contribution they make to the quality of life, to the environment and to the economy are maximised.

The All-London Green Grid aims to fill this gap. It starts from a recognition that the best way of valuing and managing green and open space is to see it as a network spreading across the face of the capital. Some places are already well-served; here the task is making sure it remains of high quality and is managed effectively. Other places suffer from a lack of green spaces, and here we need to extend the network.

This way of looking at green and open space highlights the importance of taking an integrated approach to management, enhancement and extension. We have to look on the green grid as an asset, valued for the whole range of social, health, environmental, economic and educational benefits it brings to London. It needs the same kind of protection, investment and innovation in design and management. The term "Green infrastructure" may sound odd, but given the scale and range of benefits these spaces give our city and its neighbourhoods, it is vital we see them as being as integral to the capital's



metabolism as its roads, rail lines or water pipes.

This infrastructure takes in the woodland and farmland of London's Green Belt; the Thames and other waterways; the city's parks and open spaces and the trees and gardens (increasingly on the roofs of buildings) that do so much to gladden the soul and cool the climate in central London. It is increasingly seen as among the most important factors making for civilized life in London and maintaining it a desirable place to live, work and do business, visit or study.

It will have an increasingly important role to play as we face the challenges of growth and climate change. Green infrastructure can help absorb flood water, cool the urban environment and clean the air; it can be used for local food production, to promote sport and leisure and ensure space for London's fauna and flora; as a network it can provide links and connections between places, encouraging walking and cycling, highlighting landscape and heritage and supporting the local economy. By providing informal places for people to visit and interact, it can bring Londoners together and lend something of the village to the metropolis.

This approach is very much in keeping with national thinking; the Government's white paper on the natural environment recognises the range of benefits green and open spaces provide and highlights the importance of effective management to realise them; it makes clear that the value of green and open spaces should be at the centre of the choices we make to promote economic growth and promote well-being.

This is a challenge we in London are taking up with enthusiasm. It is key to achieving my ambition that we should have the most dynamic city on the planet – but with a small city quality of life. It is at the heart of the kind of city I want our generation to hand on to our successors. This document lays some fundamental principles and explains how the planning process can help to deliver them. I hope we receive a good range of comments about how we take these ambitions forward.

Boris Johnson Mayor of London

## CHAPTER ONE

## INTRODUCTION

1.1 The various and unique landscapes and open spaces of London are assets that can reinforce a sense of place, improve health and well-being, boost environmental resilience and make the capital a more attractive and prosperous city. Through enhancement, extension, better connection and good design, these assets can operate as key infrastructure capable of shaping and supporting sustainable growth, responding to the challenges of climate change and delivering an improved quality of life for those who live, work in and visit London.

1.2 The All London Green Grid (ALGG) will promote a shift from grey to green infrastructure to secure these environmental, social and economic benefits. London is undoubtedly a green city. But the ALGG changes our understanding of this notion. It is a progression from perceiving London as a city punctuated by parks, green spaces and surrounded by countryside, to an appreciation of this network as part of the city's fundamental infrastructure

1.3 To support the delivery of these outcomes the All London Green Grid (ALGG) Supplementary Planning Guidance (SPG) provides guidance on the implementation of London Plan policy to :

1) protect and enhance London's strategic network of green and open natural and designed spaces, to connect the everyday life of the city to a range of experiences and landscapes, town centres, public transport nodes, the countryside in the urban fringe, the Thames and major employment and residential areas; 2) encourage greater use and engagement with London's green infrastructure, popularising key destinations within the network and fostering a greater appreciation of London's natural and designed landscapes; enhancing visitor facilities and extending and upgrading the walking and cycling networks in between to promote a sense of place and ownership for visitors and Londoners;

3) Secure a network of high quality, well designed and multi functional green and open spaces to establish a crucial component of urban infrastructure able to address the environmental challenges of the 21st century – most notably climate change.

These aims support the development of a multilayered landscape resource and an enhanced framework for delivery. This is in line with the emerging Green Infrastructure (GI) approach to the design, planning and management of landscape resources developing rapidly in the UK, Europe and North America. The objective of which is to strategically plan and manage networks of natural and designed landscapes and open spaces to conserve ecosystem functions and provide a range of benefits for people.

1.4 The new London Plan (published July 2011) – hereafter referred to as 'The London Plan' highlights that London has continually changed and is likely to carry on changing. The projections used to underpin the London Plan estimate that by 2031 there will be another 1.2 million people living in London with an additional 776,000 jobs. Without careful planning and design, this level of development could result in poor guality developments that deter further investment, fail to provide people (both present and future Londoners) with the high quality environment they deserve, exacerbate climate change and degrade rather than enhance biodiversity. For this scale of development to be sustainable, to respond to climate change and to enhance the health and quality of life for Londoners, a step-change in environmental quality and performance is required. The Mayor has recognised this challenge and adopted as his vision that over the years to 2031 and beyond, London should excel among global cities-expanding opportunities for all its people and enterprises, achieving the highest environmental standards and quality of life and leading the world in its approach to tackling the urban challenges of the 21st century, particularly that of climate change.

1.5 The ALGG is being identified through partnership working across borough and London boundaries and at the landscape scale. Through the development of a number of local Green Grid Area groups and other partnerships such as the Green Arc Partnerships, comprehensive dialogue and discussions have shaped this SPG and its inherent ambition to create and improve a variety of high quality landscapes. This approach does not replace existing projects and partnerships. Rather it brings them together at the landscape scale and acts as a resource to achieve greater strategic and local impact. This approach has been extremely successful in accelerating delivery in East London through the East London Green Grid (ELGG) and the Thames Gateway Parklands Initiative. The ALGG consolidates this work, builds on this experience and establishes a pan London Framework utilising the support and input of a broad base of partners and aspirations.

1.6 This ALGG SPG provides guidance on the implementation of all the policy framework set out in the London Plan and is the green infrastructure strategy for London. It will be a key document for delivering improvements to the green infrastructure network and to facilitate the identification and delivery of programmes and projects promoted by the boroughs and their partners. The approach can also provide an opportunity to identify and develop green space jobs and skills training for Londoners via volunteering programmes and increasing the demand for skilled green space workers. It will also help encourage local communities to become engaged, in line with the Government's localism agenda, by highlighting projects in which communities can become involved.

#### 1.7 This SPG :

1. Provides guidance on the implementation of all the relevant policies in the London Plan to local neighbourhoods, boroughs, developers and other delivery partners

2. Sets out a vision and spatial framework for London-wide green infrastructure

3. Promotes partnership working across the 11 Green Grid Areas within London and beyond via the Green Arc Partnerships

4. Identifies strategic green infrastructure opportunities.

1.8 This SPG does not make any specific reference to front or back gardens. This is not to deny their importance - London has a large area of garden land, approximately 24% of the capital is private garden land (37,900 Ha), divided between some 3.8m individual plots - but it recognises that many of the decisions made by individual homeowners about changes to their gardens often fall outside the scope of the planning system and thus are beyond the remit of this SPG. Nevertheless, the coverage of garden greenspace is not equally distributed across London, and areas where quantity and quality is poor should help to determine priorities to enhance the ALGG. Policy 3.5A allows boroughs to have a presumption against development of gardens where this can be locally justified.

#### **Policy Context**

1.8 Policy 2.18 of the London Plan promotes the provision of an integrated network across London that performs as green infrastructure and makes explicit reference to the production of SPG to help implement this policy. However, because of the myriad of functions green infrastructure performs there are a number of relevant policies in the London Plan. The breadth of relevant policies shows how integral green infrastructure is to achieving the Mayor's objectives for London. The London Plan contains 6 objectives for London, 4 of these are directly relevant to green infrastructure.

1. A **city of diverse, strong, secure and accessible neighbourhoods** – the desire for a high quality environment for everyone to enjoy requires the additional provision of green infrastructure

2. A **city that delights the senses** – making the most of and extending its wealth of open and green spaces and waterways, realising its potential for improving Londoner's health, welfare and development – can only be achieved via the delivery of green infrastructure.

3. A city that becomes a world leader in improving the environment – is concerned with tackling climate change – the provision of green infrastructure is fundamental to addressing this objective.

4. A city where it is easy, safe and convenient for everyone to access jobs, opportunities and facilities – emphasizes the roles of cycling and walking and making better use of the Thames – again, the provision of green infrastructure helps address this objective.

### Policy 2.18 Green Infrastructure: The Network of Open and Green Spaces

#### Strategic

A The Mayor will work with all relevant strategic partners to protect, promote, expand and manage the extent and quality of, and access to, London's network of green infrastructure. This multifunctional network will secure benefits including, but not limited to, biodiversity; natural and historic landscapes; culture; building a sense of place; the economy; sport; recreation; local food production; mitigating and adapting to climate change; water management; and the social benefits that promote individual and community health and well-being.

B The Mayor will pursue the delivery of green infrastructure by working in partnership with all relevant bodies, including across London's boundaries, as with the Green Arc Partnerships and the Lee Valley Regional Park Authority. The Mayor will publish supplementary guidance on the All London Green Grid to apply the principles of the East London Green Grid to green infrastructure across London.

C In areas of deficiency for regional and metropolitan parks, opportunities for the creation of green infrastructure to meet this deficiency should be identified and their implementation supported, such as in the Wandle Valley Regional Park.

#### **Planning Decisions**

D Enhancements to London's green infrastructure should be sought from development and where a proposal falls within a regional or metropolitan park deficiency area (broadly corresponding to the areas identified as "regional park opportunities" on Map 2.8), it should contribute to addressing this need. E Development Proposals should:

1. incorporate appropriate elements of green infrastructure that are integrated into the wider network.

2. encourage the linkage of green infrastructure, including the Blue Ribbon Network, to the wider public realm to improve accessibility for all and development new links, utilising green chains, street trees, and other components of urban greening (Policy 5.10).

#### **LDF** Preparation

F Boroughs should:

1. follow the guidance in PPG 17 and undertake audits of all forms of green and open space and assessments of need. These should be both qualitative and quantitative, and have regard to the cross-borough nature and use of many of these open spaces

2. produce open space strategies that cover all forms of open space and the interrelationship between these spaces. These should identify priorities for addressing deficiencies and should set out positive measures for the management of green and open space. These strategies and their action plans need to be kept under review. Delivery of local biodiversity action plans should be linked to open space strategies.

3. ensure that in and through DPD policies, green infrastructure needs are planned and managed to realise the current and potential value of open space to communities and to support delivery of the widest range of linked environmental and social benefits

4. In London's urban fringe support, through appropriate initiatives, the Green Arc vision of creating and protecting an extensive and valued recreational landscape of wellconnected and accessible countryside around London for both people and wildlife. 1.9 The number of London Plan objectives that green infrastructure underpins is reflected in the number of London Plan policies that are relevant to the provision of green infrastructure in one respect or another. The opportunities identified in each of the Green Grid Areas can all be related to at least one of these policies below, although many of the opportunities will be addressed by multiple policies. Policy 2.18 applies to all the London Plan objectives, as does Policy 7.1 on improving London's neighbourhoods.

Policy 4.12 – Opportunities for All (Training) Policy 5.3 – Sustainable Design & Construction Policy 5.9 – Overheating and Cooling Policy 5.10 – Urban Greening Policy 5.11 – Green roofs and development site environs Policy 5.13 – Sustainable Drainage Policy 5.20 – Aggregates (restoration of former sites) Policy 6.9 – Cycling Policy 6.10 – Walking Policy 7.2 - An inclusive environment Policy 7.4 – Local Character Policy 7.5 – Public Realm Policy 7.8 -Heritage assets and archaeology Policy 7.15 – Reducing Noise and enhancing soundscapes Policy 7.16 - Green Belt Policy 7.17 – Metropolitan Open Land Policy 7.18 – Local Open Space Policy 7.19 - Biodiversity and access to nature Policy 7.20 – Geological Conservation Policy 7.21 - Trees and Woodland Policy 7.22 - Land for Food Policy 7.27 - Blue Ribbon Network supporting infrastructure and recreational use Policy 7.28 – Restoration of the Blue Ribbon Network

In July 2011, the Government issued 1.10 for consultation a National Planning Policy Framework (NPPF). This document is intended to replace all of the existing advice set out in PPGs and PPSs. In Para 19 the Government sets out their core planning principles, one of which actively promotes the provision of green infrastructure 'planning policies and decisions should make effective use of land, promote mixed use developments that create more vibrant places, and encourage multiple benefits from the use of land in urban and rural areas, recognising that some open land can perform many functions (such as for wildlife, recreation, flood risk mitigation, carbon storage, or food production)' The draft NPPF sets out its advice on the natural environment in paras 163-170. In para 167 local authorities are encouraged to' set out a strategic approach' and to be 'planning positively for the creation, protection, enhancement and management of networks of biodiversity and green infrastructure.'

1.11 On June 7th 2011, the Government published a White Paper on the natural environment. This recognises that a healthy functioning natural environment is the foundation for sustained economic growth, prosperous communities and personal wellbeing. Consequently, it is necessary to properly value the economic and social benefits of a healthy natural environment whilst continuing to recognise its intrinsic value. The Government's objectives are to mainstream the value of nature across our society by:

• facilitating greater local action to protect and improve nature;

• creating a green economy, in which economic growth and the health of our natural resources sustain each other, and markets, business and Government better reflect the value of nature; • strengthening the connections between people and nature to the benefit of both;

Amongst a series of proposed reforms for protecting and improving the natural environment are:

1. new Nature Improvement Areas to enhance and reconnect nature on a significant scale;

2. ecologically coherent planning, retaining the protection and improvement of the natural environment as core objectives of the planning system;

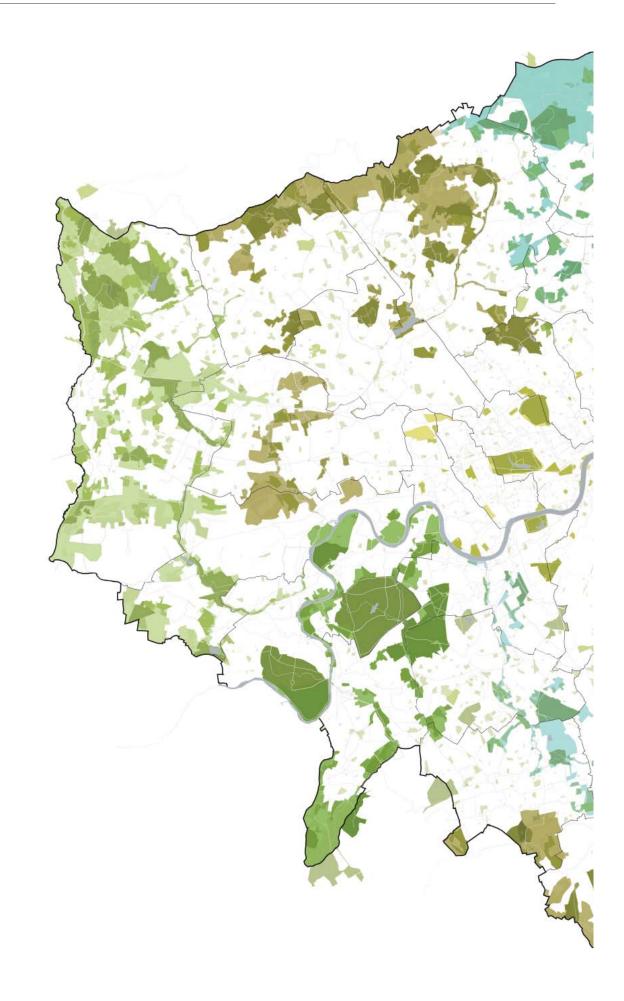
3. improving public health locally, by making high-quality green space available to everyone, and;

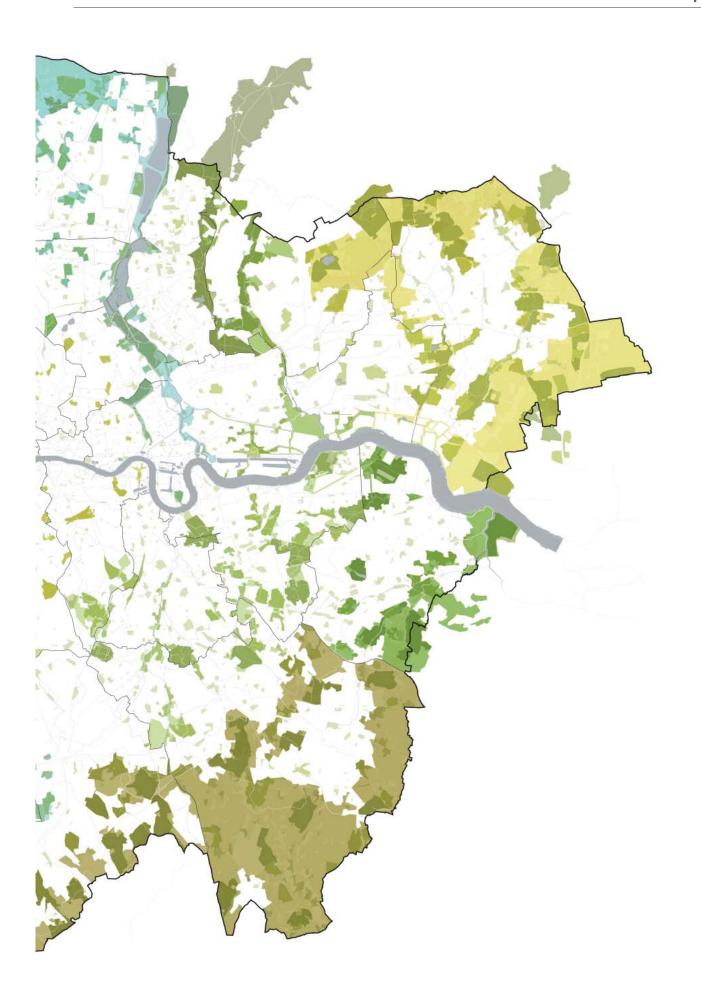
4. new Green Areas Designation, empowering communities to protect local environments that are important to them (this is cross-referred to in the NPPF in para 130).

This combination of proposed reforms and new measures align very well with the objectives and approach set out by this SPG

1.12 Although it will soon be replaced by the NPPF, current advice is set out in PPS 9 (Biodiversity and Geological Conservation) (Aug 2005) it calls for the protection of sites, the linking of sites into a network. It calls for the protection and enhancement of green space as it recognises the benefits green infrastructure provides. This SPG is consistent with both existing advice in PPS 9 and the emerging advice of the NPPF. 1.13 This ALGG SPG incorporates and replaces the East London Green Grid SPG that was published in 2008. This SPG provides non-statutory guidance that can be taken into account as a material planning consideration. It is consistent with the advice of Circular 1/2008 as paragraph 2.22 of the Circular requires. This SPG is supplementary to London Plan policy 2.18 and will be subject to three months public consultation. **CHAPTER TWO** 

## VISION





#### 2.1 The vision for the ALGG is:

To create a well designed green infrastructure network of interlinked, multi-purpose open and green spaces with good connections to the places where people live and work, public transport, the Green Belt and the Blue Ribbon Network, especially the Thames. This will provide a richly varied landscape that will benefit both people and wildlife providing diverse uses to appeal to, and be accessible by, all.

2.2 The ALGG promotes the creation of a high quality multifunctional green infrastructure network that maximizes the opportunities for improving quality of life and contributes to implementing a range of policies in the London Plan. The network includes open spaces, corridors and the links in between, of varying size and character. The linkages can be the wider public realm, corridors along transport routes, footpaths and cycleways. The ALGG includes the full range of different types of open space, including both publicly accessible and private land, such as parks, allotments, commons, woodlands, natural habitats, recreation grounds, playing fields, agricultural land, burial grounds, amenity space and children's play areas and also the Blue Ribbon Network (see Glossary). The ALGG will also provide the context for development, that delivers positive improvements including:-, enhanced land values, reduced environmental risks, improved health and well-being, enriched landscape and townscape quality - enhancing the attractiveness of London as a place to live, work and visit.

2.3 The London Plan recognises the value and benefits of green infrastructure to local communities and the contribution made to the attractiveness of London as a place to live, work and visit. These benefits are maximised when green infrastructure is designed and managed as an integrated network. The inherent functions of green infrastructure highlighted in the London Plan include:

1. protection and enhancement of biodiversity, including mitigation of new development

2. making a positive contribution to tackling climate change by adapting to and mitigating its impact

3. improving the management of water resources, flood mitigation and reduced flood risk through sustainable urban drainage systems

4. increasing recreational opportunities, access to and enjoyment of open space and the Blue Ribbon Network to promote healthy living

5. creating a sense of place and opportunities for greater appreciation of the landscape, cultural heritage and geodiversity

6. promoting walking and cycling

7. as a place for outdoor education and children's play

8. as a place for local food

These functions are set out in more detail in section 4 of this SPG.

2.4 To maximise the benefits afforded by the ALGG a wide range of expertise and stakeholders should be included when developing projects and proposals. This will include representatives from organisations including: the boroughs, the Environment Agency, Natural England, Forestry Commission, English Heritage, Groundwork London, Sustrans, Sustain, London Wildlife Trust, etc. The private sector through the development industry and partnerships such as Business Improving Districts also has its part to play. Furthermore with the increasing resonance of the localism agenda, community ownership of assets and neighbourhood planning, volunteers such as Friends groups will become increasingly important mechanism for enhancing and maintaining public open space.







Map derived from GiGL data 2011 - © Crown Copyright and database right 2011. 100050713. All rights reserved London Development Agency 2011

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In line with the wider ALGG vision, a long term landscape strategy has emerged for the Arcadian Thames area - west London.

This proposes a landscape framework which integrates parkland, public access networks, habitats for nature conservation, areas for food production, management of flood waters, key visitor destinations and a recognition of the areas historical past.

Prepared by Gross Max Landscape Architects.





## **CHAPTER THREE**

## DELIVERY

3.1 The delivery of the ALGG vision is a complex and challenging task. The Implementation Points and key opportunities set out in this SPG should be delivered or enabled through the planning and development process. This can best be achieved through the adoption of appropriate policies and proposals by boroughs in their Local Development Frameworks (LDFs).

3.2 In parallel, the ALGG will also be delivered through bespoke strategic and local projects. It is crucial for both of these delivery mechanisms that adequate funding for capital projects and for high-quality management and maintenance be secured. To address these issues, this section discusses the delivery of the ALGG and outlines some of the mechanisms and options currently available.

#### **Partnership working**

3.3 Strong and open working relationships with many partners will be key to delivering the ALGG. These will include numerous partners such as local community groups, London boroughs, Government departments and their agencies; green space managers; sub-regional and cross boundary organisations and partnerships; regeneration and environmental organisations; the green space and green infrastructure jobs and skills sector; and working across the London regional boundary with, for example, the Green Arc Partnerships.

