

Crane Valley Partnership

Strategy for the Crane Catchment

2018-2028



Final report, 9th March 2018

Disclaimer:

The views and opinions expressed in this Strategy represent a consolidated view of the organisations that are members of the Crane Valley Partnership and do not necessarily reflect the official policy or position of any individual organisation.

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A **technical annex** containing supplementary information is available as a separate document.

1. About this Strategy

- 1.1. This Strategy seeks to provide a clear vision for the Crane catchment and guide the future development of the Crane Valley Partnership (CVP) over the next ten years (until 2028). It identifies the benefits that the River and wider catchment provide to those living and working in the Crane Valley and how they can be enhanced and maximised for the benefit of all. Working closely with the Partnership and other key interested parties, the future direction and priorities for the Partnership have been agreed with the objective of ensuring that the catchment is the benchmark for integrated catchment management in urban areas in the Thames Basin.
- 1.2. The starting point for this Strategy is the set of five mission statements that the Partnership has been working to since 2013 (**Table 1.1**). This Strategy should be seen as an evolution from these objectives, updating and refocussing them to the challenges and opportunities that will face the catchment over the next ten years.

Table 1.1. The five current mission statements of the Crane Valley Partnership

1. To raise awareness and support action for conservation, restoration and new approaches to design and management of the River Valley.
2. To help communities take a sustainable approach to managing and improving the River Crane and its tributaries.
3. To improve and protect the biodiversity of the area.
4. To maximise the use of the river corridor as a resource for healthier living and educational activities for local people.
5. To promote connectivity along the river corridor.

- 1.3. The document is split into nine sections:
 - This section explains the background to the Strategy and how it was prepared;
 - **Section 2** examines **the story so far** – the successes and challenges the Partnership has faced since its inception and why there is now a need for change;
 - **Section 3** looks at why the catchment is **valued** and the **benefits** that it brings to those living and working in the area;
 - **Section 4** looks at what the future holds for the catchment and the key **drivers of change**;
 - **Section 5** proposes the Partnership's **Vision** for the future of the catchment and the **Ambition** for its own work over the next 5-10 years;
 - **Sections 6 to 8** set out the **priority themes** that will help deliver the Vision and Ambition; and
 - **Section 9** sets out how the Partnership will go about **delivering this strategy**.
- 1.4. Supporting analysis is provided in an Annex to this document.

What this Strategy seeks to achieve

- 1.5. The River Crane is one of the most natural rivers in London. It forms the central spine of a 127 square km¹ low lying catchment in the west of London, home to over 650,000 people and the location for 620,000 who work there. Those living and working in the catchment all, knowingly or otherwise, benefit from the services that the river and catchment provide and in turn shape its future.
- 1.6. Since 2005 the Crane Valley Partnership has worked to promote joined up action along the River Crane to improve biodiversity, water quality and access and recreation. The catchment and the Partnership have now reached a critical point, as 2017 sees the end of four years of funding from the Thames Water compensation fund.
- 1.7. The completion of the current period of funding, coupled with the tight financial situation facing public-sector partners and the prospect of a rapidly changing policy environment resulting from Brexit, requires a fresh look at the Partnership's structure and activities. This changing political and financial landscape is set against a backdrop of climate change and a rapidly increasing population in the catchment (a 20% increase across London as a whole in 25 years) putting pressure on the natural environment in a way never seen before.
- 1.8. To respond to this shifting context there is a need to take stock and examine both the state of the catchment and the Partnership, and its future direction. This Strategy and new Vision is needed to guide the Partnership through until 2028, ensuring the catchment is resilient to the challenges that it may face in the future at the same time as engaging, inspiring and uniting all those living and working in and for the catchment to take action.

What does this Strategy do?