3.4 A London-wide Project Board and a related Working Group will provide the overarching management structure for the ALGG. 11 Green Grid Areas have been identified across London to promote cross boundary partnership working. These partnerships have developed objectives and identified projects to produce a Green Grid Area Framework in each of the 11 Green Grid Areas. These 11 Area Frameworks will implement the ALGG within the context of this SPG. Section 5 provides a brief description of each area and highlights the landscape corridors and connections that constitute the Open Space network and the key green infrastructure opportunities to enhance and develop the network.

3.5 The ALGG Project Board can facilitate the work of these Area groups, ensuring the synergy of projects, identifying partnership linkages for site specific projects, and assisting with identifying potential funding sources. The ALGG Project Board will be supported by the Mayor's Design Advisory Panel on issues of design quality. An expert panel will be established to assist the development of supportive policy and projects.

3.6 Greenspace Information for Greater London (GiGL), the capital's environmental records centre, lead the ALGG Evidence Partnership (*www.gigl.org.uk*). This partnership exists to ensure accurate evidence is available to support the objectives of the ALGG and to guide the best use of available data. It is vital that accurate information is available to form an evidence base of the ALGG and that this information is kept up to date. This will need to include monitoring data.

## SPG Implementation Point 1: Green Grid Area partnership working

The 11 area partnerships should prepare Green Grid Area Frameworks that identify objectives and projects, taking into account cross boundary integration and promoting opportunities for improving the provision, quality, functions, linkages, the design, planning and management of the green infrastructure network.

### Integration of the Green Grid into planning

3.7 The concept of the ALGG should be embedded in Neighbourhood Plans, Local Development Documents, Area Action Plans, Opportunity Area Frameworks, Community Strategies, Open Space Strategies, regeneration framework initiatives, masterplans, development proposals and projects. Additionally, subject to boroughs agreement, Joint Development Plan Documents or Area Action Plans could be produced for each Green Grid Area by the partnerships.

### SPG Implementation Point 2: Integrating the ALGG

A The Mayor will and boroughs and other partners should incorporate the SPG Implementation Points, the strategic opportunities set out in Chapter 5 and appropriate area frameworks into policies, plans, proposals and projects, working together across boundaries where relevant.

B Development and regeneration proposals should plan, locate and design new and improved green infrastructure and manage the ALGG as an interdependent, integrated and multi-functional open and green space network.

## Identification and delivery of strategic and local projects

3.8 In conjunction with securing delivery through the planning process for new development, a range of stand-alone or area based projects will also be identified. The Green Grid Area Frameworks will provide the basis for identifying and defining the projects. Project proposals will also identify how the proposal integrates with and improves the existing green infrastructure network and how the proposal contributes to delivering the functions set out in section 4 of the SPG.

#### Securing revenue funding

3.9 As with all development and regeneration activities, revenue funding is often the most crucial and difficult aspect to secure. Embedding the ALGG into plans and strategies will give confidence to funding bodies on the strategic nature of the proposed projects. Policy 2.18 of the London Plan requires new developments to assess how they can contribute to the network of green infrastructure particularly in areas of deficiency for regional and metropolitan parks, and sites of nature conservation importance (see Policy 7.19). Policy 5.10 (urban greening) requires major development proposals in the Central Activities Zone to demonstrate how green infrastructure has been incorporated to combat the urban heat island effect. Policy 5.11 (green roofs and green walls) also requires this issue to be addressed.

3.10 There is also scope for revenue streams to be secured from those who benefit most from the green infrastructure investment, by contributing to its long-term maintenance. The inclusion of the ALGG as a material planning consideration in the Local Development Documents will mean that Section 106 negotiations can be considered with respect to the creation, improvement and management of the ALGG and boroughs should use the S106 mechanism, where appropriate, to remedy explicit on-site issues. Other potential sources of revenue funding could include the water companies.

3.11 Boroughs now have the power to raise a Community Infrastructure Levy (CIL) which will apply to most forms of development (not just a few, large developments as \$106 currently does). The CIL regulations allow boroughs to set out charges for different types of development and/or different parts of their boroughs and establish what the revenue raised will be used for. Green Infrastructure is a legitimate use for CIL monies, as such boroughs could include green infrastructure within their schedule of uses that CIL monies will fund. Community organizations and volunteers will also have a key role to play in the future in both delivering projects and maintaining spaces in the ALGG. The regulations governing the CIL are clear that the Mayor can only use his CIL for transport matters, therefore the fact the Mayor's CIL has not included green infrastructure should not be taken as a lack of Mayoral support for green infrastructure.

#### SPG Implementation Point 3:

Creation, improvement and management Development and regeneration proposals should demonstrate that adequate long term funding is provided for the creation, improvement and management of the ALGG, subject to the appropriate statutory tests, to maintain high quality and to achieve the associated benefits. **CHAPTER FOUR** 

## ALGG FUNCTIONS

4.1 This section of the SPG sets out the functions of the ALGG in more detail, identifying deficiencies and issues that affect London's green infrastructure network. The relevant London Plan policies are then signposted together with other initiatives that could provide support for the ALGG. The successful implementation of these policies should lead to the diverse functions of the ALGG being delivered. Section 5 of this document sets out how each of the Green Grid Areas can contribute to meeting the various functions set out below in Section 4.

## Adapt to climate change and promote urban greening

4.2 The Mayor's Climate Change Adaptation strategy highlights that London is already vulnerable to climate impacts – principally floods, droughts and heatwaves. Further climate change is expected to bring hotter, drier summers, warmer, wetter winters, and an increased frequency and intensity of extreme weather events, such as heatwaves and very heavy rainstorms.

#### Flood risk management

4.3 The predicted rise of sea levels, wetter winters and increased incidences of heavy rainstorms, will increase the likelihood of flooding from tidal, fluvial, surface and sewer sources (see Figure 2). Currently, 83,200 properties in London are at 'moderate' or 'significant' risk of flooding from rivers 680,000 properties are at risk of flooding from heavy rainfall following a 1 in 200 year event. Changes to permeability of the urban landscape will also increase the likelihood of flash flooding, whilst London's growth will mean that more people and properties may be at risk.

4.4 While the existing flood defences, drainage system and green space network already contribute to managing flooding, the increasing risk will require creative solutions to be incorporated into the design of existing and new development. An expanded and reshaped network of green infrastructure could significantly absorb and temporarily retain rainwater, reducing both strategic and local flood risk. There are significant opportunities to use green infrastructure to complement the existing 'grey' infrastructure (current drainage systems), so avoiding, or at least delaying the introduction of further grey infrastructure.

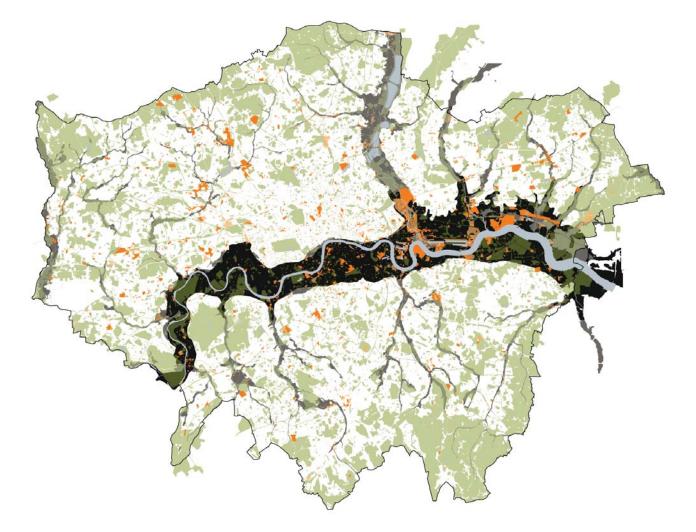
4.5 The risk of surface water flooding in Critical Drainage Areas (see glossary) can also be mitigated by increasing green cover, including green roofs, pocket parks, and rain gardens, together with the management of existing green space to ensure maximum absorbency.

#### Overheating management

London and Londoners are vulnerable 4.6 to 'overheating' in hot weather ('overheating' refers to when temperatures reach a point where they affect public health and comfort and infrastructure). Lessons from warmer cities than London, reinforced by technical studies show that green spaces and trees can have a cooling effect on the surrounding built environment. The Mayor's Climate Change Adaptation Strategy strongly promotes increasing urban green cover in London to help tackle overheating by reducing how the urban heat island effect intensifies the heat in hot weather. Research by the LUCID project recommends that a 'mosaic' of greenspaces within the urban realm can help offset the urban heat island effect.

4.7 The London Plan sets the spatial framework to support these functions of the ALGG. These include policies on sustainable design and construction (Policy 5.3); overheating and cooling (policy 5.9); urban greening (policy 5.10); green roofs

and development site environs (policy 5.11); sustainable drainage (policy 5.13); public realm (policy 7.5); trees and woodland (policy 7.21) and river restoration (policy 7.28). SPG on sustainable design and construction will give further guidance on how green infrastructure can contribute to mitigation of and adaptation to the effects of climate change. Proposals and policies in the Mayor's London Climate Change Adaptation Strategy also support achievement of this function.



#### Figure 2 : Managing climate

Strategic Housing Land Availability
Brownfield Land Database
Indicative Fluvial Flooding
Indicative Tidal Flooding
Open space

#### Increase access to open space

4.8 London has around 50,000 hectares (ha) of publicly accessible open space over 1ha in size. These spaces are distributed unevenly across the city and they have been mapped to reflect the London Plan categorisation (see Table 1 and Figure 3). This approach has been applied in London since 1976 when it was incorporated into the Greater London Development Plan. Since that time the approach has been updated and refined as a guide to the distribution, amount and location of publicly accessible open space. The indicative deficiency areas that fall outside the catchment thresholds showing where people do not have access to the categories of public open space have been identified in Figure 4.

#### Table 1 : London's public open space categories

Open space categorisation	Size guideline	Distances from homes
<b>Regional Parks</b> Large areas, corridors or networks of open space, the majority of which will be publicly accessible and provide a range of facilities and features offering recreational, ecological, landscape, cultural or green infrastructure benefits. Offer a combination of facilities and features that are unique within London, are readily accessible by public transport and are managed to meet best practice quality standards.	400 ha	3.2 to 8 Km
<b>Metropolitan Parks</b> Large areas of open space that provide a similar range of benefits to Regional Parks and offer a combination of facilities and features at the sub-regional level, are readily accessible by public transport and are managed to meet best practice quality standards.	60 ha	3.2 Km
<b>District Parks</b> Large areas of open space that provide a landscape setting with a variety of natural features providing for a wide range of activities, including outdoor sports facilities and playing fields, children's play for different age groups, and informal recreation pursuits.	20 ha	1.2 Km
<b>Local Parks and Open Spaces</b> Providing for court games, children's play, sitting-out areas, nature conservation areas.	2 ha	400 metres
<b>Small Open Spaces</b> Gardens, sitting-out areas, children's play spaces or other areas of a specialist nature, including nature conservation areas.	Under 2 ha	Less than 400 metres
<b>Pocket Parks</b> Small areas of open space that provide natural surfaces and shaded areas for informal play and passive recreation that sometimes have seating and play equipment.	Under 0.4 ha	Less than 400 metres
<b>Linear Open Spaces</b> Open spaces and towpaths alongside the Thames, canals and other waterways; paths; disused railways; nature conservation areas; and other routes which provide opportunities for informal recreation. Often characterised by features or attractive areas which are not fully accessible to the public but contribute to the enjoyment of the space.	Variable	Wherever feasible

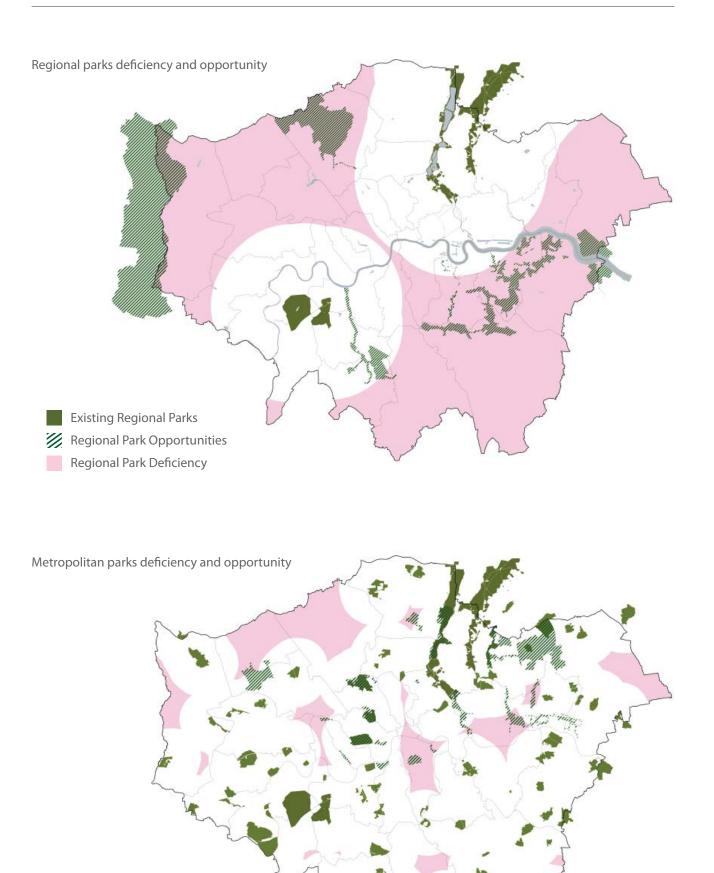
4.9 Regional Parks, such as Richmond Park, Osterley Park and those in the Lee Valley and Colne Valley, are found in outer London but much of London falls within a deficiency area for this type of park. The Wildspace Park, South East London Green Chain, the London Downlands and the Lea River Park (extending the Lee Valley Park to the Thames) provide opportunities for reducing the deficiencies in the eastern half of the city. The Wandle Valley, Crane Riverside and Brent Riverside provide opportunities to redressing the deficiencies in the west.

4.10 Metropolitan Parks are generally well provided, but there are some areas of deficiency, particularly along the north bank of the Thames in the east, in Edmonton and the Upper Lee Valley to the north and on the western edge of London. There are some areas of significant deficiency in access to District Parks, including along the Thames in the eastern half of London.

4.11 The deficiencies in provision create a gap in London's spatial character and wider open space network. Reducing this deficiency can be achieved through projects that create new public open space, expand or improve the quality of existing sites (regardless of ownership), improve the links between parks and improve the access to existing sites, either by creating new entrance points or tackling barriers in the surrounding area. In inner London more innovative solutions may have to be identified, such as the provision of accessible green roofs.

4.12 The Mayor's London Plan provides the spatial policy framework to address this issue, notably through improvements to the Public Realm (Policy 7.5). The protection and enhancement of the Green Belt and Metropolitan Open Land (Policies 7.16 and 7.17). Policy 2.18 provides for development to contribute appropriately to the provision of green infrastructure and in CAZ, major development has to demonstrate how it has incorporated urban greening measures (policy 5.10). Local open space is protected and deficiencies in public open space addressed through the process of Borough open space strategies (Policy 7.18)

4.13 Other partners have a role in ensuring that this function of the ALGG is attained. In particular boroughs should undertake and keep up to date their open space strategy with its supporting action plan. The Mayor and Cabe Space have produced supplementary guidance to assist in this. Area frameworks will help the necessary links to be made where green infrastructure goes across borough boundaries. A wide partnership, including the boroughs, the Environment Agency, Natural England, the National Trust, Groundwork London and the GLA, that has evolved around the Wandle Valley Regional Park is another mechanism for addressing deficiencies in access to good quality open space. For example, this partnership has made a successful bid to the Heritage Lottery Fund to bring about enhancements to the landscape of a large part of the proposed park. The Mayor, the Environment Agency, Natural England and Transport for London have all brought elements of funding to improvements in the park area. The sector also has its part to play, for example, Mayor is working with the BID partnership in Victoria to deliver elements of green infrastructure. In the future with the government initiative on localism, community ownership of assets and neighbourhood planning, volunteers such as Friends groups will become an increasingly important mechanism for enhancing and maintaining public open space.



Existing Metropolitan Parks

Metropolitan Park Opportunities Metropolitan Park Deficiency

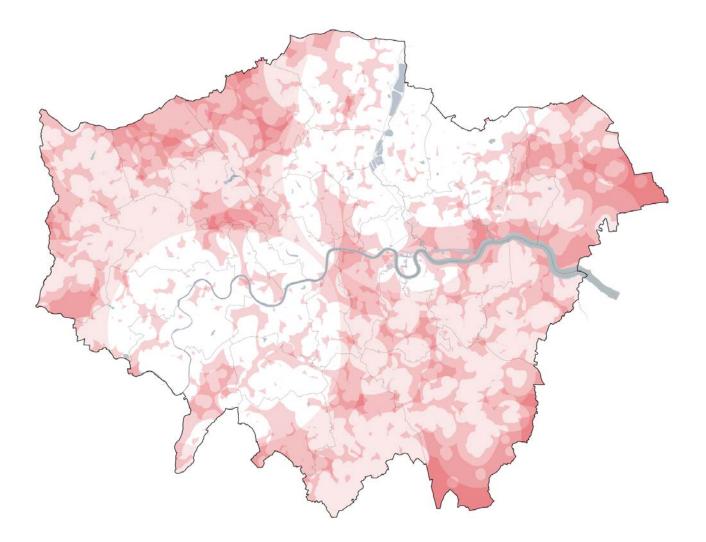


Figure 3 : Accesible open space



Regional Parks
Metropolitan Parks
District Parks
Local Parks And Open Spaces
Small Open Spaces
Pocket Parks
Other / Private Open Spaces





+ Urban Areas Deficient in Open Space

# Conserve and enhance biodiversity and increase access to nature

4.14 There are over 1500 wildlife sites across London covering 18% of the city's area. These sites have been designated for protection due to their importance for nature conservation, ranging from nationally important Sites of Special Scientific Interest (SSSIs) to community-managed reserves. They are the priorities for protection and management for biodiversity. They need to be conserved and enhanced for their own sake, as a resource of local, national and international importance in a city that is comparatively more wildlife-rich than much of its intensively farmed rural hinterland.

4.15 The Mayor's distance threshold (that you should be no more than a 1 km walk from a site) identifies deficiency areas. It is estimated that 1.75 million Londoners live within the deficiency areas that have been mapped as shown in Figure 5. The Mayor has provided guidance in Improving Londoners' Access to Nature by identifying sites that have the potential for enhancement that can reduce or alleviate these deficiency areas.

4.16 Reducing the deficiency areas can be achieved in the following ways:

1. improving the natural value of an accessible site;

2. creating new open space to provide a significant experience of nature;

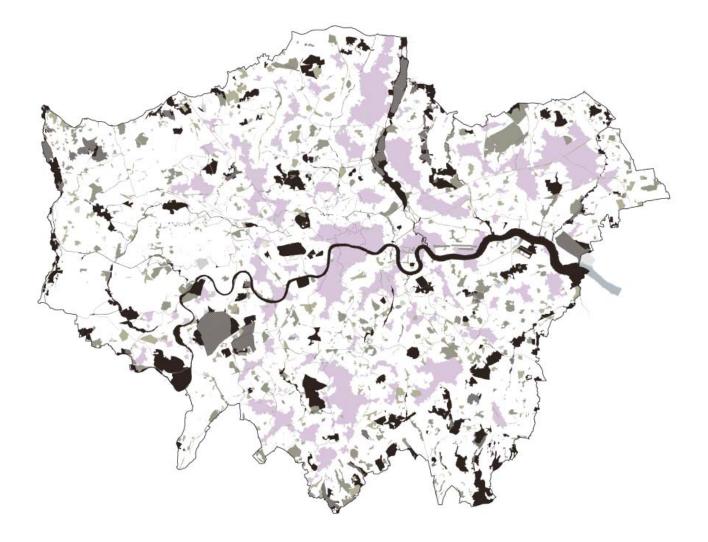
3. providing new entrance points to a site providing a significant experience of nature;

 opening up access to a restricted site; or
 improving the walking access through areas surrounding a site, extending the catchment area. Smaller scale enhancements can provide improvements that may not be able to reduce the deficiency area but can alleviate it. 4.17 In central London there is a large area of deficiency, alleviated at its edges by the central London Royal Parks, Burgess Park, Brockwell Park, and Victoria Park. The opportunities in central London to minimise the deficiency in access to nature may relate more to greening the urban environment to provide space and opportunities for wildlife throughout the urban fabric.

4.18 The network of wildlife sites is key to the conservation of London's biodiversity, and a critical component of the London and local Biodiversity Action Plans. Nevertheless, biodiversity exists outside this network, and there will be opportunities through the ALGG to enhance, expand and connect this network.

4.19 London Plan Policy 7.19 (Biodiversity and access to nature) provides the strategic policy on this issue. As well as addressing areas of deficiency, boroughs should also demonstrate how they will contribute to achieving the Biodiversity Action Plan targets identified in the London Plan and should identify, protect and enhance corridors for movement of species. These green corridors can fit perfectly within a network of green infrastructure.

#### Figure 5 : Access to nature



SSSI SE England
 SINC Metropolitan
 SINC Borough 1
 SINC Borough 2
 SINC Local
 Deficiency in Access to Nature
 Sites to Reduce Areas of Deficiency

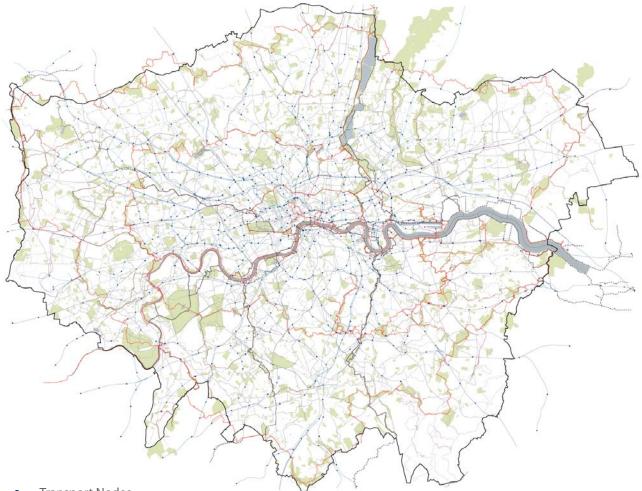
#### Improve sustainable travel connections

4.20 National Cycle Routes, the London Cycle Network, London's Greenways and the Strategic Walk Network support and promote sustainable transport choices, leisure options and physical activity (see Figure 6). These strategic networks link and pass through the green infrastructure network. They should be attractive, well signed, sheltered, safe and well maintained. Better understanding of the existing strategic network of cycle and walking routes and transport nodes will enable improvements to be made to strategic links between routes, transport hubs and places of Landscape, Cultural and Heritage interest.

4.21 Projects should improve the quality of walking (via initiatives such as Legible London) and cycling routes (via initiatives such the Cycle Hire scheme and Cycle Super Highways), extend them, enhance their connectivity and link green spaces together. Local routes, important in their own right, should link in with this strategic network and opportunities to create and improve routes to encourage green travel choices should be identified and incorporated into projects.

4.22 London Plan Policies set the spatial framework to support this function of green infrastructure, especially through policies on encouraging cycling that seek to increase the proportion of journeys made by cycle, and walking (Policies 6.9 and 6.10). Improvements to the public realm and green infrastructure, making them both safer and more attractive will also support this aim (policy 7.5) This objective is also carried through into the policies and proposals in the Mayor's Transport Strategy (Policy No 17, Proposals No 54 and 60) and initiatives such as the Great Outdoors and Better Streets.

#### Figure 6 : Making connections



- Transport Nodes
- Rail Network
- Underground Network
- ----- National Cycle Route
- --- National Cycle Route proposed
- —— London Cycle Network
- --- London cycle Network proposed
- ····· Strategic Walking Routes
- ····· Other Walking Routes
- ····· Thematic Local Walks
  - Green and Open Areas (Public + Private)

#### Promote healthy living

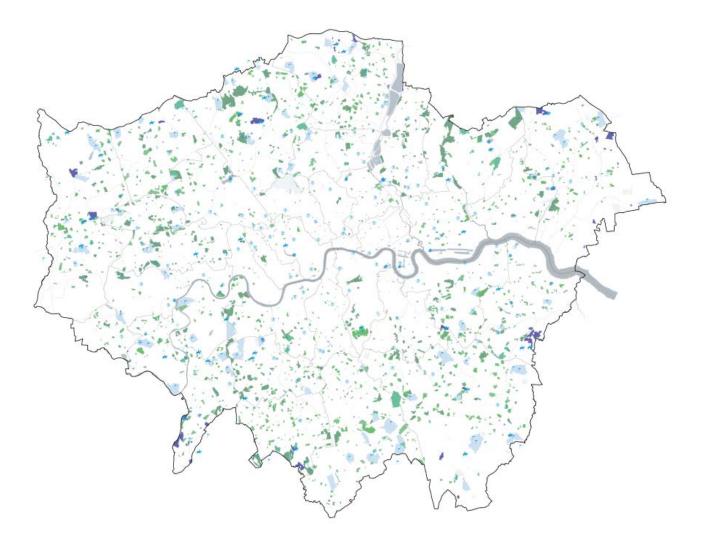
4.23 Improving access to and the enjoyment of the green space network promotes healthy living (see Figure 7). The provision, protection and improvement of sports facilities, including playing fields, as well as encouraging the use of parks, play facilities and other green spaces, are central to encouraging more active lifestyles and improved mental well-being. Green spaces are also known to contribute to the psychological and social well-being of communities, having a positive effect on stress levels, mental health and community cohesion. High guality, well managed open spaces that provide safe environments can discourage crime and anti-social behaviour. This reduces the fear of crime and makes available the benefits of public open spaces to more of the local community.

4.24 The London Plan sets the spatial framework for supporting this function, through encouraging Londoners to be more active as covered under the previous section (cycling, walking and enhanced public realm);

- by encouraging the protection and provision of sports facilities (policy 3.19) and children's play (policy 3.6); Revised SPG on providing for children's and young people's play and informal recreation will be published for public consultation later in 2011.
- encouraging boroughs to identify spaces of relative tranquillity through open space strategies (policy 7.15);
- encouraging the use of land for growing food near to the communities it serves. (policy 7.22).

- Policy 7.1 of the Plan also recognises the need for neighbourhoods to be designed to enable people to live healthy and active lives with access to green infrastructure and the Blue Ribbon Network. Supplementary guidance on Lifetime Neighbourhoods will be published for public consultation in late 2012.
- The Mayor's Sport Legacy Plan supports this by aiming to increase participation in sports activities and the Mayor's Health Inequality Strategy policies and proposals support the healthy living aspects of the ALGG. Other partners such as the NHS have a major part to play in achieving this objective with voluntary organisations such as Groundwork, British Trust for Conservation Volunteers with the Green Gym initiative (see glossary) and Sustrans making major contributions.





Children and Teenagers Play Spaces
Playing Fields
Recreation Grounds
School Grounds
Hospital Grounds
Golf Course
Equestrian
Other Recreation

#### Conserve and enhance heritage features, geodiversity and landscape character

4.25 An understanding of the underlying geodiversity, the historic value and the character, design and quality of both the natural and designed landscape is required to fully understand and respect the context of the network of green infrastructure.

Landscapes and heritage assets play 4.26 a role in creating the basis for individual and collective cultural identity. The ecological and landscape zones of London illustrate the traditional character of each area and can contribute to understanding the open space network (see Figure 8). The natural and historic heritage of London should be carefully integrated into landscape proposals to enhance an area's distinctiveness and the sense of place for neighbourhoods. The zones can be used as the context for the landscape character of the area and guide the restoration, creation and maintenance of wildlife habitat, informing the wider strategy of initiatives at the landscape scale and the development of projects. Some areas are of particular significance as they are landscapes that are contiguous with natural features in London's hinterland. The Thames Estuary Marshes to the east, the Downlands to the south and the ancient woodlands to the north provide opportunities for landscape scale restoration and management and recreational opportunities of a significant scale. They are also the landscapes which form part of broader initiatives, such as Thames Estuary Parklands, which straddle the London boundary.

4.27 Natural England has published London's Natural Signatures - a framework for London that identifies 22 natural landscape character zones, which are illustrated in Figure 9. Each character type is described and specific landscape features are identified to produce a 'natural signature' that provides a snapshot of the unique and recognisable natural characteristics of each zone. The key influences that shape the landscape are set out and design clues are highlighted to inform future development. The relevant 'natural signatures' are included in each of the Green Grid Area descriptions in section 5 of the SPG.

4.28 The landscape character zones numbered in Figure 9 are listed below:

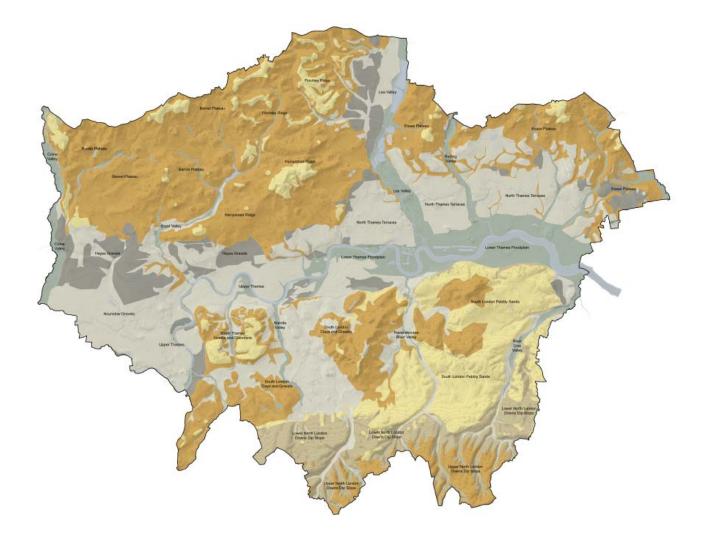
- 1. Colne Valley
- 2. Ruislip Plateau
- 3. Barnet Plateau
- 4. Finchley Ridge
- 5. Hampstead Ridge
- 6. Lea Valley
- 7. Essex Plateau
- 8. Roding River Valley
- 9. North Thames Terraces
- 10. Hayes Gravels
- 11. Brent River Valley
- 12. Hounslow Gravels
- 13. Upper Thames
- 14. Lower Thames Floodplain
- 15. South Thames Heaths & Commons
- 16. Wandle River Valley
- 17. South London Clays & Gravels
- 18. Ravensbourne River Valley
- 19. South London Pebbly Sands
- 20. River Cray Valley
- 21. Lower North Downs Dip Slope
- 22. Upper North Downs Dip Slope

4.29 There are both Regionally and Locally Important Geological Sites (RIGS and LIGS. These should be protected and enhanced by development proposals. Boroughs should use the advice set out in London's Foundations and the expertise of the London Geodiversity Partnership to investigate sites to determine if additional sites should be protected via the planning system. RIGS are identified in the London Plan on Map 7.4.

4.30 The panoramas, river prospects and townscape views that are protected and managed through the London Plan policies are often from open spaces such as parks. Other open spaces also afford more local views and panoramas, these provide opportunities to inspire people to re-connect with their local environment and can be interpreted to promote regeneration.

4.31 London contains a wide variety of open spaces and designed landscapes that are historically significant and that have significant heritage and cultural value. Understanding the origins and history of the semi-natural and designed landscapes can provide information on how these areas could be managed and protected. London Plan policies on local character (policy 7.4) identifying heritage assets (policy 7.8) and geological conservation (policy 7.20), provide the spatial framework to achieving this function of the ALGG. SPG is being developed to assist in establishing the elements of local context to be considered in relation to Lifetime Neighbourhoods, including the integration of green infrastructure and this guidance will be published for public consultation in 2012. Other partners, especially the boroughs with English Heritage and Natural England can also provide a wide range of expertise and sometimes funding.

## Figure 8 : Ecological and landscape zones



Chalk soild
Gravel and Sandy hiltops
Clays
Loams
Low level Gravel
Flood PLain soils

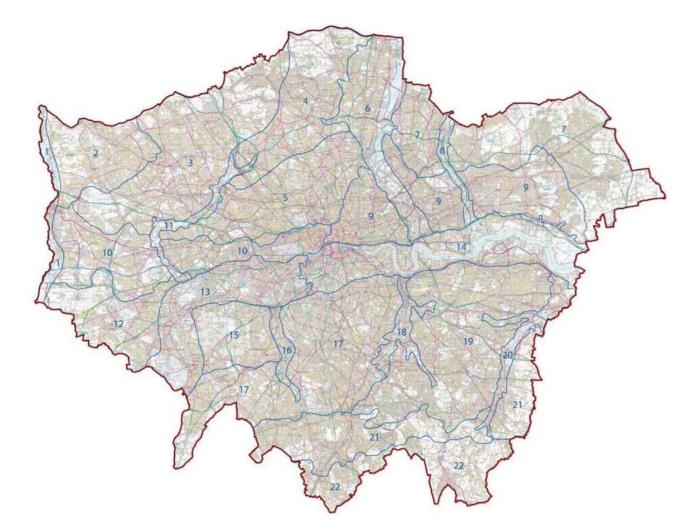


Figure 9 : Landscape character zones

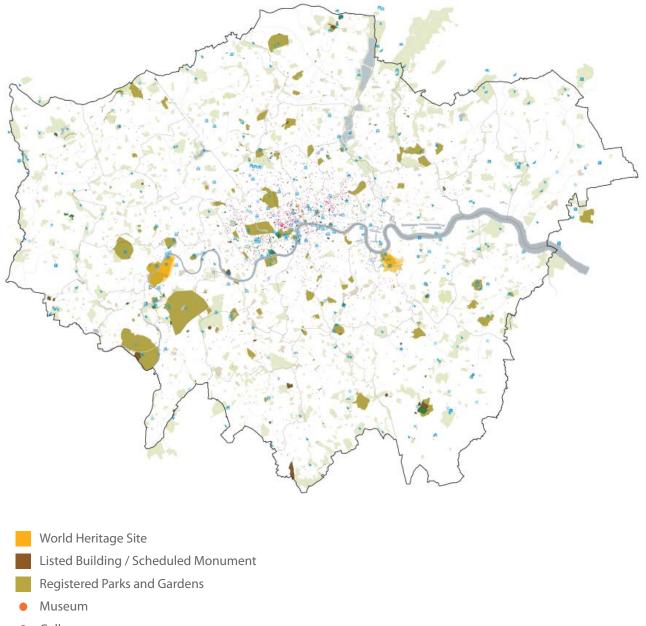
# Enhance distinctive destinations and boost the visitor economy

4.32 There is a wide range of visitor attractions and places of interest across London that are associated with open spaces in London, including cultural buildings, historic parks and gardens, visitor centres, museums, water activities, country parks, nature reserves, view points and golf courses (see Figure 10).

4.33 This network forms a key element of the Strategic Cultural Areas identified in the London Plan. For example, the parks and spaces in Central London contribute to the world class status of the capital as a visitor destination and the green spaces and extensive parklands of Greenwich Riverside in East London and London's Arcadia in South West London complement the visitor experience to some of London's most historic sites.

4.34 The Olympic venues in east London will form a major new international visitor destination for sport, recreation and tourism. The Queen Elizabeth Olympic Park will form a key element in this new visitor offer and the image of this part of London over the longer term (Policy 2.4). 4.35 Where relevant, projects should improve and promote natural and historic heritage value, visitor facilities, interpretation, green routes and linkages as part of widening the appeal and use of the green infrastructure network. The spatial distribution of facilities and places of interest can be used to help inform the development of projects to improve the coverage and availability of these resources. London Plan policies on local character and public realm (policies 7.4 and 7.5) as outlined above support this benefit. Other partners such as the Thames Landscape Strategy, English Heritage, London Partners and the Olympic Legacy Company can also contribute. The Mayor's Cultural Strategy sets out policies and proposals that give further support.





- Gallery
- Theatre / Performance Venue
- Library / Archive
- Cemetry or Churchyard
  - Formal Garden

#### Promote sustainable design, management and maintenance

4.36 The design, management and maintenance of green infrastructure need to be of a high standard in order to meet the ALGG vision. Green infrastructure that plugs in to the existing green space network needs to be planned and designed as an integrated part of all new development proposals and regeneration programmes and the resources for management and maintenance identified and secured.

4.37 Understanding the context of green space within the urban environment is an essential prerequisite to ensuring a more sustainable approach to design, management and maintenance. An approach recognising that existing green spaces can provide a wide range of benefits over and above their primary recreation function and aesthetic value ensures that management plans and investment strategies fully address the future requirements of the space as part of a network of green infrastructure assets (Policies 2.18 and 7.1).

4.38 For example, incorporating Sustainable Drainage Systems (SUDS) can reduce surface water runoff in a more natural way as well as providing amenity value and benefits for wildlife. There are a number of SUDS design approaches that can be applied to suit the circumstances of the location including:

- rainwater harvesting; swales; soakaways; green roofs; gravel and grass; permeable and porous pavements; and basins, ponds and reed beds that can store water.

Incorporating green roofs into the design and delivery of projects and proposals can have a wide range of benefits including:

- helping to manage storm water; reducing the Urban Heat Island effect; enhancing biodiversity; providing insulation; reducing pollution; and helping to protect and prolong the life of the roof.

4 3 9 There are a number of London Plan policies that give strategic support to achieving this benefit from ALGG. These include an approach to sustainable design and construction (Policy 5.3) from the start of the design process of a scheme, this approach is elaborated on in Policy 5.9 that sets out a cooling hierarchy to avoid overheating and the impacts of the urban heat island. This is supported by policies 5.10 and 5.11 that set out the benefits of incorporating urban greening in developments, particularly in the CAZ. Policy 5.13 sets out a drainage hierarchy that will help the design of drainage for a development achieve a range of objectives, including for biodiversity and amenity. Policies on local character and the public realm address issues of landscape to support achievement of this benefit. The Mayor's London Climate Change strategy provides more detail on the approaches to overheating and cooling and to drainage. The SPG to the London Plan on Sustainable Design and Construction will provide more guidance on implementation through the development process.

4.40 Other partners that can assist implementation include the Forestry Commission with its 'right place, right tree' initiative supported through the Mayor's London Tree and Woodland Framework (Policy 7.21). The London Parks and Green Spaces Forum is working with Friends' groups to spread good practice. Groundwork also has a number of projects through the INTERREG C-Change project, particularly in the Wandle Valley, that support this objective. The Environment Agency supports good practice in sustainable drainage, and the London Biodiversity Partnership can provide good advice on invasive species control via the London Invasive Species Initiative.

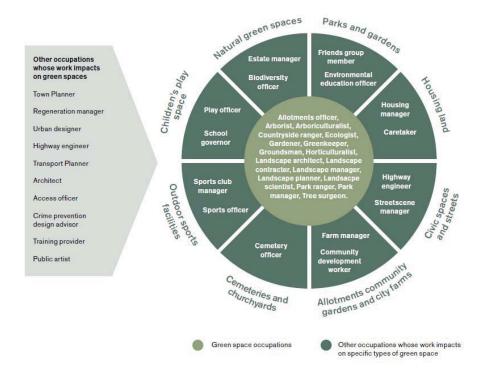
## Enhance green space and green infrastructure sector skills

4.41 There are a wide variety of occupations that are directly or indirectly associated with the planning, design and management of parks and other open spaces as illustrated in Figure 11. Those working in the green infrastructure sector in London will play an important role in delivering, managing and maintaining a high quality green space network. The jobs and skills in these sectors are needed to ensure that London can adapt to the effects of climate change.

4.42 Skills that will enable carbon emission reductions and support climate change adaptation within the green infrastructure sector should be an integral part of the implementation of the ALGG. The aim is to support the capability of the sector

through the transition to the low carbon economy, by providing coordination, access to expert advice, training and knowledge transfer. For example, green roofs and walls provide thermal insulation that can save approximately 1.6 kilograms of CO2 per square metre and can reduce the energy requirements of air conditioning by 75%.

4.43 The London Plan provides strategic policy support through Policy 4.12 – Opportunities for All. Government policy on localism, neighbourhood plans and volunteering could all provide opportunities for boroughs and local communities to consider how new green skills could be gained and brought to bear on the maintenance and enhancement of ALGG. Initiatives such as BTCV's green gyms, Trees for Cities and the Mayor's volunteering strategy with the Re-Leaf programme all provide initial examples of good practice.



#### Figure 11 : Green space sector job

Source: CABE (2009). Skills to grow: seven priorities to improve green space skills.

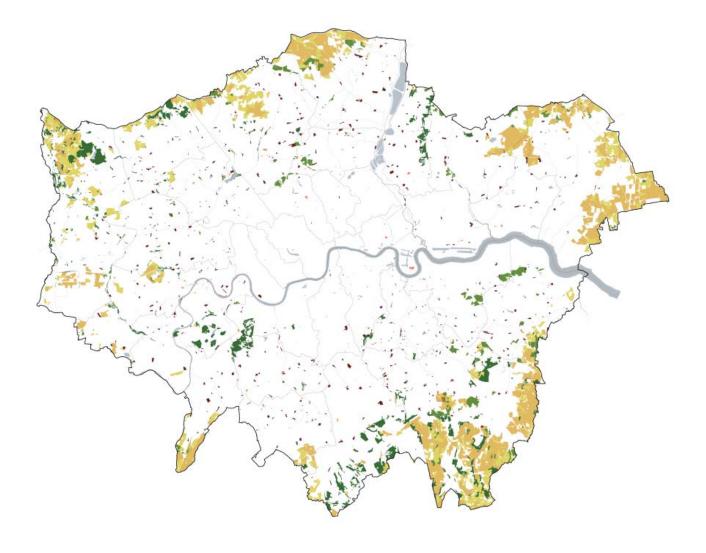
#### Promote sustainable food production

4.44 Land for food growing promotes active lifestyles, better diets and food security. In urban areas community food growing projects can be the focus for building increased social cohesion. Many projects engage some of London's most hard to reach individuals and evidence suggests they are very successful in building the confidence, and skills of individuals and providing them with a path way to employment. Productive land in London includes food growing in allotments, community gardens in residential estates and agricultural farms on the urban fringe (see Figure 12). The maintenance of these and similar green spaces can be a way of bringing together diverse members of the local community and help to make new social links.

4.45 Currently, only 30,000 Londoners use allotments to grow their own vegetables and fruit. The data demonstrate the lack of provision in parts of central London, compared to the outer boroughs. Combining these data with areas of demand at the local level can help to formulate where priorities should be focused in order to meet needs. Capital Growth, the local food growing initiative supported by the Mayor aims to transform the capital with 2,012 new food growing spaces by 2012. These spaces will complement the statutory allotment sites and introduce new spaces where these do not exist, particularly in inner London (Policy 7.22). Over 35,000 Londoners are involved in community food growing projects as a part of the London-wide Capital Growth scheme (www.capitalgrowth.org).

4.46 The protection of the Green Belt and Metropolitan Open Land ensures land is maintained for local food production or is available for food production in the future. The Mayor will seek to encourage and support thriving farming and land-based sectors in London, particularly in the Green Belt. In more densely developed parts of the city green roofs and walls can provide opportunities for new local food growing (Policies 7.16, 7.17 and 5.11). Other partners who can assist in achieving this benefit include the Mayor's Food Board and voluntary organisations such as Sustain. Other productive uses for this land include food for animals and the production of biomass fuel for energy consumption.





- Allotments / Community Gardens
- Horticulture / Orchards
- Arable Agriculture
- Livestock Agriculture
- Broadleaf Woodlands
- Mixed Woodland
- City Farms

#### Improve air quality and soundscapes

4.47 Green infrastructure, trees and vegetation are recognised as being able to filter pollution so improving the quality of the air in and around the green infrastructure network. Creating new green spaces and linkages and urban greening of streets and buildings will assist in further reducing air pollution and improving the health and enjoyment of those living and working in London.

4.48 Green spaces can provide havens of tranquillity and soundscape interest in a busy city: however, many green spaces can be blighted by noise. The design and management of the landscape and vegetation can help to reduce unwanted noise intrusion and support positive soundscapes, such as bird song or the noise of running water. Areas of relative tranguillity within the urban environment should be recognised and intrusive noise reduced. Policy 7.15 Reducing noise and enhancing soundscapes provides support for Boroughs to identify areas of relative tranquillity through their open space strategies.

4.49 The Mayor's Air Quality Strategy (together with London Plan Policy 7.14) recognises the importance of tackIng air pollution and improving air quality. This is also supported by the Mayor's Transport Strategy (Policy 15, Proposals 91 and 94). The promotion of walking and cycling (see above) can also help tackle the problem of poor air quality. TfL are developing sub-regional Transport Plans to help address issues of air quality and noise..