- Provides direction for the Partnership to develop and grow in the face of a rapidly changing policy and funding climate.
- Identifies and raises awareness of the value of the catchment to those living and working there.
- Sets out the Partnership's Vision of what the catchment will be like in 2023 and beyond to 2028.
- Proposes the Ambition of the Partnership in helping to achieve the Vision.
- Develops a set of Themes and Actions to guide the work of the Partnership in the next five years to 2023.

¹ Crane Valley Partnership website (<http://cranevalley.org.uk/>) accessed 30/06/17

How this Strategy was prepared

- 1.9. The preparation of this Strategy took place over 5 months between August and December 2017. Independent Consultants (Rural Focus) were engaged to produce the Strategy and provide an independent view on the future of the catchment and Partnership.
- 1.10. A workshop was held with the Partnership on the 3rd October 2017 which examined the legacy of the Partnership to date as well as looking at the challenges and opportunities facing the catchment.
- 1.11. One to one interviews and phone interviews were also held with some members of the Partnership and other key outside organisations and individuals to inform the process.
- 1.12. Thanks go to the following individuals and organisations for their thoughts and inputs in developing the Strategy.

Acknowledgements

- Stephen Alexander..... Friends of Moormead
- Henry Badman Thames Water
- Frances Bennett..... FORCE
- Vicky Boorman..... LB Hillingdon
- Michael Bradshaw..... LB Harrow
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- Rob Gray FORCE
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- Tim Knight Green Corridor
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- Amanda Maclean Environment Agency
- Mat Reed Environment Agency
- Jon Staples..... LB Ealing
- Ilse Steyl Green Corridor (CVP Development Manager)
- Ray Smith..... Yeading Meadows
- Hilary Thomson Tidal Crane Association
- Steve Whitbread..... LB Harrow
- Tom White London Wildlife Trust

2. The story so far

Establishment of the Partnership

- 2.1. The Partnership was established in 2005 as a loose knit group of organisations with a mutual aspiration to improve biodiversity and water quality along the River Crane. During its early years, the Partnership provided a means for voluntary bodies with an interest in the River and its river-side habitats to liaise with statutory bodies including the Local Authorities, Environment Agency and Thames Water. The Partnership also facilitated the development of some initial projects including a London Wildlife Trust led Heritage Lottery Fund project and the GLA funded priority parks project in conjunction with the London Boroughs of Hounslow and Richmond and FORCE.
- 2.2. The failure of a Thames Water sewage sluice gate in October 2011 led to a catastrophic pollution incident which killed an estimated 10,000 fish in 24 hours. A £400,000 compensation fund from Thames Water was made available to the Partnership in 2013 enabling it to appoint a Development Manager and start functioning in a more structured manner.
- 2.3. Around the same time Defra began promoting the Catchment Based Approach as a way of focussing decision making and action more locally in order to deliver River Basin Management Plans and meet the requirements of the Water Framework Directive. Defra funded 63² Catchment Based Initiatives of which the Crane catchment was one, with support and advice provided by the Environment Agency. The area covered by the Crane catchment is shown in **Figure 2.1**.
- 2.4. With funding from Defra a Catchment Plan for the Crane was produced by the London Wildlife Trust on behalf of the Partnership and published in 2013. The catchment Plan established a strong framework for future work, identifying issues that the catchment faced and seven objectives to help deliver integrated catchment management and delivery of the Water Framework Directive Objectives.
- 2.5. Just prior to these developments the All London Green Grid (ALGG) had established a policy framework to promote the design and delivery of Green and, importantly, Blue Infrastructure across London providing a strategic plan for enhancement of the catchment. The combination of the Catchment Plan and the ALGG proved to be a catalyst for collaborative working in the Partnership setting the direction and agenda for future work.
- 2.6. The combined effect of funding from the Thames Water Compensation Fund being awarded in 2013, the endorsement of a Catchment Based Approach from Defra, a clear outline of the issues that needed to be tackled in the 2013 Catchment Plan and the strategic plan for enhancement of both green and blue spaces provided by the All London Green Grid allowed the Partnership to flourish.
- 2.7. The Partnership currently involves 24 Partner organisations from varied backgrounds (listed below) and has made significant progress establishing itself as an effective Partnership.