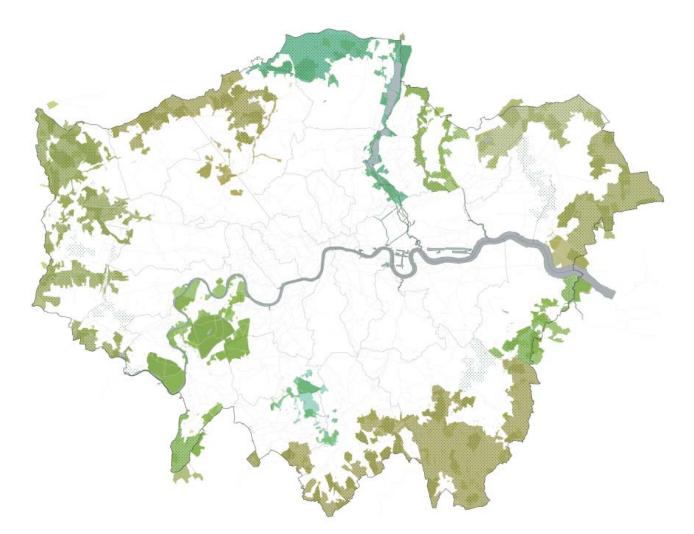
# Improve the quality of and access to the urban fringe

The Green Belt around London has 4.50 enormous potential to provide access to good quality countryside on the doorstep of London. There are many examples of good quality countryside in the urban fringe that attract people, including Epping Forest, the Lee Valley Regional Park, the Colne Valley Regional Park and a range of country parks. Appropriate uses that are consistent with maintaining the open character of the land designated as Green Belt or Metropolitan Open Land (see glossary) can achieve positive improvements to the quality of the landscape and the accessibility of this resource. There are considerable opportunities to increase the amount of public access to the countryside around London and generally to link fragmented areas of public open space, by both public transport and walking and cycling routes (Policies 6.9 and 6.10). Metropolitan Open Land is particularly important in inner London, and similar opportunities for improving its quality and access should be explored as contributors to the green infrastructure network linking through to London's countryside.

4.51 The London Plan supports the implementation of the Green Arc vision that aims to create and protect an extensive and valued recreational landscape of wellconnected and accessible countryside around London for both people and for wildlife (Policy 2.18). Implementation of the ALGG projects will contribute to achieving this.

4.52 Agriculture is an appropriate use in the Green Belt and farmers adopting agri-environmental stewardship schemes can deliver good environmental practice, including enhanced biodiversity benefits and improved access (policy 7.22). 4.53 London Plan policy on protecting local open spaces and addressing deficiencies (7.18) can also support improving access to the urban fringe by providing the opportunities to identify and implement vital links in green infrastructure. Other partners such as the London boroughs, neighbouring

county and district councils, the Environment Agency, Forestry Commission and Natural England through the Green Arc initiatives have a key role in implementing this. Voluntary sector organisations such as the Woodland Trust and local wildlife trusts will also be key partners.



#### Figure 13 : Green belt and urban fringe



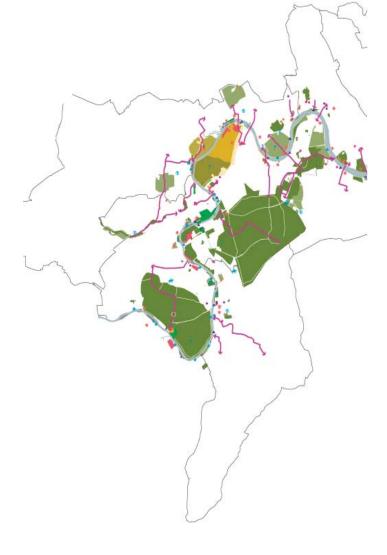
## Conserve and enhance the Thames riverside spaces

4.54 The riverside open spaces and the access to and along the River Thames enhance the experience and setting of London's iconic river, contributing to its historic, cultural and natural significance. Large and small parks like Bushy Park, Battersea Park, Jubilee Gardens and Potters Fields enhance the space of the river and provide destinations and view points that add to the sense of place. The Wildspace Park at Rainham provides a major new visitor destination centred on the Thames marshes in the east of London. The character of the riverside spaces changes along the Thames, meandering through meadows, historic parks and gardens in the west, through the more urban central area with its embankment promenades and parks, through to the industrial and docklands areas and the riverside marshes in the east.

4.55 The Thames Path and towpaths provide routes and connections along the riverside, stimulating access and recreation. There are also a number of routes to the Thames through the open space network, such as through the South East London Green Chain and from Richmond Park. There is considerable scope to improve this network and link into the Thames Path, for example where tributaries meet the Thames (Policies 7.24, 7.27. 7.28 and 7.29). These other elements of the Blue Ribbon Network can also form a key part of the ALGG. For example where waterways can be restored and enhanced they can make a significant contribution to achieving many of the functions of the ALGG, such as adapting to climate change and enhancing biodiversity (policy 7.27).

4.56 London's four World Heritage Sites (WHSs), the Tower of London, Royal Botanic Gardens Kew, Maritime Greenwich and Westminster Palace and Abbey are all on the Thames and the open spaces at these locations are integral to the historical character and setting (policy 7.10). The London Plan SPGs on the London View Management Framework and on the settings of WHS (forthcoming) will provide support for partnerships to incorporate this aspect into WHS Management Plans.

4.57 Three strategies that have been developed by partnerships that cover the Thames between Hampton to Kew, Kew to Chelsea and the Thames estuary east of Tower Bridge. These strategies provide more detailed information and action points that should be taken into consideration when



informing policy and developing projects for implementing the ALGG, as does TE2100. The partnerships that have developed these strategies will be significant to implementing these projects in the ALGG. The Environment Agency, Port of London Authority, Natural England and the relevant Boroughs will be key to achieving this. A partnership led by the Environment Agency has produced a River Restoration Plan to assist in the restoration of waterways by naturalising river channels. Some of these projects will be implemented through capital projects and some through nearby developments. Voluntary groups such as Thames 21 and the London Wildlife Trust also have a significant role.

**Figure 14** : Thames riverside spaces links and attractions



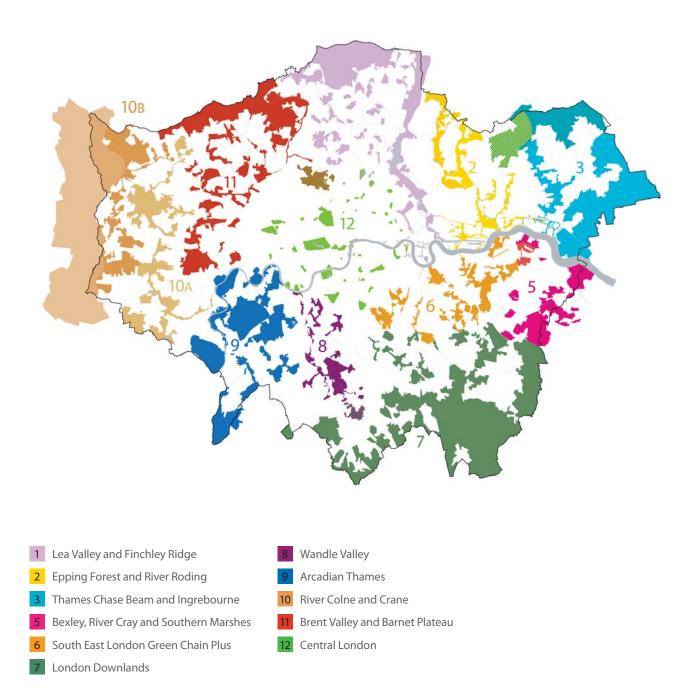
- World Heritage Site
- Landscapes related to the Thames
- Museum
- Gallery
- Theatre / Performance Venue
- Library / Archive

**CHAPTER FIVE** 

# GREEN GRID AREAS

5.1 The eleven Green Grid Areas (GGAs) provide the basic framework from which policies and projects can be developed and delivered. The ALGG Areas update, complement and expand upon the six areas established as part of the ELGG to provide a pan London framework. This is illustrated in Figure 15. The parts that are shaded in more than one colour indicate where the areas overlap.

#### Figure 15 : Green Grid



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5.2 The Green Gird Areas numbered in Figure 14 are listed below. The list highlights how they have developed from the ELGG work.

- 1. Lea Valley and Finchley Ridge Extended existing ELGG area
- 2. River Roding and Epping Forest Extended existing ELGG area
- 3. Thames Chase, Beam, Ingrebourne Extended existing ELGG area
- 4. Previous ELGG area 4 is now absorbed in Areas 2 and 3
- 5. River Cray and Southern Marshes Extended existing ELGG area
- 6. South East London Green Chain + Extended existing ELGG area
- 7. London Downlands New area
- 8. Wandle Valley New area
- 9. Arcadian Thames New area
- 10. River Colne and Crane
- 11. Brent Valley and Barnet Plateau New area
- 12. Central London New area

5.3 This section briefly describes each of the Green Grid Areas, illustrating the strategic components of the open space network. It highlights and suggests enhancements to the existing open space network of landscape corridors, the east west links in-between and the urban areas iti serves. It also identifies the key open space opportunities that should be used to inform the development and delivery of the network and the implementation of the Green Grid. This information will inform development planning, master planning, borough Open Space Strategies, the design and delivery of new landscapes, open spaces, and links and their subsequent management. The key opportunities have been developed

from a range of plans and strategies, including borough Local Development Frameworks and Open Space Strategies, and through partnership workshops, with the London Boroughs, national agencies such as the Environment Agency and Natural England and other open space and landscape planning, design and management organisations.

5.4 The relevant Landscape Natural Signatures, or character zones, identified in Figure 13 are included in each of the Green Grid Area descriptions that follow in this section of the SPG. This landscape scale information should be used as a starting point to identify the local context for the development of projects, proposals and management plans within each of the Green Grid Areas. More detailed information on the landscape character zones can be found at

http://www.naturalengland.org.uk/regions/ london/ourwork/londonnaturalsignatures.aspx .

### GGA1 Lee Valley and Finchley Ridge

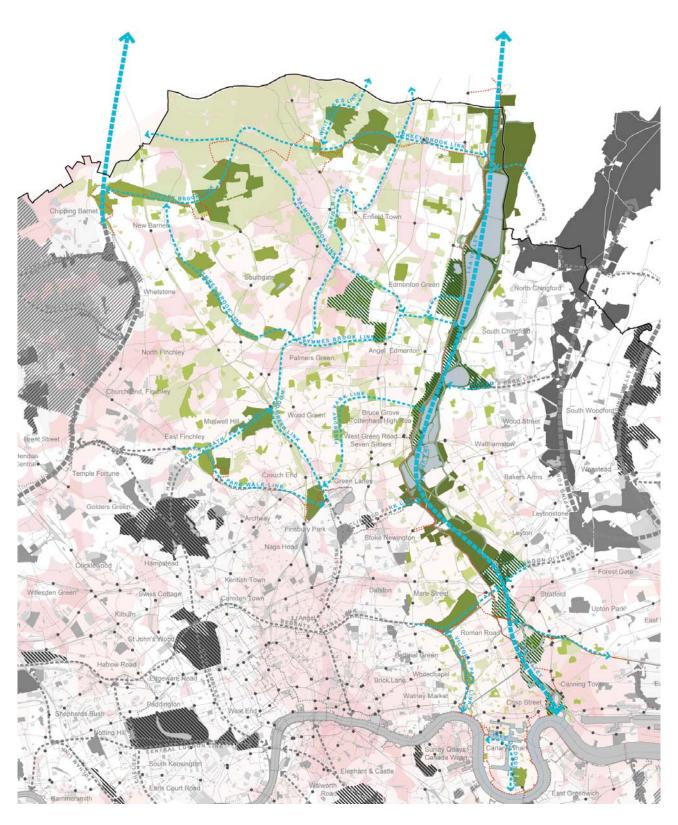
5.5 The Lee Valley and Finchley Ridge includes parts of the boroughs of Barnet, Enfield, Hackney, Haringey, Newham, Tower Hamlets and Waltham Forest. The area includes four of the landscape character zones identified by Natural England, as shown in Figure 13. The Natural Signatures of each of the relevant landscape zones are set out in Table 5.1.

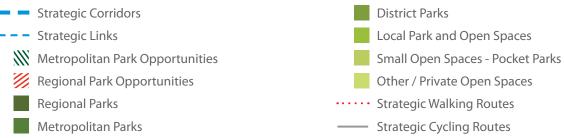
 Table 5.1
 : Landscape Natural Signatures

Landscape zone		Natural Signature
4.	Finchley Ridge	Ridgetop blocks of ancient woodland on former commonland
5.	Hampstead Ridge	A mosaic of ancient woodland, scrub and acid grassland along ridgetop summits with panoramic views
6.	Lea River Valley	Braided tributary streams flowing across wide open marshes to join the River Lea and its sequence of reservoirs
9.	North Thames Terrace	Flat, open grassland, stepping up from the Thames, with narrow sinuous strips of woodland marking the alignment of tributary creeks

5.6 The Mayor has produced an Opportunity Area Planning Framework for the Lower Lea Valley that provides strategic planning guidance to establish the Green Grid as part of new development proposals. The Mayor has also produced a draft Olympic Legacy SPG which is currently out to consultation which will superceded the Lower Lea Valley OAPF.

5.7 The 37km long Lee Valley Regional Park was formed in 1966 and extends from Tower Hamlets and Newham to Ware in Hertfordshire. Within the M25, the park provides a green corridor with a number of large reservoirs through north London. North of Hackney Wick the open space, reservoirs and waterways form a largely continuous open landscape that continues into Essex. Hackney Marsh, in the southern part of the GGA, is a flat open space with mainly amenity grass fringed with trees that provides a large number of playing fields that are regionally important for football. From Hackney Marsh to the River Thames the River Lee splits into a number of separate channels which are all canalised and diverge at Bow Locks and are largely inaccessible to the south of Bow Creek. The open space in this southern section is more fragmented and restricted by the surrounding urban development.





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5.8 Large accessible parks such as Trent Country Park in the Green Belt to the west of the Lee Valley are connected by a number of strategic and local links, such as Trent Country Park which provides 400ha of meadows, woodlands and lakes. Many of these spaces, like Forty Hall, are associated with former country house estates. These parks are linked together by the London Loop through to the Lee Valley Regional Park. There are a number of small tributaries of the Lee in the western part of the area, some of which are accessible and provide green corridor links.

5.9 The **Isle of Dogs Link** forms a short route from the Thames through the docklands area to the Mudchute and Millwall Park green area, joining with the Thames again at Island Gardens.

#### 5.10 The Victoria Park/Mile End Park

**Link** forms a continuous green space corridor from Limehouse Basin adjacent to the River Thames, to the Lee Navigation canal and the Lee Valley Regional Park. Linear canals are a dominant feature of this open space link.

#### 5.11 The Elevated Greenway Link

functions as a Greenway (a long, narrow strip land used for recreation), comprising a raised foot and cycleway built on top of the Northern Outfall Sewer. It is currently the only east-west link north of the river in East London. The route is suitable both as a destination route linking with two major employment areas, and as a leisure route. At present beyond the recetly refurbished section within the Olympic Park boundary the remaining sections of the Greenway are in need of refurbishment. 5.12 The **London Olympic Link** will join the new parkland and local green infrastructure created as part of the Olympic Legacy, through the built area to the open landscape of Epping Forest at Wanstead. The route is mainly urban in character, with West Ham Cemetery providing a green space inbetween.

5.13 The **Highams Park Link** comprises a small tributary passing through residential areas of Highams Park. There is no formalised right of way along its length.

5.14 The **Clissold Park Link** forms part of the Capital Ring strategic path, linking the park, nature reserve, open space, the monuments and chapel of Abney Park and through streets to the Lee Valley.

5.15 The **Finsbury Park Link** connects the park with the complex of green space at Downhills Park and Lordship Recreation Ground through to Bruce Castle Park and Tottenham Cemetery. The Link then connects with the Tottenham Marshes in the Lee Valley Regional Park. The linkages between these green spaces run through largely residential areas.

5.16 The **Park Walk Link** runs along a disused railway line connecting Finsbury Park to Highgate Wood and Queen's Wood and then onto Alexandra Park.

5.17 The **Wood Green Link** connects Clissold Park in the south to Finsbury Park and Alexandra Park to the north, continuing on through Wood Green to Palmers Green. Outside of these green spaces the link mainly passes through built-up areas.. 5.18 The **Pymmes Brook Link** follows a small tributary from Pickett's Lock on the River Lea out to Monken Hadley Common in the Green Belt. The Pymmes Brook Trail links with the London Loop in the north and the Lee Valley Walk in the south, passing through a number of parks, including Oak Hill, Brunswick, Arnos and Pymmes. The trail follows the waterway along most of its course but goes through the urban area in several areas, including crossing the A10.

5.19 The **Salmon Brook Link** starts in the Green Belt, running through farmland before passing through residential areas and golf courses. It then connects to Bury Lodge Park and onward through cemeteries and playing fields in Edmonton to the green spaces of the Lee Valley Park at Pickett's Lock. In this last section the Brook is only visible in these pockets of green space.

5.20 The **Enfield Link** follows the New River course through Bush Hill Park golf course and the Town Park, connecting with the town centre. The route follows the river as it loops around the town and playing fields. The Link then moves north through largely residential areas and connects with the Green Belt at Middleton House and Gardens.

5.21 The **Turkey Brook Link** follows the London Loop from the Lee Valley Walk at the Prince of Wales Open Space via Albany Park and through built areas connecting to Forty Hall Country Park, Hillyfields Park and Whitewebbs Park in the Green Belt.

#### 5.22 The Hampstead Heath Ridge Link

connects the Heath to Alexandra Park in the north via Highgate Wood and in part follows the northern arm of the Parkland Walk through Muswell Hill. Parts of the route pass through residential areas and alongside a golf course. 5.23 The **Whitewebbs Link** forms a route through the Green Belt from Hillyfields Park on the urban fringe through Whitewebbs Country Park and beyond.

5.24 Strategic green infrastructure opportunities:

1. Deliver a new 100ha park for London as part of the legacy of the 2012 Olympics; a park which will act as the focal point for new and existing communities, and help to improve east-west connectivity across the Lea Valley.

2. Complete the strategic north-south connection through the Lea Valley to the Thames via the creation of the Fatwalk and a series of new open spaces as part of the future Lea River Park.

3. Create a regionally significant network of open spaces within 'Walthamstow Wetlands' - increasing access to a series of spaces of diverse character and use including Walthamstow Reservoirs and Walthamstow Marshes.

4. Strengthen the connections between a series of open spaces between Finsbury Park and the Lea Valley, extending the Parkland Walk Link and creating a sustainable transport route which in part follows the course of the Moselle River.

 5. Provide new areas of accessible open space and better routes into and across the Lea Valley at Meridian Water to support and shape anticipated regeneration and the creation of an exemplary sustainable neighbourhood.
 6. Strengthen the landscape connection of the Pymmes Brook Link from Monken Hadley Common to the Lea Valley along the course of the Pymmes Brook - providing a chain of interlinked and diverse open spaces, and enhancing the ecology of the watercourse. 7. Maximise the potential of the Green Belt, by improving facilities and attractions at Trent Country Park and Forty Hall Park, and enhancing north-south landscape connections across the M25 and into the wider extent of the Green Belt.

8. Transform Ponders End into a key gateway into the Lea Valley - creating improved views and connections into and across the valley, and new leisure uses to attract visitors.

9. Develop the New River as a key north-south landscape connection, a sustainable transport route and a significant heritage asset.

10. Maximise the potential of Salmons Brook as a north-west to south-east landscape connection from the Green Belt in Barnet to the Lea Valley.

11. Improve the facilities of, and connections between, Alexandra Park, Highgate Wood, and Queens Wood along the Park Walk Link, in order to maximise their potential as a visitor destination of rich landscape character offering fantastic views across London.

12. Enhance the landscape connection of the Upper Lee Valley northwards beyond the M25 into Hertfordshire, and eastwards to the green space network and communities of Epping Forest and beyond.

## GGA2 Epping Forest and Roding Valley

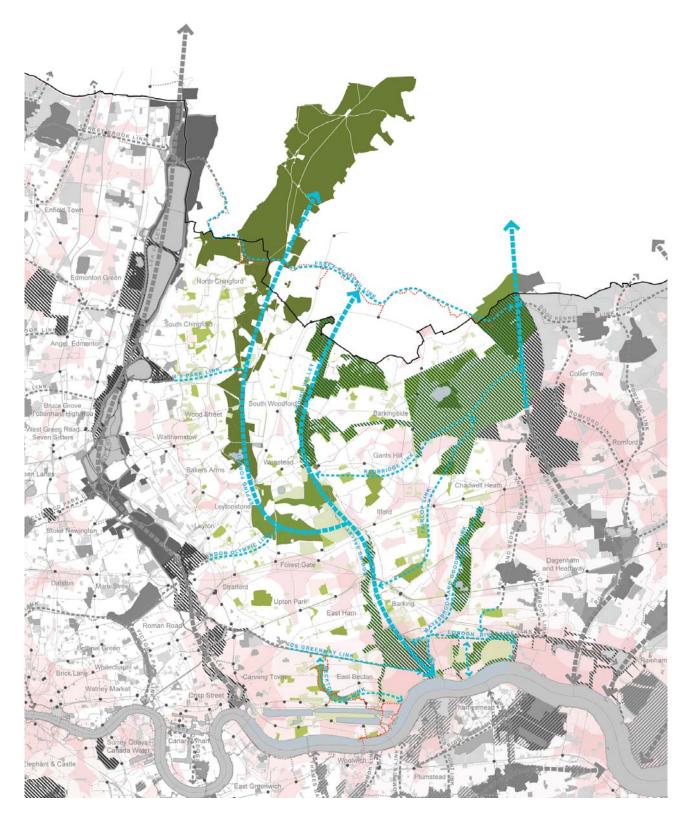
5.25 Epping Forest and Roding Valley includes parts of the boroughs of Barking and Dagenham, Newham, Redbridge and Waltham Forest. The area includes four of the landscape character zones identified by Natural England, as shown in Figure 13. The Natural Signatures of each of the relevant landscape zones are set out in Table 5.2.

Table 5.2 : Landscape Natu	ural Signatures
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Landscape zone		Natural Signature
7.	Essex Plateau	Mosaics of ancient woodland, wood pasture and acid grassland within the former royal hunting 'forests' at Epping Forest and Havering
8.	Roding River Valley	The narrow, sinuous course of the upper Roding where the riverbanks are lined with willows
9.	North Thames Terraces	Flat, open grassland, stepping up from the Thames, with narrow sinuous strips of woodland marking the alignment of tributary creeks
14.	LowerThames Floodplain	A vast, flat riverside zone of grazed saltmarshes grading to reedswamp, mudflats and the wide tidal Thames – the most striking and immediately visible natural element in London

5.26 The green corridors of Epping Forest and the Roding Valley weave their way from the Green Belt in the north, southwards towars the Thames. The open corridors are joined together by the Wanstead Flats and Wanstead Park. Epping Forest has a natural character and is mainly wooded, with areas of ancient woodland, heath, rough grass and scattered ponds. The Forest has pockets of quietness and generally has a peaceful character. Centenary Walk is well established and runs the length of the Forest from Manor Park in the south to the countryside to the to the countryside to the north of London.

The Roding Valley is dominated by 5.27 road and utilities infrastructure and contains areas of both degraded open space and sites of surprising ecological value. Amenity grassland is the dominant land cover and there is relatively little tree cover. The river has largely been straightened and in many places is no more than a concrete channel. However, the tidal section of the river at Barking Creek supports extensive areas of mudflat and intertidal reedbed. The River Roding forms a confluence with the River Thames at Barking Creek. The area surrounding it is characterised by extensive sites of previously developed land, most of which does not contain accessible green space.



<ul> <li>Strategic Corridors</li> </ul>	District Parks
Strategic Links	Local Park and Open Spaces
Metropolitan Park Opportunities	Small Open Spaces - Pocket Parks
💓 Regional Park Opportunities	Other / Private Open Spaces
Regional Parks	•••••• Strategic Walking Routes
Metropolitan Parks	Strategic Cycling Routes

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5.28 The open land cover in the southern part of the Green Grid Area is mainly amenity grass and rough grass with lakes providing the main features of interest. To the south of the A13 (T) the area is dominated by industrial areas on the River Thames floodplain and the open spaces are fragmented with access to the Roding being more limited.

5.29 The **Essex Plateau Link** follows the London Loop through the open landscape of the Green Belt, linking the Lee Valley Regional Park in the west to Epping Forest and across the Roding Valley to Hainault Forest Country Park in the east.

5.30 The **Highams Park Link** comprises a small tributary passing through residential areas of Highams Park. There is no formalised right of way along its length.

5.31 The **Redbridge link** comprises of Valentine Park, Seven Kings Park, Claybury Park, Fairlop Waters, Hainault Forest Country Park through to LB Havering. Between these open spaces the route would pass along quiet roads, which should have opportunities to become 'Green Routes' with avenues and cycle lanes.

5.32 The **London Olympic Link** will join the new parkland and local green infrastructure created as part of the Olympic Legacy, through the built area to the open landscape of Epping Forest at Wanstead. The route is mainly urban in character, with West Ham Cemetery providing a green space in between. 5.33 The **Fairlop Link** runs through residential areas and links Barking town centre in the Roding Valley to the open landscape at Fairlop Plain. Along the route the link runs through Barking Park and South Park to the complex of green spaces around Seven Kings Park. From here the link follows the route of the Seven Kings Water into Fairlop Plain.

5.34 The **Elevated Greenway Link** follows the Northern Outfall Sewer from the Lower Lea Valley to the Roding where it meets the Thames.

5.35 The **Mayesbrook and Goodmayes Link** runs through the network of Goodmayes and Mayesbrook Parks and associated playing fields and cemetery to improve the green network in this area. The link then runs south following the Mayes Brook, which is inaccessible as it goes through the urban area, until its confluence with the River Roding. There is an opportunity to extend the significant improvements in ecological quality and usability as part of a range of flood storage enhancements.

5.36 The **Parsloes Park Link** connects the London Riverside Link in the south through the urban area to Castle Green and then Parsloes Park. It then continues northwards through suburban areas, connecting with Valence Park and St. Chad's Park in Chadwell Heath, where it then joins with the Green Belt.

5.37 The **Beckton Park Link** comprises Beckton District Park, Newham City Farm and New Beckton Park. Currently there is no clear connection between Beckton District Park and the Greenway on the Northern Outfall Sewer, and no clear link between New Beckton Park and the Thames riverside. The existing character of this area is predominantly naturalistic parkland with native tree and scrub planting. 5.38 The **Goresbrook Link** follows the Goresbrook River from Parsloes park in Barking and Dagenham, through Goresbrook Park, the industrial and commercial development between the A13 and the railway line, and along the eastern boundary of the Barking Reach development site before reaching the River Thames. There are only two sections of this link where there is public access to the River: Goresbrook Park and the southern end of the link adjacent to the River Thames and Horse Shoe Corner.

5.39 The **London Riverside Link** includes the Barking Reach development site and the Dagenham Docks Industrial Estate. The redevelopment of the area will provide a new green space network through the district. A number of ditches and small water courses run through the area which provides an important habitat for water voles, birds and vegetation.

5.40 Strategic green infrastructure opportunities:

1. Create a Metropolitan Park linking the River Roding from Ilford to Barking Creek and the Beckton Park Link, consolidating a series of fragmented open spaces, improving access to maximise pedestrian and cycle connectivity and restoring the River Roding and its tributaries, incorporating flood storage, alleviating urban run-off and enhancing biodiversity.

2. Improve the ecological connections and routes between Mayesbrook Park and Goodmayes Park and Recreation Ground in order to address the Metropolitan Park deficiency. 3. Improve the water quality and ecological value of the Goresbrook, removing culverted sections to create and enhance access along the Goresbrook Link from Parsloes Park through Goresbrook Park.

4. Create a linked network of high quality accessible open spaces with a strong wetland character, along the London Riverside Link between the Thames and Dagenham Dock.

5. Improve access, diversify use and improve the quality of the existing open space networks of Barking Town Centre and 'Urban Newham'. Promote Abbey Green as the catalyst to create links south through the Gascoigne Estate to Barking Riverside and Beckton District Park to link north to Green Street, Plashet Park and Wanstead Flats.

6. Improve links from urban communities to Epping Forest, the Lea Valley and beyond to Essex, including creating routes that connect Wanstead Flats to the Centenary Walk through Walthamstow and Highams Park.

7. Integrate green infrastructure as part of the regeneration of Barking Riverside with particular emphasis on incorporating flood management/SUDs, conserving and enhancing biodiversity and creating a network of accessible green spaces.

8. Create a green infrastructure network in Fairlop Plain that focuses on improving the quality of the existing open spaces and developing improved physical links between them.

9. Improve public space connections to the Royal Docks through the Arc of Opportunity between Canning Town, Thameside West and Beckton East and north towards 'Urban Newham' connecting to the Greenway. 10. Enhance access to the River Thames and the docks through high quality public spaces and mixed use of the waterscapes.

11. Improve and link the 'lost rivers' in the Ching, Seven Kings, Mayes, Gores and Loxford corridors, north to the Essex countryside and south to the Thames, enhancing public access, promoting creating and preserving riverine habitat and flood protection.

12. Preserve and enhance natural habitats around Barking Creek to establish wetland habitats such as grazing marsh, reed beds, ponds and wet woodland, increasing accessibility with potential for productive uses within Newham, whilst maintaining the navigability of the lower Roding for commercial and leisure use.

13. Enhance access and connectivity across major east-west infrastructure corridors, including the A13, River Roding, the Royal Docks and railway lines.

14. Improve east-west connectivity between key open spaces through creation of treelined streets and cycle routes linking the large network of parks (providing new sections of the National Cycling Network Route 13), improving access via new and existing bridges over rivers, and links to key destinations and development sites. .

15. Create a link between the Roding Valley, Claybury Park, Fairlop Waters, Hainault Forest Country Park and Havering along the Redbridge Link improving the quality of open space and restoring the culverted rivers. 16. Create and promote exemplar community led food growing sites across the area making use of underutilised land such as the derelict garages of Barking and Dagenham, Central Park nursery, or the walled garden of Ray Park, and enhancing existing sites such as Newham City Farm.

# GGA3 Thames Chase, Beam and Ingrebourne

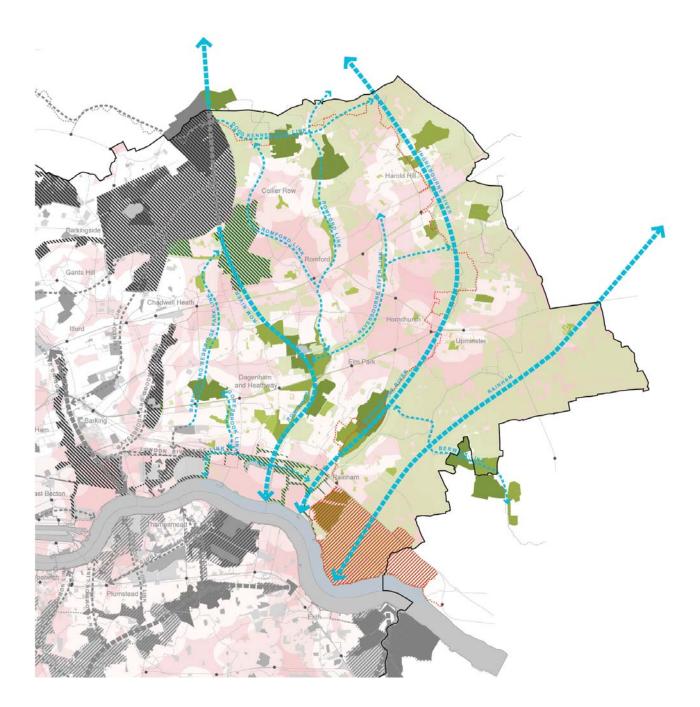
5.41 The Thames Chase, Beam and Ingrebourne includes parts of the boroughs of Barking and Dagenham, Redbridge and Havering. The area includes three of the landscape character zones identified by Natural England, as shown in Figure 13. The Natural Signatures of each of the relevant landscape zones are set out in Table 5.3.

#### Table 5.3 : Landscape Natural Signatures

Landscape zone		Natural Signature
7.	Essex Plateau	Mosaics of ancient woodland, wood pasture and acid grassland within the former royal hunting 'forests' at Epping Forest and Havering
9.	North Thames Terraces	Flat, open grassland, stepping up from the Thames, with narrow sinuous strips of woodland marking the alignment of tributary creeks
14.	LowerThames Floodplain	A vast, flat riverside zone of grazed saltmarshes grading to reedswamp, mudflats and the wide tidal Thames – the most striking and immediately visible natural element in London

The land north of the A118 is mainly 5.42 flat arable land, with large open fields that maintains its rural and natural character. Gravel extraction has left its mark on the landscape, where this activity has led to former workings being used for landfill and also for recreation with land being restored as country parks at Fairlop Waters, Eastbrookend and Hornchurch. To the north and east of the GGA the land rises and is largely agricultural in character with wooded areas on higher ground. Although the middle section of this area around the River Rom includes extensive areas of public open space, there is limited access in the town centres and to the Thames Thames Chase Community Forest covers part of the GGA.

5.43 Moving to the south the GGA becomes increasingly urbanized and industrialized. The Beam River valley is predominantly flat, open flood plain with sparse tree cover, although there are pockets of woodland and scattered trees in the parks. Lack of access to the watercourses is a key issue. The Rom and Beam Corridor connects Romford town centre with the Thames at Dagenham. Although the middle section of this corridor includes extensive areas of public open space, there is limited access in the town centres and where it meets the Thames





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5.44 The Ingrebourne valley is a gently sloping landscape at the eastern edge of Hornchurch and Romford with a predominantly rural/urban fringe character. Access along the edge of the Ingrebourne River is good, with the London Loop long distance footpath running almost along its full course. North of Upminster, the Ingrebourne has steeper valley sides and land use consists mainly of pasture and arable fields. The land is relatively unspoilt, unlike the lower river valley which has been affected by gravel extraction and landfill, but also contains the ecologically rich Ingrebourne Marshes.

The Rainham, Wennington and 5.45 Aveley Marshes in the south of the GGA are flat grazing marshes of rank grassland and relatively dry reedbeeds, intersected by a network of ditches and provide an important bird habitat. The River Thames is the main feature, affording views along and across the waterway, in a landscape that can have an open and exposed feel. The London Riverside Conservation Park on these marshes will include the restoration of Rainham landfill site. The park is of regional importance and is being created by a number of partners including the Royal Society for the Protection of Birds. However, there are existing barriers that limit access to the park.

5.46 The **Dogg Kennel Hill Link** follows the London Loop through the Green Belt, connecting Hainault Forest Country Park in the east with Havering Country Park and Bedfords Park, through to the Ingrebourne valley in the east. 5.47 The **Romford Link** follows the River Rom from Eastbrookend Country Park in the south to Romford town centre where the river becomes culverted. As it goes north the Link branches into two routes. The left route continues to follow the River Rom, though it is partly channelised and inaccessible behind residential development, before emerging into the Green Belt and connecting to the London Loop. The right hand branch follows Blacks Brook which runs through a mainly green corridor that connects to Bedford Park in the north.

5.48 The **Ravensbourne River Link** follows the Ravensbourne River through the residential area of Emerson Park north of Hornchurch, past Hornchurch Sport Centre and through Harrow Lodge Park. There is currently no public access to the river where it runs through the residential area.

5.49 The **London Riverside Link** includes the Barking Reach development site and the Dagenham Docks Industrial Estate. The redevelopment of the area will provide a new green space network through the district. A number of ditches and small water courses run through the area which provides an important habitat for water voles, wetland birds and estuarine vegetation.

5.50 The **Berwick Link** runs through the Green Belt from Hornchurch Country Park in the Ingrebourne valley to accessible countryside in the Thames Chase Community Forest.

5.51 Strategic green infrastructure opportunities:

1. Improve the access to and the landscape quality of Fairlop Plain as part of the Redbridge Link and open up the Seven Kings water to add to the diversity of the landscape. 2. Improve and protect the landscape value of the Ingrebourne valley, providing for informal recreation, reinforcing woodland planting in the north, and conserving and re-creating marshland habitats to the south.

3. Create an accessible open space network through the Dagenham corridor, linking Hainault and Fairlop with the Thames, providing long distance paths and strengthening east-west connections.

4. Improve north to south links along the river corridors of the Gores, Wantz, Ravensbourne, Mardyke and Beam by upgrading access and transforming parks within the corridors.

5. Improve and strengthen east/west links through the area by increasing access and connectivity along major east/west infrastructure corridors such as the A13, A1306 and railway lines and by creating new cycle corridors and tree lined streets.

6. Provide a new public park, civic square and tree lined streets within Romford Town Centre, enhancing pedestrian and cycle routes to surrounding green spaces and restore and enhance access to the River Rom through opening up of culverts, naturalising river channels and enhancing the recreational potential of the river.

7. Create a mosaic of open spaces and woodland in Thames Chase for biomass, orchards for food production, allotments, wet woodlands and screening and improved access to the open countryside.

8. Create the London Riverside Conservation Park as an exemplar sustainable regional park for the 21st century, restoring and enhancing biodiversity and floodplains and providing informal opportunities for recreation in the countryside. 9. Create a linked network of accessible open spaces with a strong wetland character, along the London Riverside Link.

10. Open up the culverted sections of the Goresbrook restoring naturalised river banks and floodplains, providing access along the Goresbrook Link from Parsloes Park through Goresbrook Park and the Barking Riverside development site to the Thames.

11. Improve the London Loop long distance footpath linking Rainham village and the Thames and integrating other foot and cycle routes and destination points within the GGA.

# **GGA5 River Cray and Southern Marshes**

5.52 The River Cray and Southern Marshes include parts of the boroughs of Bexley and Bromley. The area includes four of the landscape character zones identified by Natural England, as shown in Figure 13. The Natural Signatures of each of the relevant landscape zones are set out in Table 5.4.

#### Table 5.4 : Landscape Natural Signatures

Landscape zone		Natural Signature
14.	LowerThames Floodplain	A vast, flat riverside zone of grazed saltmarshes grading to reedswamp, mudflats and the wide tidal Thames – the most striking and immediately visible natural element in London
19.	South London Pebbly Sands	Historic heathy commons and extensive woodland on elevated land with views over the Thames Basin from ridgetops and summits
20.	River Cray Valley	Chalk river with a natural profile which flows through a sequence of floodplain meadows and wet woodlands
21.	Lower North Downs Dip Slope	A diverse landscape with a transition from heath, scrub and woodland on the lower slopes to more open farmland and scattered ancient woodland on the rising chalklands to the south

5.53 The Crayford and Dartford Marshes are divided by the River Darent, which is characterised by embankments on either side. The fresh water grazing marshes are drained by a network of ditches and grazed by cattle. The marshes are very open and exposed and can feel quite desolate. An ongoing problem of neglect and fly tipping adds to the sense of insecurity. Nevertheless, the marshes mirror those on the north bank at Rainham and comprise one of the most ecologically significant areas in Greater London.

5.54 Between the A206 and A2 at Crayford, the River Cray is dominated by industrial and commercial development. Between the A2 and A20 the valley becomes steep-sided and is characterised by extensive woodland, grazed water meadow, horse paddock, and arable fields.

5.55 The London Loop path follows the River Cray and provides good pedestrian access through the area. However, a number of roads and railway lines cross the area and form significant barriers.

5.56 To the east of the River Cray in the southern part of the area, the Green Belt includes the chalk slopes of the North Downs which contain ancient woodland connected by hedgerows and surrounded by open farmland. The open spaces provide a mosaic of ancient woodland, acid heathland, hedgerows and wet grassland.





5 57 The Thamesmead Link connects the Thames riverfront and the Green Chain and includes Erith Marshes, Lesnes Abbey Woods and Southmere Park. The lower part of the link is characterised by canals, lakes and wetland habitats. A green route connects Lesnes Abbey Wood with Southmere Park, and the path continues along the Thamesmead canal system and through the housing estate to the river adjacent to the Victorian Pumping Station. The route crosses up and over the Ridgeway – the path that sits atop the Southern Outfall Sewer which runs to the Crossness works on the west side of Erith Marshes. Thamesmead has areas of highdensity residential housing and a challenging mix of issues requiring management.

5.58 **The Ridgeway Link** is an elevated path established above a major Victorian Sewer. It forms a green link between the Thames Path at Crossness Sewage Treatment Works, to Plumstead. It is a key gateway from the West into the rich network of green open spaces and waterways in Thamesmead and Erith Marshes.

5.59 **The River Shuttle Link** runs from Avery Hill Park within the South-East London Green Chain to Hall Place. It links a number of open spaces of various types including small local parks, school playing fields, a golf course, a number of narrow linear spaces between back gardens, woodland and allotment gardens. The Shuttle Riverway footpath follows most of the river course and links the open spaces together. 5.60 Strategic green infrastructure opportunities:

1. Conserve and improve the environmental and ecological value of Erith, Crayford and Dartford marshes, improving public access, pedestrian and cycle links.

2. Conserve and enhance the rural character and intimate scale of the landscape between the A2 and A20, exploring opportunities to increase the flood storage capacity of the local floodplain.

3. Maximise the potential of the River Cray corridor to create a high quality, accessible riverside environment, including strengthening connections of green spaces between the A206 and A2 and links to surrounding green spaces and countryside on the urban fringe, including the Chalk Link to the North Downs.

4. Strengthen and enhance the landscape connections along the Thamesmead Link from Lesnes Abbey Wood to the Thames riverfront including Erith Marshes.

5. Enhance the river character and recreational use of the River Shuttle Link and strengthen the connections between its open spaces, improving public access.

6. Develop the South East London Green Chain as a Regional Park opportunity.

7. Promote and enhance the long distance South East London Green Chain footpath and links by improving accessibility into and through the area, particularly access from its edges.

## GGA6 South East London Green Chain Plus

5.61 The South East London Green Chain Plus includes parts of the boroughs of Bexley, Bromley, Croydon, Greenwich, Lewisham and Southwark. The area includes four of the landscape character zones identified by Natural England, as shown in Figure 13. The Natural Signatures of each of the relevant landscape zones are set out in Table 5.5

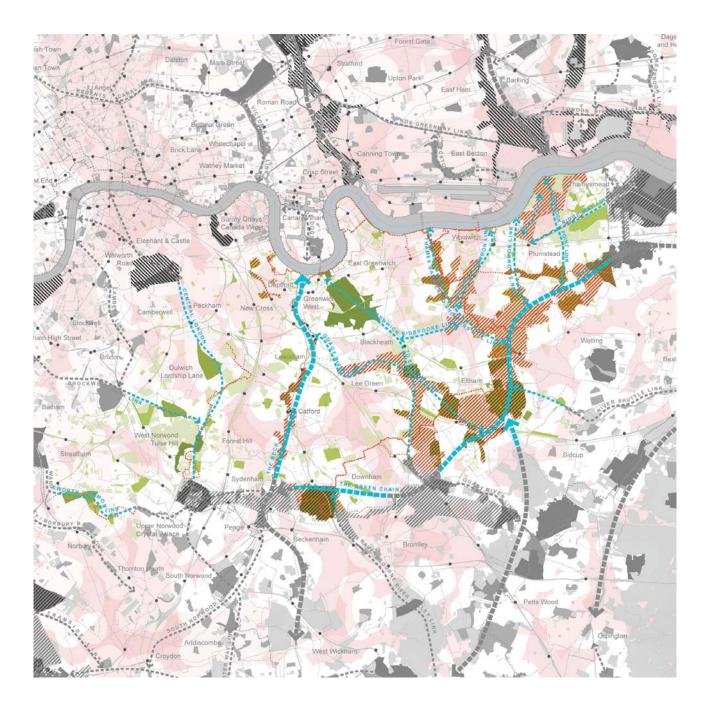
#### Table 5.5 : Landscape Natural Signatures

Landscape zone		Natural Signature
14.	LowerThames Floodplain	A vast, flat riverside zone of grazed saltmarshes grading to reedswamp, mudflats and the wide tidal Thames – the most striking and immediately visible natural element in London
17.	South London Clays & Gravels	Small hedged meadows and large heathy commons set against a backdrop of extensive woodlands on higher land
18.	Ravensbourne River Valley	A network of small rivers, bounded by gravel terraces, which flow through water meadows and tidal flood meadows before reaching the Thames as a navigable channel, bordered by working wharves
19.	South London Pebbly Sands	Historic heathy commons and extensive woodland on elevated land with views over the Thames Basin from ridgetops and summits

The South East London Green Chain. 5.62 a long established partnership between the London Boroughs of Bexley, Bromley, Greenwich, Lewisham and Southwark, is an extensive and reasonably well connected network of parks and open spaces. The character of the Green Chain is very varied and includes ancient and semi-natural woodland, historic parkland, heath, horse paddocks, playing fields, cemeteries, and allotment gardens. Most of the open spaces have an urban character, with mown grass and views to surrounding suburban housing. Some spaces, however, retain a rural character, such as the horse paddocks around

Eltham Palace. Dulwich and Sydenham Hill Woods are the closest ancient woodland to central London.