Key factors in the development of the Partnership have been Defra's Catchment Based Approach, Thames Water's Compensation Fund, the 2013 Catchment Plan and the All London Green Grid

² Evaluation of the Catchment Base Approach Pilot Stage: Final Evaluation Report (2013) Defra

Membership of the Crane Valley Partnership in 2017

- Green Corridor
- London Borough of Ealing
- London Borough of Harrow
- London Borough of Hillingdon
- London Borough of Hounslow
- London Borough of Richmond Upon-Thames
- Heathrow Airport Ltd
- Thames Water
- Environment Agency
- Friends of the River Crane Environment
- London Wildlife Trust
- Thames Anglers Conservancy
- A Rocha
- Cranford Park Friends
- TW4
- The Conservation Volunteers
- Tidal Crane Association
- English Heritage
- The Royal Parks
- Sustrans
- Environment Trust
- Thames 21
- Zoological Society of London
- Canal and River Trust

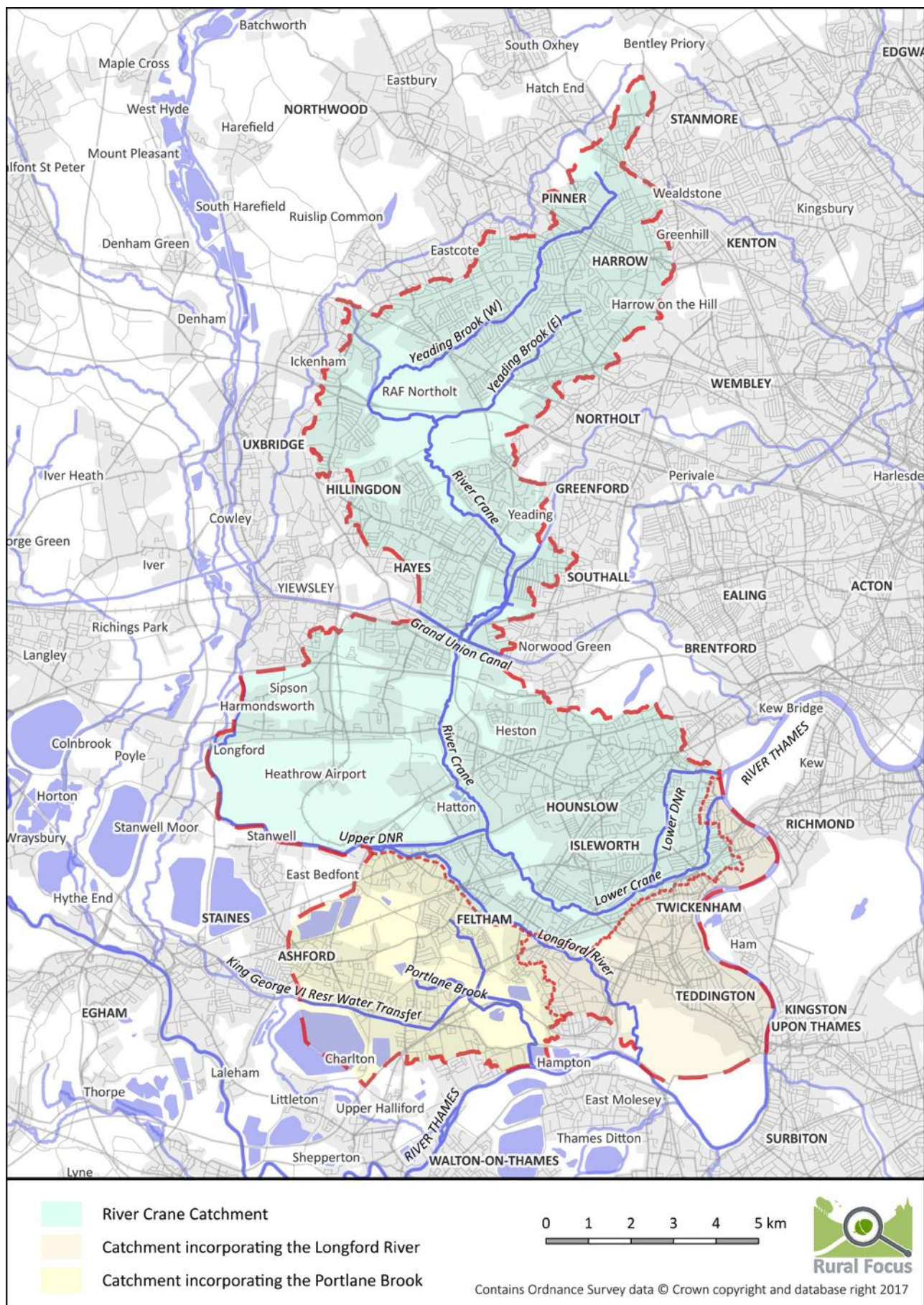


Figure 2.1. The Crane catchment areas

Note: The Portlane Brook catchment has not been part of the project area to-date but is under consideration for the future.

The Partnership's achievements

- 2.8. The Partnership is well regarded, both by Partners and outside organisations that it works with. Projects undertaken by the Partnership are often viewed as being great successes. There is a real sense that there is a good productive relationship amongst Partners that enables them to get on with things and achieve results.
- 2.9. The Partnership has successfully generated approximately £1,000,000 of funding over the past five years in addition to the £400,000 provided through the Thames Water Compensation Fund³. On average £280,000 was spent on the Partnership per annum³.
- 2.10. Of the original £400,000 compensation money 63% (£250,000) of it has been used on physical works projects or monitoring leading to physical works. All of these projects also received additional funding from other source, including local councils, the Environment Agency, Defra, the GLA, and other funding sources such as Biffa etc. The other £150,000 was spent on management of the Partnership and the development of grant applications.³