5.64 The commons and woodlands on the Southern Ridge provide long views and strong spatial relationships with the River Thames, as well as the meandering Pool, Quaggy, Ravensbourne and Shuttle rivers. These tributaries with their associated wetlands, parks and green corridors allow connections with the local and the wider landscape b y providing waymarked routes. The eastern marshlands stretch from the bottom of the ridge towards Thamesmead





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giving the River Thames a breadth and wild quality not present further upstream.

5.65 The Ravensbourne and Pool Rivers (the Waterlink Way) consist of narrow open space links with a strong urban character that are tightly developed on both sides of the water courses. Most of the open spaces in this western part of the GGA are amenity spaces and contain sports pitches or linear parks of mediocre quality. The railway line running south from Lewisham runs along the Ravensbourne and crosses the river several times, restricting access to the adjacent open spaces.

5.66 The **Ridgeway Link** is an elevated path established above a major Victorian Sewer. It forms a green link between Crossness Sewage Treatment Works, Thamesmead and Plumstead; and is a key gateway from the West into the rich network of green open spaces and waterways in Thamesmead and Erith Marshes.

5.67 The **Greenwich to Eltham Link** runs from Greenwich Park and Blackheath to Eltham Palace through a number of sports and recreation grounds and Sutcliffe Park. Currently there is no designated footpath linking these spaces.

5.68 The **Kidbrook Link** provides a short link between the Greenwich to Eltham Link and the Green Chain. The spaces within this link generally have a low quality vegetation structure. The Kidbrook has been culverted along most of its course through the residential area of Kidbrook and there is no public access along the edge of the brook.

5.69 The **Thames Barrier to Shooters Hill Link** is a well connected and high quality open space network which has a rich and diverse character including mature woodland, common and parkland. 5.70 The **Woolwich Common Link** connects the Thames and Woolwich town centre through the Common to the Thames Barrier to Shooters Hill Link.

5.71 The **Winn's Common Link** heads north from the Green Chain through the urban area, connecting with Shrewsbury Park and Plumstead Common to the Thames at the Woolwich Arsenal.

5.72 The **Tripcock Point Link** connects the Thames with the Green Chain at Plumstead Common. The part of the link through Thamesmead is characterised by footpaths along lakes and canals in the former low-lying marshland.

5.73 The **Thamesmead Link** forms part of the South East London Green Chain and includes Erith Marshes, Lesnes Abbey Woods and Southmere Park.

5.74 Most parts of the **Quaggy River Link** are urban in character and have been straightened and canalised, with the exception of certain sections, such as through Sutcliffe Park, where the river channel has been restored. The Link forms a connecting route between the Beck, Green Chain and Heath Walk strategic corridors.

5.75 The **Ravensbourne River Valley Link** follows the route of the river south from Beckenham Place Park to Bromley town centre. Much of the river is inaccessible and culverted until it reappears to the south of the town centre going through the large open space formed by Norman Park and Bromley Common. 5.76 The **South Norwood Link** connects South Norwood Country Park to the green spaces at New Beckenham to the north east and Park Hill in East Croydon to the south west. The route travels through mainly residential streets with only small pockets of green space in either direction.

5.77 The **Central London Link** connects a number of important open spaces going north from Crystal Palace Park, including One Tree Hill, Sydenham Wells Park, a number of golf courses, the Horniman Gardens, the Camberwell cemeteries, Peckham Rye Common and Park and on towards Burgess Park in central London. The spaces are not connected by a continuous green corridor and the links in between are reliant on the streets through the urban environment.

5.78 Strategic green infrastructure opportunities:

1. Develop the South East London Green Chain as a Regional Park opportunity.

2. Promote and enhance the long distance South East London Green Chain footpath and links by improving accessibility into and through the area, particularly access from its edges. And Develop extensions of the SE London Green Chain by creating new links, including Sutcliffe Park to Greenwich Park, Avery Hill to Hall Place, Plumstead to the proposed Cross River Park, New Beckenham to Ladywell Fields, Beckenham Place Park to Bromley Town Centre, and Crystal Palace Park to South Norwood Country Park.

3. Create a connected park system along the Ravensbourne and Pool Rivers re-instating the natural channel, improving habitats, creating an exemplary green transport route including a link southwards towards Bromley, and exploring opportunities for improving health and the local environment. 4. Re-instate a natural river course along the Quaggy River with natural banks and meanders, enhancing flood storage capacity and creating sustainable drainage schemes.

5. Reinstate, extend and improve the historic open spaces surrounding Eltham Palace and Charlton House.

6. Strengthen and enhance the connections along the Tripcock Park to Plumstead Common Link, promoting habitat types characteristic of this part of the tidal river environment.

7. Improve the relationship and connection with nature across the GGA, including the use of nature trails and a green link between Woolwich Common and the Thames.

8. Promote and enhance the existing woodland and heathland character of the Thames Barrier to Shooters Hill Link.

9. Strengthen and enhance the landscape connections along the Thamesmead Link from Lesnes Abbey Wood to the Thames riverfront including Erith Marshes.

10. Improve connections and the quality of open space in the Deptford, Deptford Creekside, New Cross/New Cross Gate area, creating new green links and routes along the alignment of the former Surrey Canal and improving the connections with the River Thames and parks in adjacent areas.

11. Promote and enhance connections between the open spaces north from Crystal Palace Park towards Burgess Park, including One Tree Hill, Sydenham Wells Park, Horniman Gardens, the Camberwell cemeteries, Peckham Rye Common and Park.

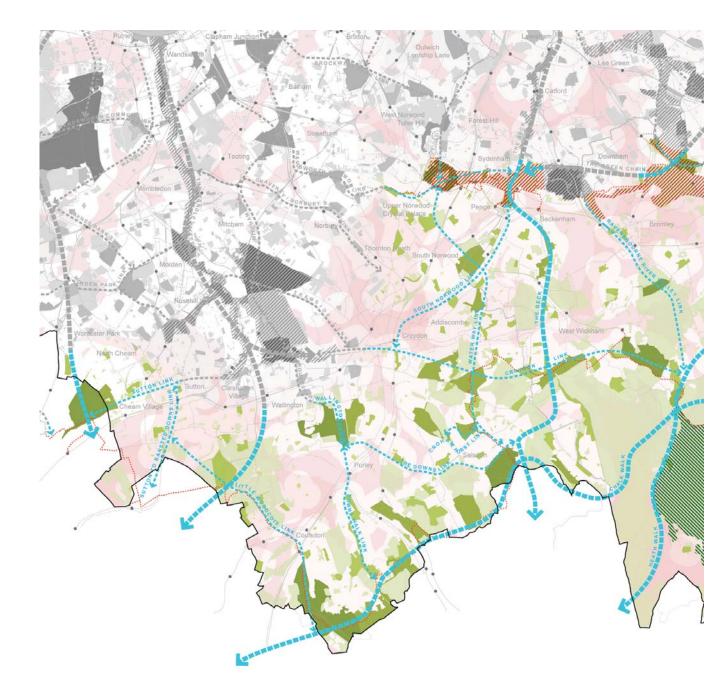
## **GGA7 London Downlands**

5.79 The London Downlands Area includes the boroughs of Bromley, Croydon and Sutton. The area includes three of the landscape character zones identified by Natural England, as shown in Figure 13. The Natural Signatures of each of the relevant landscape zones are set out in Table 5.6.

 Table 5.6 : Landscape Natural Signatures

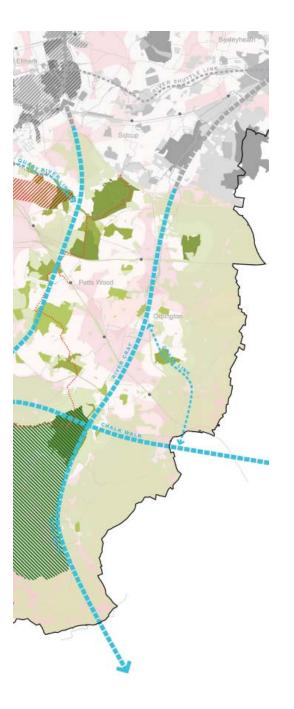
Lar	ndscape zone	Natural Signature
17.	South London Clays & Gravels	Small hedged meadows and large heathy commons set against a backdrop of extensive woodlands on higher land
18.	Ravensbourne River Valley	A network of small rivers, bounded by gravel terraces, which flow through water meadows and tidal flood meadows before reaching the Thames as a navigable channel, bordered by working wharves
20.	River Cray Valley	Chalk river with a natural profile which flows through a sequence of floodplain meadows and wet woodlands
19.	South London Pebbly Sands	Historic heathy commons and extensive woodland on elevated land with views over the Thames Basin from ridgetops and summits
21.	Lower North Downs Dip Slope	A diverse landscape with a transition from heath, scrub and woodland on the lower slopes to more open farmland and scattered ancient woodland on the rising chalklands to the south
22.	Upper North Downs Dip Slope	Ancient woodland and chalk grassland on steep valley slopes emphasise the striking, sculpted chalkland relief

5.80 The land rises gently to the south of the area as the ridge of the North Downs stretch from the east to the west just to the south of London. The area contains many of the capital's woodlands, trees, and hedgerows and almost all of its chalk grasslands. There are many ponds and ancient rights of way and the area supports a rich tapestry of small mixed farming and arable fields. The landform changes through the suburbs as it is based on London clay where remnant and significant open spaces, parks, gardens and grounds form networks together and to the wider countryside. Down House, the home of Charles Darwin, forms an important historical and educational feature of the open landscape in the London Borough of Bromley and is proposed by the UK Government as a World Heritage Site.





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5.81 There are extensive views across the valleys, downlands and some of the capital's widest views across central London to Greenwich, Wembley and Heathrow. The Surrey Hills Area of Outstanding Natural Beauty (AONB) and the Kent Downs AONB adjoin the Green Belt and overlap the edge of the Green Grid Area, which makes walking into open countryside feasible from many open spaces within London's Downlands. The Downlands Management project includes the open spaces in the south of the London Boroughs of Sutton and Croydon and extends across north-east Surrey. Established in 1988, the project aims to improve the quality of the countryside in the urban fringe.

5.82 Large accessible open spaces in the Green Belt create green corridors that extend into the urban area, such as Farthing Downs and Happy Valley towards Coulsdon Common. There are three London strategic walking routes which run east-west across the area. The Green Chain Walk largely coincides with the Capital Ring which then continues west beyond Crystal Palace Park whilst The London Loop is further south and links many of the most dramatic Downlands parks and open spaces. This route goes up and down the ridges and valleys of the downlands. The Vanguard Way runs southwards from central Croydon to the downlands of the rural fringe. Parts of the urban fringe are living working landscapes, with a predominance of privately-owned green space, such as golf courses, farmland, horticulture, hospitals, and an airport, which make this green edge less publicly accessible.

Large accessible open spaces in the Green Belt create green corridors that extend into the urban area, such as Farthing Downs and Happy Valley towards Coulsdon Common. 5.83 The rivers Wandle, Beck, Ravensbourne and Cray form north/south corridors that extend from the urban area into the Green Belt. The Heath Walk Strategic Corridor follows the pebbly soils from Chislehurst, Hayes and Keston Commons through to Addington Hills. The Chalk Walk Strategic Corridor runs from the Surrey border at Cane Hill and Happy Valley in the west, via Riddlesdown, Hutchinson's Bank, Saltbox Hill to High Elms Country Park in the east before joining Kent's North Downs.

5.84 The **Ravensbourne River Valley Link** follows the route of the river north from the large open space formed by Norman Park and Bromley Common to Beckenham Place Park where it links to the Green Chain. Along the way it passes through Bromley town centre where much of the river is inaccessible and culverted.

5.85 The **Chalk Link** runs from the River Cray through the Green Belt, connecting with the Chalk Strategic Corridor to the south.

5.86 The **Croydon Link** connects the Wandle Valley via Croydon town centre where it becomes the Heath Walk Strategic Corridor to Hayes Common and beyond. The western section is largely built up in character, incorporating small public spaces such as Wandle Park and Park Hill. As it goes eastwards the link becomes greener in character as it passes through playing fields and golf courses. There are larger public open spaces in this section.

5.87 The **Croham Hurst Link** provides a short connection between Croham Hurst and Littleheath Woods and Bramley Bank.

5.88 The **South Norwood Link** connects South Norwood Country Park to the Green Chain spaces at New Beckenham to the northeast and Park Hill in East Croydon to the southwest. The route continues through mainly residential streets with only small pockets of green space in either direction.

5.89 The **Downs Link** connects the Roundshaw Estate to the open land in the Green Belt. It passes through mainly residential areas interspersed with golf courses.

5.90 Similarly, **the Downs Walk Link** runs to the south of the Roundshaw Estate to connect to the North Downs in the urban fringe.

5.91 The **Sutton to Banstead Downs Link** runs through the urban area from the town centre into the open land in the Green Belt and on into Surrey.

5.92 The **Water Link Way** connects The North Downs towards conservation area Kenley Aerodrome.

5.93 Strategic green infrastructure opportunities:

1. Promote Darwin's Landscape projects on heritage, education, interpretation, biodiversity and access.

2. Develop a London's Downlands Countryside Park incorporating urban areas within the visual envelope and protected green views, improving green links to the Surrey Hills AONB and Kent Downs AONB, promoting community agriculture and woodland harvesting projects and branding Downlands role as a food producer for London within the M25. 3. Improve the ecological and environmental quality of the four river valleys through restoration projects, habitat enhancement and species re-introduction, and projects which seek to mitigate flood risk.

4. Increase access to nature and the countryside around New Addington.

5. Improve awareness of the public rights of way network and promote access to managed corridors that incorporate new strategic walking, cycling and riding routes linked to the Green Chain and London Loop.

6. Increase biodiversity, create nature reserves and promote sustainability for appropriate visitor facilities, building on the High Elms Country Park Visitor Centre as an exemplar.

7. Promote traditional countryside management techniques such as grazing, coppicing and particularly in the urban/ rural edge and along river valleys to create green corridors through the urban area to the countryside.

8. Support the concept of the Great North Wood through conserving existing woodland fragments and identifying the potential for expansion and re-connectivity.

9. Promote shared use of private open spaces based on the Kenley Common model.

10. Improve Crystal Palace Park as a key anchor within the South East London Green Chain, a Regional Park opportunity.

## **GGA8 Wandle Valley**

5.94 The Wandle Valley Area includes parts of the boroughs of Croydon, Lambeth, Merton, Sutton and Wandsworth. The area includes four of the landscape character zones identified by Natural England, as shown in Figure 13. The Natural Signatures of each of the relevant landscape zones are set out in Table 5.7.

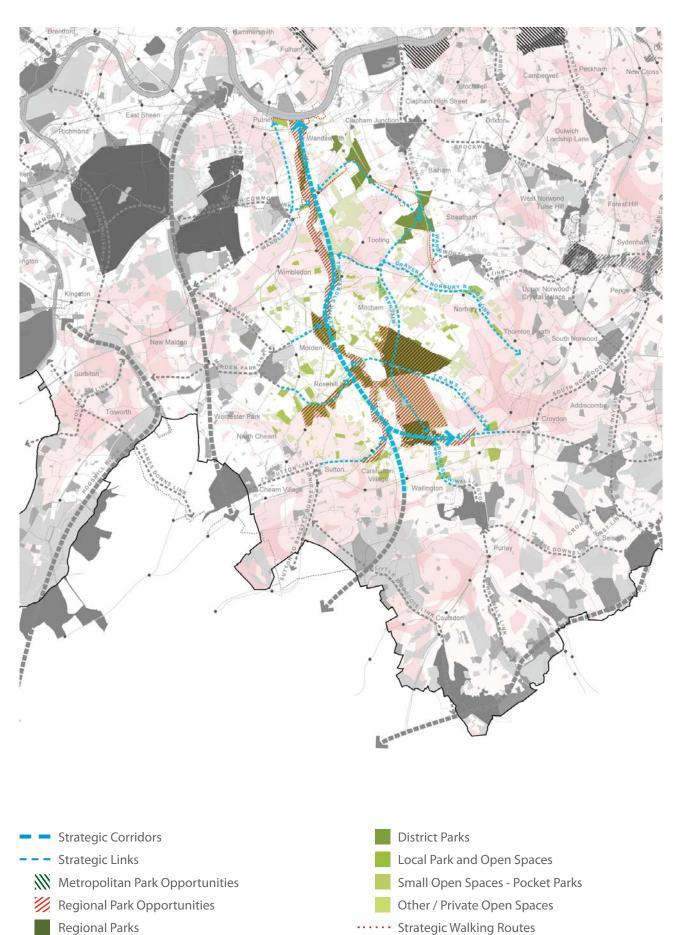
## Table 5.7 : Landscape Natural Signatures

Landscape zone		Natural Signature
15.	South Thames Heaths & Commons	Mosaic of heathland, grassland and ancient wood pastures with groups of veteran trees
16.	Wandle River Valley	Water meadows echoing the meandering course of the river, backed by sinuous bands of wet woodland
17.	South London Clays & Gravels	Small hedged meadows and large heathy commons set against a backdrop of extensive woodlands on higher land
21.	Lower North Downs Dip Slope	A diverse landscape with a transition from heath, scrub and woodland on the lower slopes to more open farmland and scattered ancient woodland on the rising chalklands to the south

The River Wandle flows from the North 5.95 Downs through south London to the Thames. The Wandle River Valley forms the main strategic corridor for the area, containing areas of industrial heritage and significant nature conservation interest. Much of the river corridor lies to the rear of houses, behind industrial estates or bordering allotments and sports-fields. The river has occasionally become hidden in the urban environment being culverted, contained, difficult to access and poorly connected to the neighbourhoods that surround it. Along some parts of its course the river has natural banks, amenity grasslands, wet woodlands, large commons and water meadows, all rich in biodiversity. The Wandle Trail, an established footpath and cycleway, follows the course of the river

wherever access is possible.

5.96 The Wandle Valley is home to a significant amount of industrial and employment space. Historically water mills were located along the river, and the valley continues to play an important strategic role in terms of London's industrial capacity. There are remnants of the rich architectural and industrial heritage that can be found along the valley, along with grander landscapes of country estates and other areas of open space used for outdoor sports and allotments.



Strategic Cycling Routes

**Regional Parks** 

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5.97 The Wandle Valley Regional Park initiative sets out a vision for the creation and improvement of a linked network of open spaces along the river corridor. The park will connect to town centres, transport hubs, communities and business areas, extending out to connect to the open spaces in the surrounding area. This includes Mitcham Common, a large area of grassland and woodland, which added to the proposed new country park, would provide an extensive open space corridor to Beddington Park in the south. The protection and restoration of the river corridor's natural qualities will play an important role in making a vital and vibrant piece of green infrastructure in this part of London.

5.98 The **Wimbledon Common Link** runs via the Capital Ring strategic walk to the west connecting to the large open spaces of Wimbledon Park, Wimbledon Common and Richmond Park.

5.99 To the east of the Wandle the **Graveney/Norbury Brook Link** runs through residential areas. It is often canalised or inaccessible until it reaches Norbury Park, where it goes on to link with open spaces in Thornton Heath.

5.100 The Tramside Link follows the rail route and connects Croydon town centre, through Wandle Park and Mitcham Common to Poulter Park .

5.101 The **Croydon Link** connects the Wandle Valley via Croydon town centre to Hayes Common. The western section is largely built up in character, incorporating small public spaces such as Wandle Park and Park Hill. As it goes eastwards the link becomes greener in character as it passes through playing fields and golf courses. There are larger public open spaces in this section, including Lloyd Park, Addington Hills, Kennel Wood and Spring Park.

5.102 The **Roundshaw-Wallington Link** comprises the open spaces around the Roundshaw estate, Mellows Park and Bandon Hill cemetery. There is currently no clear connection with the Wandle River.

5.103 The **Sutton Link** connects to the open spaces at Carshalton through a largely residential area. It then connects Sutton town centre to Nonsuch Park in the west.

5.104 The **Sutton to Banstead Downs Link** runs through the urban area from the town centre into the open land in the Green Belt and on into Surrey.

5.105 The **Morden Park Link** extends to the west form the Wandle Valley and connects to Morden Park and to sports grounds and Beverley Brook beyond. Another branch of the Link runs from Watermeads through the St. Helier Open Space and residential areas to the southern edge of the park.

5.106 The **Wandsworth Common Link** heads east following the Capital ring strategic walk and passes through cemeteries and sports grounds within residential areas to Wandsworth Common. It then extends to Tooting Common and Streatham Common to link with Crystal Palace Park, again passing through largely residential areas. 5.107 The **Mitcham Link** connects Beddington Park going northwards through the new country park at Beddington Farmlands to Mitcham Common. It continues north, linking smaller green spaces including Streatham Park Cemetery, Figge's Marsh through the urban area to Tooting Common.

5.108 Strategic green infrastructure opportunities:

1. Create a new Regional Park as a vehicle to improve the quality, management, funding and identity of open space within the Wandle Valley.

2. Improve the ecological and environmental value of the River Wandle through restoration projects, habitat enhancement and species re-introduction, and projects which seek to mitigate flood risk.

3. Create a 200 hectare country park at Beddington Farmlands through the restoration of land used for gravel extraction and landfill tipping, linking Beddington Park with Mitcham Common.

4. Create a District Park through the unification of Poulter Park, Revesby Wood, Middleton Open Space, St Helier Open Space, and Rose Hill Park.

5. Create improved cycle and pedestrian connections to the Wandle Valley and Wandle Trail from the surrounding areas through significant open spaces such as the proposed District Park, and a suite of projects connecting the River Wandle to Croydon Town Centre. 6. Develop an exemplar sustainable neighbourhood at Hackbridge - with low carbon development closely integrated with the River Wandle through improved cycle and pedestrian connections, and energy generation associated with river restoration projects.

7. Develop a mutually beneficial relationship between the open space network and industrial space within the Wandle Valley from facilitating access improvements through to nurturing a unique sense of place which can help to enliven and enrich the identity of the Regional Park.

8. Capitalise on the area's abundance of heritage assets including watermills, mill races, Merton Priory, and Merton Abbey Mills, to develop the Regional Park as a landscape rich in historical character.

## **GGA9** Arcadian Thames

5.109 The Arcadian Thames includes parts of the boroughs of Hounslow, Kingston, Merton, Richmond, Sutton and Wandsworth. The area includes three of the landscape character zones identified by Natural England, as shown in Figure 13. The Natural Signatures of each of the relevant landscape zones are set out in Table 5.8.