Headline Achievements

- 2.11. Significant outputs of the Partnership can be summarised as follows:

- 15 km of river restored, improving its value for nature and local people.
- About 10 km of new access routes created, enhancing people's recreational experiences.
- At least 500 members of the public volunteering in projects to enhance their environment.
- Effective working between a diverse group representing 24 organisations.

- 2.12. These successes have been achieved through seventeen successful projects that have been undertaken since 2013. Projects have largely focussed on increasing understanding of and making physical improvements to the river, tackling biodiversity and water quality issues in line with Water Framework Directive objectives. An overview of the projects and their main area of focus is given below in **Table 2.1**.

³ Figures provided by Dr Ilse Steyl.

Table 2.1. Analysis of Partnership projects (current activity shown in bold)

Improving Understanding <i>Baseline/Data/ Monitoring</i>	Planning <i>Feasibility Studies/ Plans</i>	Making Changes <i>Physical Improvements / Changing Behaviour</i>
European Eel Project	Crane Aquatic Refuge Project	Invasive Species Management
Invasive non-native species baseline study	ToolHab	Crane Valley Wetland Enhancement
Phosphorus Investigation & Monitoring – Phase 1		Donkey Woods Northern Wetland SUDS
ToolHab		Only Rain in Rivers
Citizen Crane		Crane Valley Project
Crane River Monitoring Initiative	Key to project focus: <div> <div></div> Biodiversity <div></div> Water Quality <div></div> Multiple Ecosystem Services </div>	Lower DNR Improvement Project
Fish Barrier Assessment		
River Crane Phosphorous Monitoring – Phase 2		
Urban River Surveys		