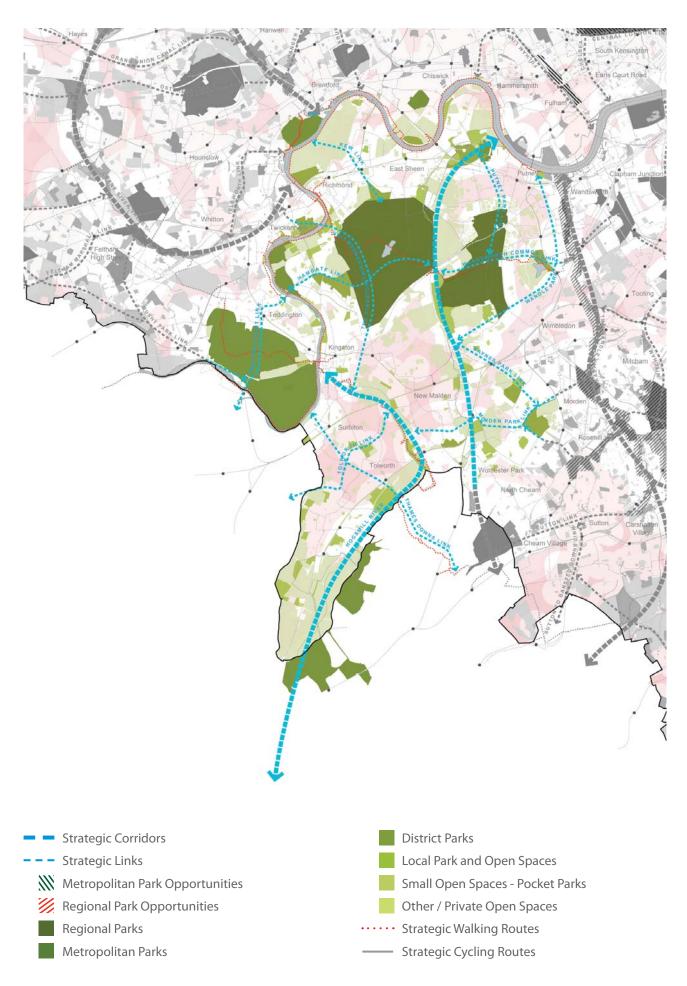
#### Table 5.8 : Landscape Natural Signatures

Landscape zone		Natural Signature
13.	Upper Thames	the meandering River Thames, together with the transitional mud-flats, shingle beaches, islands and flood meadows alongside
15.	South Thames Heaths & Commons	Mosaic of heathland, grassland and ancient wood pastures with groups of veteran trees
17.	South London Clays & Gravels	Small hedged meadows and large heathy commons set against a backdrop of extensive woodlands on higher land

5.110 The character, scale and quality of the open spaces throughout this GGA are closely linked with the heritage, views and relationship with the River Thames. The river meanders through a landscape of historic and royal parks, heritage sites, a variety of wildlife habitats, residential and employment areas. Important views can be found from the parks and open space of the Thames and towards landmarks in central London.

5.111 The Upper Thames runs through the northern part of this area with the Thames Path linking large, high quality open spaces from Hampton Court and Bushy Park to Kew and Barnes. This linked network forms the main strategic corridor. Bushy Park, Home Park, Ham Common, Syon Park and Barnes Common provide large parkland areas that incorporate wetlands, grassland and woodland. 5.112 In the centre, the large open spaces of Richmond Park through to Wimbledon Common and Putney Heath provide a rich mosaic of heath, common, ancient woodland and parkland and are key elements in the character of this area, forming important landmarks. To the south of the area pockets of amenity spaces, grassland and woodland lead from the built up area into the urban fringe countryside where a network of woodlands, hedgerows and small meadows can be found.

5.113 The Beverley Brook strategic corridor runs south from the Thames connecting Barnes Common to Richmond Park and Wimbledon Common, although elsewhere the waterway is less apparent. The Beverley Brook Walk provides a link, but passes through built up areas where it leaves the waterway.



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5.114 The Hogsmill River Valley provides a strategic corridor that runs from the Thames at Kingston town centre to the open countryside on the edge of London and comprises of grasslands with pockets of woodland. The Hogsmill Valley Walk follows the river and the Bonesgate Stream, linking with the London Loop and Thamesdown Link strategic walking routes that lead to Rushett Common, Horton Country Park and Ashtead and Epsom Commons on the edge of London.

5.115 The **Hamgate Link** extends from Ham Riverside Lands through residential streets and Richmond Park to connect with the Beverley Brook corridor.

5.116 The **Wimbledon Common Link** connects Richmond Park to the Wandle Valley to the east via Wimbledon Common and Wimbledon Park, following the route of the Capital Ring strategic walk. The route continues eastwards to Crystal Palace Park as the Wandsworth Common Link.

5.117 The **Morden Park Link** extends east from the Beverley Brook corridor to the Wandle Valley via Morden Park.

5.118 The **Sutton Link** connects Nonsuch Park to Sutton town centre and onwards to the open spaces at Carshalton through a largely residential area.

5.119 The **Tolworth Link** heads southwest from the Hogsmill corridor connecting green spaces that are linked through residential streets into Surrey.

5.120 The **Hampton Court Link** runs from the green spaces on the Thames through Teddington to Bushy Park and Hampton Court Park. 5.121 The **Kingston Twickenham Link** connects from the Thames to Richmond Park and runs through the Kingston residential areas towards the Town Centre of Kingston

5.122 The **Putney Park Link** runs from the Barnes Common through a large residential area West of Putney Town Centre towards Wimbledon Common.

5.123 The **Raynes Park Link** connects Maiden Golf Course and Cottenham Park and heads southeast to Raynes Park. The link continues towards Morden Park.

5.124 The **Kew Link** runs between the Royal Botanic Gardens and Old Deer Park golf Course and is linked with North Sheen Station and onwards connected with East Sheen Common and Richmond Park.

5.125 The **Isleworth Link** connects Isleworth waterfront, and its connection to the Kew Link via the proposed foot ferry, to the Crane River Valley and Twickenham stadium along Twickenham Road.

5.126 The **Bushy Park Link** connects the Thames towpath running alongside Hampton Court and Bushy Park to Kempton Park race course, Kempton Park Reservoirs and the urban area of Hampton.

5.127 The **Sutton to Bansted Downs** Link connects the Sutton link and Sutton town centre with the Bansted Downs along Brighton Road and linking to Overton recreation ground. 5.128 The **Thames Downs Link** connects the residential centres of Erwell to the Thames Down footpath which links the River Thames and Thames Path at the centre of Kingston to the North Downs. The Thames Down Link follows to course of the Hogsmill River before meeting the Thames Down Path at Tolworth Farm and continuing along the Hogsmill River corridor to Kingston.

5.129 The **Wandle Park Link** connects from the Beverley Brook corridor at Raynes Park to Putney town centre and Wandsworth Park. The connection mainly runs through residential areas and also connects Wimbledon town centre and Wimbledon Park.

5.130 Strategic green infrastructure opportunities:

1. Restore the lost floodplains of the River Thames and its tributaries in order to create new opportunities for biodiversity and flood risk management at Ham, Hurst Park, Canbury Gardens, Marble Hill, Old Deer Park, Syon Park, Kew Gardens, Grove Park, Barnes Wetland Centre and open spaces along the Beverley Brook and Hogsmill River.

2. Promote recreational riverside improvements along the River Thames that enhances the experience, making it legible and accessible to pedestrians, and where appropriate cyclists, through resurfacing of the towpaths.

3. Develop the green network along the Hogsmill River Valley corridor to create parkland, including a new district park as a focal point for the surrounding residential areas and integrate links with surrounding farm land. 4. Develop the green network along the Beverley Brook River Valley corridor to create a parkland network linked to the Thames Path. Enhance the connection between Richmond Park and Wimbledon Common and create a series of linked open spaces and nature areas including Combee Wood, Beverley Park, Morden Park, Motspur Park, Ply Brook.

5. Increase the potential for biodiversity and nature conservation in areas between Richmond Park, Wimbledon Common, the Thames corridor and the countryside, creating green links and pedestrian connections to the smaller surrounding open spaces.

6. Create and enhance an interconnected network of footpaths, cycle routes and river crossings that link open space corridors creating linear connections and gateways to connect important riverside open spaces.

7. Integrate green infrastructure as part of the 'Twickenham Area Action Plan', the 'Brentford Waterway Town', the 'Kingston Ancient Market Place', Tolworth Broadway regeneration and the Morden Town Centre green link.

8. Enhance key heritage features and the landscape character of the Arcadian Thames such as at Richmond Park, the Old Deer Park and Kew Gardens and develop the area as a destination for tourism in order to improve the local economy.

9. Conserve the network of formal and informal views and panoramas that criss-cross the Arcadian Thames landscape.

10. Enhance and promote 'centres of sporting excellence' throughout the Arcadian Thames utilising the existing public and private sports facilities along the Thames.

11. Promote productive landscapes, including sustainable food production and urban farms, incorporating historic agricultural field patterns as a transition from the urban area to the countryside in Green Belt. Improve allotments facilities to address the deficiency in provision, expanding Tolworth Main Allotments and creating a new site in the Thamesfield or East Putney wards.

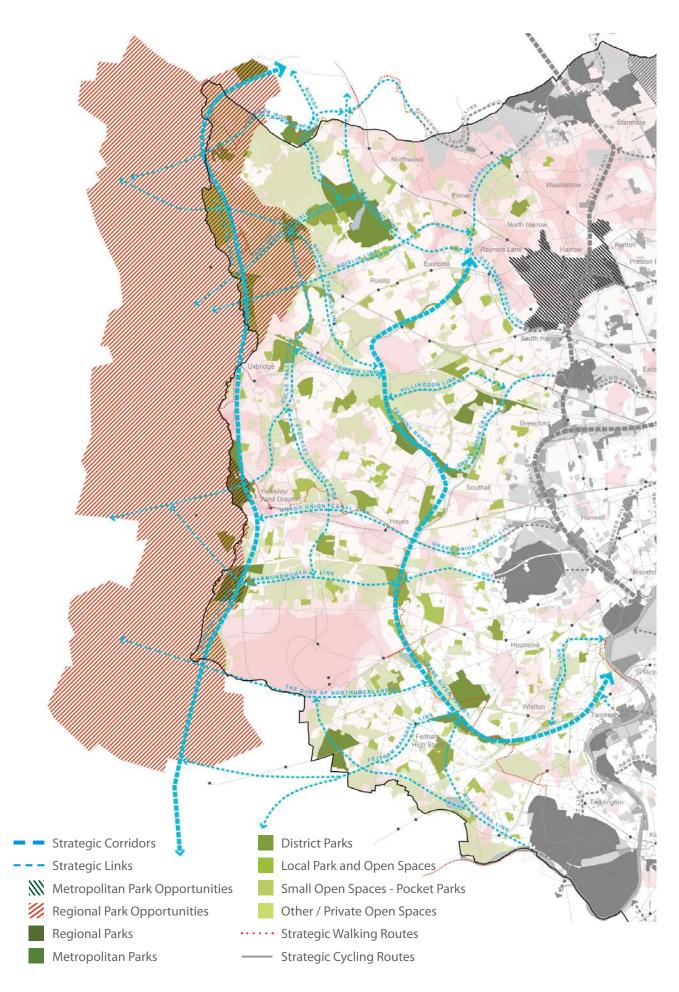
# **GGA10 River Colne and Crane**

5.132 The River Colne and Crane includes parts of the boroughs of Ealing, Hillingdon, Hounslow, Harrow and Richmond. The area includes seven of the landscape character zones identified by Natural England, as shown in Figure 13. The Natural Signatures of each of the relevant landscape zones are set out in Table 5.9.

## Table 5.9 : Landscape Natural Signatures

Landscape zone	Natural Signature
1. Colne Valley	Fast- flowing, clean rivers set within floodplain meadows bordered by damp woodland
2. Ruislip Plateau	Field hedgerows dotted with oaks and bluebells beneath hornbeam coppice echoing the ancient trees of Ruislip Woods
3. Barnet Plateau	Long views from remnant heathy commons
5. Hampstead Ridge	A mosaic of ancient woodland, scrub and acid grassland along ridgetop summits with panoramic views
10. Hayes Gravels	Small-scale, enclosed landscape of meadows bordered by tall hedgerows, with woodlands, copses and hedgerow trees
11. Brent River Valley	Meandering, shallow river bordered by diverse floodplain meadows and winding strips of damp woodland
12. Hounslow Gravels	A large scale mosaic of heathy grassland, scrub and secondary woodland, traversed by narrow, lush stream corridors

5.133 Whilst the two river catchment landscapes within the GGA are linked as part of the notional West London Green Web, they are distinct and hydrologically separate. They both have dedicated governance arrangements in place and as such are subdivided below.



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## 10a The Colne valley

5.134 The Colne Valley Regional Park was established in 1965 and includes the open spaces on the western boundary of London, extending into the neighbouring authorities. It contains a mosaic of farmland, woodland, braided rivers, canals and lakes. A long history of gravel extraction is reflected in the filled land and open water landscape character along the Colne.

5.135 The River Colne is the main important strategic corridor, with a wide floodplain, extending into London from the Chilterns. The corridor of the River Pinn, a tributary of the Colne is also important. Much of the open land is in private ownership but there is a network of paths, such as the Colne Valley Trail, that link to large areas with public access, including Denham Country Park, Hillingdon House Farm and Harmondsworth Moor.

5.136 Extensive ancient woodland in the north of the area, known as Ruislip Woods, forms the landscape setting for the surrounding urban area. The north of the area is characterised by gently undulating slopes which flatten out south of the M40 and include historic parklands, woodland and heathland. Lakes created as a result of gravel extraction form a feature along the eastern edge of the valley. Paths create a link along the River Pinn that runs from West Ruislip to Pinner through residential areas, open meadows and amenity grassland. The southern part of the GGA is dominated by Heathrow Airport and there is a large scale impact on the environmental quality of the area.

5.137 The **Duke of Northumberland's Link** follows this river from the Crane River corridor into the Colne Valley as it passes through the urban area and to the south of Heathrow Airport. The river is largely inaccessible or culverted within the urban area, where there are only small pockets of green space.

5.138 The **Harmondsworth Lin**k connects the Colne and Crane strategic corridors through a complex network of green spaces, most of which do not have public access.

5.139 The **Grand Union Canal Link** connects to the Crane River and Hillingdon trail at Minet Country Park. The London Loop walk follows the canal westwards through Hayes and Yiewsley and links to Stockley Country Park and the Colne Valley.

5.140 The **Colne Valley Link** runs through a mosaic of open spaces and built up areas, from Yiewsley in the south, where it joins the River Colne, northwards to the woodland and commons at Ruislip. The route passes through parks and playing fields along the route, including Hillingdon House Farm, but has to go through the built area where there is no public access to the river.

5.141 The **Ruislip Link** partly follows the River Pinn from Pinner through to Ruislip, passing through parks and private green spaces for much of the way. The Link continues west after Ruislip through residential areas before connecting to the Colne Valley.

5.142 The **Park Wood Link** runs from the Green Belt in the north to the significant woodlands and commons at Ruislip. It then passes through the urban area to connect to the Yeading Brook. Further connections also run to the west from this link back to the Colne Valley through the large parks in between.

5.143 The **Park Wood Ruislip Link** starts at green spaces of the Ruislip National Nature Reserve and heads south west through Mad Bess Wood and Bayhurst Wood Country Park. From here it follows roads through open countryside to join the London Loop and Grand Union Canal Walk continuing through Denham Country Park.

5.144 The **Bishop's Wood Country Park Link** connects Rickmansworth, which is part of the three-river district area and runs through Moorpark and Batchworth Park Golf Course. The link continues to Bishop Wood Park and Northwood Hills.

5.145 The **Ruislip Yeading Link** runs from the Lynsters and Pynesfield Lake towards the village of Harefield with great views over the Colne Valley Park. The link continues east after this and runs through the residential area to Ickenham end in the Yeading Brook.

5.146 The **Uxbridge Common Link** heads east from the Common thorugh the urban area of North Hillingdon before joining the Hillingdon Trail. It then follows the Trail through green spaces, including woodland and golf courses, where it joins the Yeading Brook.

5.1.47 The **Colne Northwood Link** heads east from Park Wood in the Colne Valley following the London Loop strategic walk through open countryside and connecting with Bishop's Wood Country Park. It then continues thorugh the Northwood suburban area, still following the London Loop, to Oxhey Woods. The route then continues eastwards in GGA10. 5.148 The **Stockley Country Park Link** runs from Hillingdon town centre through Moorcroft Park towards the lakes and landscaped areas of Stockley Country Parkland, the link continues south towards the Harmondworth Link.

## 10b the Crane Valley

5.149 The Crane Valley maintains a predominantly natural composition rising in the north of Harrow as the Yeading Brook and flowing through Hayes (becoming the Crane), passing to the east of Heathrow Airport and Hounslow Heath through Twickenham to Isleworth where it reaches the Thames.

5.150 The shallow valley of the River Crane provides the only variation in the topography across the flat landscape of the Hounslow Gravels. The area is characterised by recent industrial and interwar suburban development interspersed by corridors and patches of open space along tributary streams.

5.151 The Crane River valley contains accessible open spaces and paths along the river corridor from Twickenham to the large open space of Hounslow Heath. The London Loop walk continues alongside the river for most of the way, passing Heathrow Airport and going on to Cranford park where it joins the Grand union Canal and the Yeading Brook. A project to establish a metropolitan scale park along the river between Twickenham and Feltham, doubling the size of the existing River Crane Park, is proposed. Open spaces of parks, grassland, scrub and woodland are found along the course of the Yeading Brook. There is an accessible riverside walk between Roxbourne Park and Ickenham Marsh and from North Hillingdon via Yeading Brook Meadows to Yeading Lane, but elsewhere access is more limited.

5.152 The Brent Valley corridor to the east of the GGA contains a well connected corridor of open spaces, including sports fields and golf courses. There are accessible walks along parts of the river some of which form part of the Capital Ring and Grand Union Canal Walk strategic routes. Osterley Park and Fields lie to the south of the link and contain hedgerows, parkland, woodland and veteran trees, but there is no clear connection with the adjacent waterways.

5.153 The **Park Wood and Ruislip Links** connect the Crane Valley to the Colne via woodlands, commons and other green spaces.

5.154 The **Hillingdon Link** goes east from the town centre along the southern edge of the Northolt Aerodrome to the Paddington branch of the Grand Union Canal. It passes through the urban area linking local parks along the way.

5.155 The **Grand Union Canal Link** extends to the west to form a route to the Colne Valley. At the Yeading corridor the main branch heads east, tightly constrained by built development on both sides until it meets the northern part of Osterley Park. The Paddington branch of the canal heads in a northerly direction parallel to the Yeading Brook, until Southall where it turns north eastwards. It passes through a number of urban areas and green spaces, including golf courses and sports fields, before connecting to the Brent Valley corridor and continuing on into central London. 5.156 The **Isleworth Link** follows the course of the Duke of Northumberland's River as it heads north from the Crane Valley corridor, through Isleworth before heading east to join the Thames. Between the Crane and Isleworth there is some access to the river, but after it passes through the water works it is tightly constrained by built development on either side and culverted in places.

5.157 The Harmondsworth Link

connects the Craneford Countryside Park with the villages Harlington, Sipson and Harmondsworth. It passes through the Colne Valley Regional Park, Richings Park Golf and Country Club before heading towards the Langley Country Park.

5.158 The **Feltham Marshall Link** runs from Hounslow Heath nature reserve towards Grosvenor Park and heading west to Bedfont Lakes Country Park. The link continues after this and runs through Ashford town centre toward the Spelthorne District.

5.159 The **Osterley Park Link** goes east from Craneford Country Park and runs through Air Links Golf Course before heading towards Osterley House Park. The link continues through Wyke Green Golf Course and connects with the Brent Valley corridor.

5.160 The **Bushy Park Link** runs from Hounslow Heath towards Hanworth Town Centre and Kempton Park Race Course. The link passes through Hampton Village and runs along the Thames towards Bushy Park and Hampton Court. 5.161 Strategic green infrastructure opportunities Colne and Crane Valley

1. Maintain and enhance the landscape, historic environment, waterscape, biodiversity and the public open spaces and links of the Colne Valley Regional Park as both a significant destination and as a means of access to the countryside of the urban fringe of West London and beyond in adjacent counties.

2. Develop visitor hubs as 'gateways to the countryside' for Londoners, with paths leading out into the wider countryside, at Little Britain, Denham Country Park and Rickmansworth Lakes.

3. Improve access to the river and canal corridors to create a green network centred on the River Crane and River Pinn valleys and the constructed waterways that link them to the River Colne: the Grand Union Canal, the Duke of Northumberland and Longford Rivers.

4. Develop an integrated approach to water management across the Colne and Crane catchments, to address flood storage capacity, fluvial flooding, sustainable urban drainage measures and the provision of new water space. including at the River Pinn, Holme Lodge Ditch, Stanwell Moor Ditch and the Colne Brook.

5. Continue to improve the relationship between Heathrow Airport and its surrounding landscape in terms of access, mitigation and land use.

6. Support the Colne Valley Rural Development Forum to promote productive landscapes, viability of farming/ smallholdings in the urban fringe and protect against erosion of existing farmland. 7. Support river naturalisation and waterside habitat improvement projects, especially along lengths of the River Crane, Yeading Brook, River Pinn and at Ickenham Marsh.

8. Strengthen and integrate pedestrian and cycling connectivity both along and between the river corridors, public transport nodes and walking and cycling routes.

9. Integrate green infrastructure as part of major road and railway network projects, including Crossrail, HS2 and the Heathrow spurs. Enhance the landscape around the major roads including the M40, M4, M25, A4 and routes to and from Heathrow.

10. Create a new 100ha metropolitan scale Crane Riverside Park to provide a continuous, accessible link between Hounslow Heath and Twickenham Station, which includes a long distance footpath, improved access into the linear park for surrounding communities, including Donkey Wood and Hounslow Heath, and an enhanced wildlife corridor.

11. Improve Roxbourne Park and Roxbourne Rough in Harrow and neighbouring sites including Yeading Brook Open Space and Streamside Open Space. Improve Yeading Brook Fields in Ealing and improve links to neighbouring areas such as Ickenham Marsh.

12. Create a District Park at Greenford Southall Borders/ Spike's Bridge/ King George's field and linking with open space across the canal in Hillingdon.

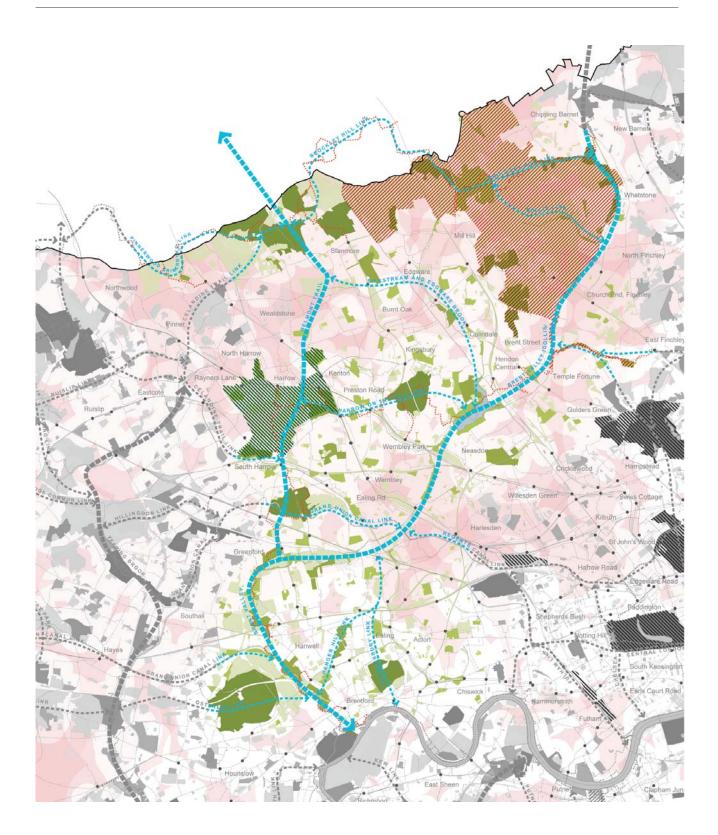
# GGA11 Brent Valley and Barnet Plateau

5.162 The Brent Valley and Barnet Plateau includes parts of the boroughs of Barnet, Brent, Camden, Ealing, Harrow and Hounslow. The area includes six of the landscape character zones identified by Natural England, as shown in Figure 13. The Natural Signatures of each of the relevant landscape zones are set out in Table 5.10.

## Table 5.10 : Landscape Natural Signatures

Landscape zone	Natural Signature
2. Ruislip Plateau	Field hedgerows dotted with oaks and bluebells beneath hornbeam coppice echoing the ancient trees of Ruislip Woods
3. Barnet Plateau	Long views from remnant heathy commons
4. Finchley Ridge	Ridgetop blocks of ancient woodland on former commonland
5. Hampstead Ridge	A mosaic of ancient woodland, scrub and acid grassland along ridgetop summits with panoramic views
10. Hayes Gravels	Small-scale, enclosed landscape of meadows bordered by tall hedgerows, with woodlands, copses and hedgerow trees
11. Brent River Valley	Meandering, shallow river bordered by diverse floodplain meadows and winding strips of damp woodland

5.163 The northern part of the area retains a farmland character on the urban fringe and in pockets within the built up area, which is interspersed with golf courses, heathland, commons and woodland. There are large accessible open spaces in the Green Belt including Moat Mount Open Space, Scratchwood Country Park, Stanmore Common and Harrow Weald Common. These extensive areas of open land contain cultural and historic features and provide recreational opportunities. Woodland and tree belts on the hillsides are a feature of this area and there are views from the higher ground. The open spaces and topography of sloping hills at Harrow-on-the-Hill form an integrated part of the character and tradition of this area. The Green Belt area offers huge potential as a productive, recreational and environmental resource. However, large parts of the Barnet Plateau notably at its urban edge are deficient in access to nature and open space. Transport infrastructure affects the continuity of walking routes, and reduces air quality. The creation of a Regional Park, as identified in the London Plan, would realise a continuous green/ blue corridor along the Brent Valley from the Thames to the Green Belt.





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5.164 The Finchley and Hampstead Ridges cross the southern section of the GGA. Hampstead Heath forms the principal large open space that has a unique mix of semi-natural and formal habitats and offers panoramic views from Parliament Hill.

5.165 The Brent Valley corridor runs between the plateaux to the north and the ridges to the east and south. The river Brent's tributaries cross the plateau forming narrow incised valleys in the clay, though often hidden from view and contained in channels it broadens as it crosses the Haves Gravels. The river merges with the Grand Union Canal at Hanwell and joins the Thames at Brentford. Much of the river corridor is inaccessible, culverted and is bisected by the A406. From the Pitshanger area to the west and south the Link contains a better connected corridor of open spaces, including sports fields and golf courses. There are accessible walks along parts of the river some of which form part of the Capital Ring and Grand Union Canal Walk strategic routes. Osterley Park and Fields lies to the south of the link and contains hedgerows, parkland, woodland and veteran trees, but there is no clear connection with the waterways.

5.166 The **Belmont Trail Link** runs mainly through the public realm from Stanmore in the north to the green spaces of Harrow on the Hill to Horsenden Hill and connecting to the Brent Valley corridor at Perivale Park.

5.167 The **Silk Stream and Edgware Brook Link** runs from the green spaces around the Brent Reservoir through suburban development to the large open spaces on the urban fringe at Stanmore. The watercourses are only visible and accessible along sections of the corridor. 5.168 The **Pinner Wood-Grimerdyke Lin**k and the Brockley Hill Link follow the London Loop strategic walk through the Green Belt from the Colne Valley in the west to the Dollis corridor in Barnet. It links together a number of large accessible green spaces, including Oxleas Wood, Harrow Weald Common, Stanmore Common and the open spaces at Elstree, Scratchwood and Moat Mount.

5.169 The **Dollis Link** connects large open spaces of real distinctiveness and biodiversity, linking Moat Mount Open Space in the Green Belt to the Brent Valley via the Folly Brook and Riverside Walk Gardens and onwards to Hampstead Heath. The northern part runs through farmland and playing fields, with the lower reaches providing a green corridor through the built up area, where some sections are culverted. The Dollis Valley Greenwalk connects these open spaces and links in to the London Loop and Capital Ring strategic walks.

5.170 The **Celandine Trail Link** connects the large open spaces in the Green Belt around Harrow Weald Common through Pinner Park to the tip of the Yeading Brook corridor. From here the Link continues through residential areas connecting disconnected parks to Sudbury Hill.

5.171 The **Harrow on the Hill Lin**k runs east through Northwick Park, Preston Park and Fryent Country Park to the Welsh Harp Open Space and Brent Reservoir. There are a number of north to south transport routes that create barriers along the link. 5.172 The main branch of the **Grand Union Canal Link** extends to the west to form a route to the Yeading corridor and onto the Colne Valley from Osterley Park. Further north, the Paddington branch also heads south westwards from the green spaces at Horsenden Hill, passing through a number of urban areas and green spaces. Heading eastwards, it goes through urban areas, including Park Royal industrial park, before continuing into central London as the Regent's Canal Link.

5.173 The **Gunnersbury Link** runs southwards form the Brent Valley through Hanger Hill where it branches into two branches at Ealing. The western branch continues through a network of parks and sports fields to rejoin the Brent River at Boston Manor Park. The eastern branch passes through Ealing Common and urban development to Gunnersbury Park and the Thames, although the M4 and railway lines create a substantial barrier between the river and the park.

5.174 The **Hanger Hill Link** connects with the Brent Valley corridor at Boston Manor Park and playing fields to the Gunnersbury Link at Ealing. In between it links with sports grounds, Lammas Park, Walpole Park and Haven Green at Ealing Broadway.

5.175 Strategic green infrastructure opportunities:

1. Create the Brent River Greenway, a continuous walking & cycling route, connecting the Thames to the Green Belt and visitor destinations like Neasden temple, Wembley Stadium and Osterley Park, by connecting to and improving existing routes, including as part of the redevelopment at Wembley and Brent Cross / Cricklewood. 2. Develop a framework for the creation of a new 'Brent Valley' Regional Park – as a vehicle to improve the quality, connectivity, management, funding and identity of open space within the GGA.

3. Improve the ecological and environmental value of water courses in the River Brent catchments, to mitigate flood risk and undertake invasive species control, restoration projects, including deculverting hidden rivers, water quality improvement, habitat enhancement and species re-introduction.

4. Enhance the accessibility and use of the Green Belt, and to explore options for surface water storage upstream of urban areas prone to flooding.

5. Develop the Capital Ring as an accessible green corridor for walking & cycling, connecting open spaces across the GGA with improved links to areas of deficiency in access to nature & open space.

6. Enhance links from the Grand Union Canal to nearby open spaces and growth at Alperton, for walking and cycling, and to support and enhance the role of the Canal as a biodiverse corridor through industrial areas at Park Royal, and Hounslow.

7. Increase access for walking and cycling to cultural destinations, to the Green Belt, Capital Ring, Brent and Colne Valleys from Harrow on the Hill and Wealdstone centre through a series of linked improvements and additions to the open space network, associated with the growth of central Harrow. 8.Increase access to Silk Stream and Edgware open spaces & nature, promote walking & cycling, reduce flood risk, improve water quality and enhance habitat through a series of linked open space network improvements and additions associated with growth at Mill Hill East, Colindale, West Hendon and Edgware Road.

9. Address issues of fragmentation and deficiency of green infrastructure in eastern Ealing / south east Brent by increasing quality of the existing network, making links, and maximising provision in growth areas at Park Royal, Church End, Alperton, North Kilburn and Cricklewood/Brent Cross by promoting SUDS, green/brown roofs and creating new parks.

10. Increase native tree cover, using street trees to improve air quality, absorb surface water run off, and provide urban cooling along Edgware Road, in central Brent, at Brentford and across Harrow.

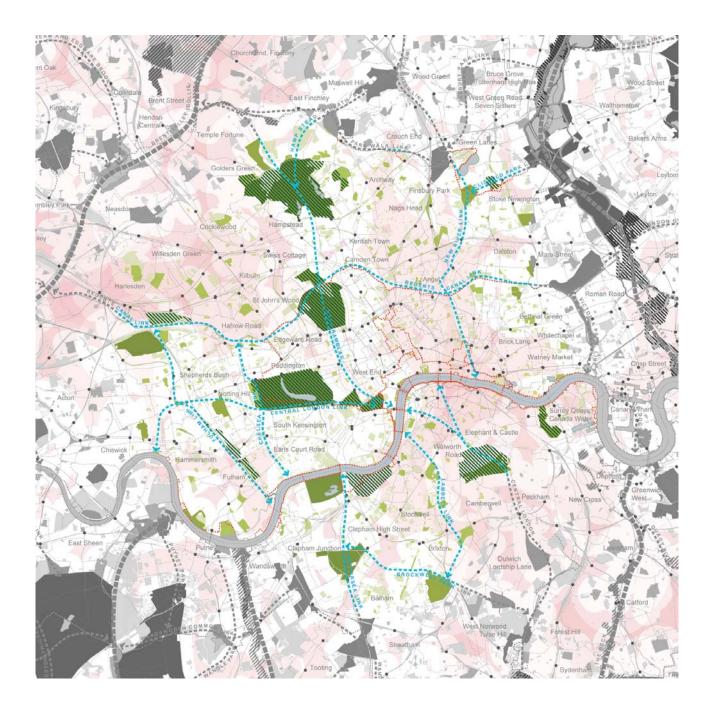
#### GGA12 Central London

5.174 Central London includes parts of the boroughs of Camden, Islington, Hackney, Hammersmith & Fulham, Kensington & Chelsea, Lambeth, Southwark, Tower Hamlets, Wandsworth, Westminster, and the City of London. This covers an area which includes the Central Activities Zone as defined by the London Plan (see London Plan Map 2.3). The area includes six of the landscape character zones identified by Natural England, as shown in Figure 13. The Natural Signatures of each of the relevant landscape zones are set out in Table 5.11.

#### Table 5.11 : Landscape Natural Signatures

Landscape zone	Natural Signature
5. Hampstead Ridge	Small-scale, enclosed landscape of meadows bordered by tall hedgerows, with woodlands, copses and hedgerow trees
9. North Thames Terraces	Flat, open grassland, stepping up from the Thames, with narrow sinuous strips of woodland marking the alignment of tributary creeks
10. Hayes Gravels	Meandering, shallow river bordered by diverse floodplain meadows and winding strips of damp woodland
13. Upper Thames	The meandering River Thames, together with the transitional mud- flats, shingle beaches, islands and flood meadows alongside
14. Lower Thames Floodplain	A vast, flat riverside zone of grazed saltmarshes grading to reedswamp, mudflats and the wide tidal Thames – the most striking and immediately visible natural element in London
17. South London	Small hedged meadows and large heathy commons set against a backdrop of extensive woodlands on higher land

5.175 While the area is predominantly urban, the green spaces reveal the underlying landscape of the Thames basin and the remnants of natural, semi-natural, man-made and cultivated terrain, offering an insight into important characteristics that also define the area. The area is characterised by built development interspersed with green spaces of various sizes. Central London straddles the River Thames, which is its primary geographic feature, and largest open expanse, crossing the city from east to west. The Thames Path provides a strategic link that connects the open spaces along the river front.





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5.179 To the south of the Thames, few areas of natural landscape remain, given the intense built structure of the area. Remnant semi-natural landscapes are generally scattered and isolated, often surviving within common land and the recreational spaces created as part of the suburban expansion of the 19th and 20th centuries. The principle areas of public open space are Battersea Park, Clapham Common, Brockwell Park, Burgess Park and Southwark Park. The parks, golf courses and woodland along the Dulwich and Sydenham ridgeline contribute to the quality of the urban character.

5.180 Trees and vegetation in the open spaces, streets and civic spaces within the Central area can provide green links through the urban area, linking with green spaces and transport nodes and are as much a feature of London as the terraced houses and street themselves. Urban greening of streets and buildings will assist in adapting to the effects of climate change, for example street trees will provide shade and help to alleviate the Urban Heat Island effect through cooling.

5.181 The **Regent's Canal Link** passes through the urban area from Paddington in the west along the canal, connecting with Kensal Green Cemetery and Regent's Park. From here, the canal is not always visible and the route passes through densely developed areas before joining with Victoria Park in the east and onwards to the Thames through Mile End Park.

5.182 The **Fulham Link** extends southwards from Kensal Green and Wormwood Scrubs through the urban area to the Thames connecting pockets of green space south of Wormwood Scrubs, including new open space planned at Earl's Court and Brompton Cemetery. 5.183 The **Chelsea Link** extends from Kensington Gardens and Hyde Park joining with small spaces through the streets of Central London to the Thames in the south and Regent's Canal to the north.

5.184 The **Nash Ramblas Link** runs north from Parliament Square and the Thames, through the Royal Parks and the grand avenues of the Central Activities Zone to Regent's Park and Primrose Hill. It continues through residential streets to Parliament Hill and Hampstead Heath.

5.185 The **New River Link** extends north from the Thames in the City through the heart of London to Regent's Canal. Continuing north there is a small section of the New River that is visible and accessible although it is tightly constrained by built development as the route heads towards Clissold Park.

5.186 To the south of the **Thames the Central London Link** passes through urban areas to connect the South Bank with Burgess Park and Peckham Rye Common and Park and onwards to Crystal Palace Park. North of the Thames it heads westwards through the Royal Parks, Holland Park, Shepherd's Bush Common and meeting the Thames again at Furnival Gardens in Hammersmith.

5.187 The **Brockwell Park Link** runs from Clapham Common eastwards through the urban area to Brockwell Park and the complex of green spaces around Dulwich Park.

5.189 The **Battersea Park Link** goes thorugh the urban areas of Clapham and Balham and connects Battersea park with Clapham Common and Tooting Bec Common, the only significant green spaces in the area. 5.190 The **Lambeth Link** heads southwards from the park at Lambeth Palace on the Thames through urban development to Kennington Park. It passes through the urban area again, connecting with Myatts Fields and Ruskin Park. From here it again passes through the urban area before joining with Brockwell Park.

5.191 Strategic green infrastructure opportunities:

1. Develop a linear park along the Thames that embraces the heritage and identity of London anchored by two World Heritage Sites (Tower of London / Westminster ) between Chelsea Bridge and Tower Bridge.

2. Re-inforce the Royal Parks as key local and international heritage destinations for activities to promote health and well-being, skills training, and biodiversity.

3. Promote Hampstead Heath together with Kenwood House as a major destination, enhancing access and connections for pedestrians and cyclists and improving the storm water attenuation potential of the ponds with related ecological and landscape opportunities.

4.Promote and enhance the cultural offer and environmental quality of central London's Victorian cemeteries (in particular the 'Magnificent Seven').

5. Mitigate the risk of surface water flooding in Critical Drainage Areas by increasing green cover, including green roofs, pocket parks, and rain gardens, together with the management of existing green space to ensure maximum absorbency. 6. Create a linear parkway in the Wormwood Scrubs to World's End green corridor, integrating the recreation sections of Counters Creek at Earl's Court.

7. Promote London's 'urban forest' and plan for succession planting to ensure a continuity of maturing trees that contribute significantly to the beauty, quality and distinctiveness of Central London's streets, public realm and open spaces.

8. Enhance access to the Regents Canal for recreational and commuter use, improving wayfinding and new shared use path signage along the towpath, promoting the heritage aspects of the landscape and improving the connectivity with communities.

9. Create exemplar greenway gateways into London along the key western corridors of the A4 and A40, enhancing the pedestrian and cycling environment, offering better north/south community connections across the corridors and improved links to green spaces and town centres.

10. Improve the connectivity and safety of the pedestrian and cycling environment linking green spaces from central London to the Olympic Park and to the regeneration area of the Lower Lea Valley and the Royal Docks.

11. Create new public realm and green space as an integrated part of major infrastructure schemes, including Crossrail and the Thames Tideway Tunnel, ensuring that they are connected to the existing green space network to encourage walking and cycling. 12. In the Nine Elms redevelopment area, create a new linear park connecting Vauxhall to Battersea Power Station and the Thames Path, providing a continuous route for walking and cycling, improve parks and squares, incorporate tree planting, street crossings, interpretation at points of interest and green roofs.

13. Promote additional pockets of nature in the central London by diversifying management, linking spaces to provide wildlife corridors and promote accessibility and interpretation of the natural environment in parks and on walking routes.

14. Promote spreading the network of Capital Growth and local initiatives, creating exemplars for underutilised land and the opportunity for business enterprise and green skills training through partnership working with the public, private and third sector to encourage urban agriculture as part of improving health and well-being.

15. Promote temporary green space through short-term leases with land owners on sites awaiting development, to provide interim landscapes that promote the objectives of the Green Grid.

16. Develop a network of green skills partnering the Business Improvement Districts with parks managers, third sector organisations and major green skills learning hubs such as Capel Manor.

# CHAPTER SIX

# GLOSSARY

#### **BCTV Green Gym**

Outdoor, practical work that improves the health of the volunteers and the open spaces they work in.

#### **Biodiversity**

This refers to the variety of plants and animals and other living things in a particular area or region. It encompasses habitat diversity, species diversity and genetic diversity. Biodiversity has value in its own right and has social and economic value for human society.

#### **Blue Ribbon Network**

A spatial policy covering London's waterways and water spaces and land alongside them.

#### **Critical Drainage Areas**

An area within Flood Zone 1 which has been identified to the local planning authority by the Environment Agency.

#### Geodiversity

The variety of rocks, fossils, minerals, landforms, soils and natural processes, such as weathering, erosion and sedimentation, that underlie and determine the character of our natural landscape and environment

#### Greening

The improvement of the appearance, function and wildlife value of the urban environment through soft landscaping.

#### Green Chains

Areas of linked but separate open spaces and the footpaths between them. They are accessible to the public and provide way-marked paths and other pedestrian and cycle routes.

#### **Green Corridors**

Relatively continuous areas of open space leading through the built environment which may be linked and may not be publicly accessible (eg a railway embankment). They may allow movement of some animals and plants, and act as a conduit for species to reach further into urban areas that would otherwise be the case, and potentially provide extensions and connectivity to green spaces they join.

#### **Green Infrastructure**

The multifunctional, interdependent network of open and green spaces and green features (e.g. green roofs). This network lies within the urban environment and the urban fringe, connecting to the surrounding countryside. It provides multiple benefits for people and wildlife including: flood management; urban cooling; improving physical and mental health; green transport links (walking and cycling routes); wildlife habitats and ecological connectivity; and food growing. Green and open spaces of all sizes can be part of green infrastructure provided they contribute to the functioning of the network as a whole. It includes the Blue Ribbon Network but excludes the hard-surfaced public realm.

#### Green roofs/walls

Planting on roofs or walls to provide climate change, amenity and recreational benefits. Additional guidance has been issues on green roofs and walls

#### **Metropolitan Open Land**

Strategic Open Land within the urban area that contributes to the structure of London.

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## Chinese

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# Vietnamese

Nếu bạn muốn có văn bản tài liệu này bằng ngôn ngữ của mình, hãy liên hệ theo số điện thoại hoặc địa chỉ dưới đây.

# Greek

Αν θέλετε να αποκτήσετε αντίγραφο του παρόντος εγγράφου στη δική σας γλώσσα, παρακαλείστε να επικοινωνήσετε τηλεφωνικά στον αριθμό αυτό ή ταχυδρομικά στην παρακάτω διεύθυνση.

# Turkish

Bu belgenin kendi dilinizde hazırlanmış bir nüshasını edinmek için, lütfen aşağıdaki telefon numarasını arayınız veya adrese başvurunuz.

# Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਸ ਦਸਤਾਵੇਜ਼ ਦੀ ਕਾਪੀ ਤੁਹਾਡੀ ਆਪਣੀ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੀਦੀ ਹੈ, ਤਾਂ ਹੇਠ ਲਿਖੇ ਨੰਬਰ 'ਤੇ ਫ਼ੋਨ ਕਰੋ ਜਾਂ ਹੇਠ ਲਿਖੇ ਪਤੇ 'ਤੇ ਰਾਬਤਾ ਕਰੋ:

## Hindi

यदि आप इस दस्तावेज की प्रति अपनी भाषा में चाहते हैं, तो कृपया निम्नलिखित नंबर पर फोन करें अथवा नीचे दिये गये पते पर संपर्क करें

# Bengali

আপনি যদি আপনার ভাষায় এই দলিলের প্রতিলিপি (কপি) চান, তা হলে নীচের ফোন্ নম্বরে বা ঠিকানায় অনুগ্রহ করে যোগাযোগ করুন।

# Urdu

اگر آپ اِس دستاویز کی نقل اپنی زبان میں چاھتے ھیں، تو براہ کرم نیچے دئے گئے نمبر پر فون کریں یا دیئے گئے پتے پر رابطہ کریں

# Arabic

إذا أردت نسخة من هذه الوثيقة بلغتك، يرجى الاتصال برقم الهاتف أو مر اسلة العنوان أدناه

# Gujarati

જો તમને આ દસ્તાવેજની નકલ તમારી ભાષામાં જોઇતી હોય તો, કૃપા કરી આપેલ નંબર ઉપર ફોન કરો અથવા નીચેના સરનામે સંપર્ક સાઘો.

# **MAYOR OF LONDON**