Successes and challenges that the Partnership has faced

- 2.13. The perception of the Partnership both internally and externally is very positive. The view seems to be that the Partnership has got on and undertaken and completed lots of successful projects that have resulted in good outcomes for the catchment. The Partners seem to communicate and work well on projects, and it is a positive productive environment.
- 2.14. There has been real success in managing to get volunteers involved and interested in the river on a wide range of topics (e.g. the Citizen Crane Project). This has included getting people engaged in issues such as pollution that are generally viewed as being of little public interest compared to for example biodiversity where there has traditionally been greater public enthusiasm and participation.
- 2.15. The Partnership has proven to be a valuable forum for sharing information, particularly between different types of organisations. For example, between community groups and the statutory bodies who don't often have the opportunity to share a platform. Understanding of the river and wider catchment has improved significantly, through both the sharing of information and the projects that have scrutinised the river and provided data for further work.
- 2.16. Examining the impact that the Partnership had made on the five headline issues⁴ identified in the 2013 Catchment Plan, the Partnership felt they had made most progress on tackling heavily modified channels, followed by pollution, restricted access, invasive species and risk of flooding.

Successes include:

- *Involvement of volunteers*
- *Sharing of information*
- *Improving heavily modified river channels*
- *Identifying causes of pollution*
- *Improving access to rivers*
- *Tackling invasive species*

⁴ Heavily modified channels, Risk of flooding, Pollution, Restricted access and Invasive species.

- 2.17. However, greater scrutiny and knowledge of the river has inevitably led to an improved understanding and awareness of the problems that it faces. This is coupled with increasing pressure on the catchment from a range of sources including rising population, increased development and the growing threat of climate change.
- 2.18. There were often conflicting perceptions amongst partners about how much progress had been made. Progress seems to be uneven along the river and action has been thinly spread. There is a consensus that the upper catchment has been relatively neglected, particularly the Yeading Brook.
- 2.19. The focus of the Partnership's work has also largely been on the river corridor rather than the catchment as a whole. This often results in a feeling that the source or root cause of problems are not being tackled. For example, tackling pollution at source from roads and through improved land management was felt to be a priority by many. There was also a feeling that a lack of progress on water quality and water flows had been made and also opportunities missed on local flood risk management such as the adoption of SUDs.
- 2.20. It is worth emphasising that these concerns sit against a backdrop of general satisfaction and the perception that the Partnership had achieved a lot, but with increased information more issues of concern have been identified. The view is that the Partnership suffers from a low profile and low levels of awareness particularly amongst elected members and senior decision makers. It was felt that the perception of what the Partnership does achieve doesn't match what is actually achieved. There are few senior representatives from organisations on the Partnership which may adversely affect the influence it has.
- 2.21. This lack of awareness of the Partnership extends to the river as well, with many sections of the community unaware of the work being done or even the existence of the river. Involvement in the activities of the Partnership and utilisation of the river corridor was felt to be limited to quite narrow sections of the community and specific parts of the catchment. It was felt that communities lacked ownership of the river and catchment as a whole, and were also physically disconnected from many parts of the river, a problem which applies to wildlife as well. The Partnership's work was seen to be worthwhile from a scientific and management point of view, but less good at tackling community concerns and interests.
- 2.22. It was felt that as austerity hits many of the public-sector organisations on the Partnership, particularly the London Boroughs, their roles and levels of involvement were having to change rapidly. This change and uncertainty was causing concern, particularly amongst the community groups in the Partnership, who particularly relied on the Boroughs for advice and practical support.

Ongoing challenges include:

- ***Uneven spread of opportunities/ activities along the river***
- ***A focus on the river corridor to the exclusion of issues in other areas***
- ***A low profile of the Partnership amongst decision makers***
- ***A relatively narrow geographic and demographic base amongst volunteers***
- ***A lack of connection for both people and wildlife both along the river corridor and out into the wider catchment***
- ***Tight budgetary constraints on partners, particularly the Borough Councils***

3. Why is the Crane Valley important?

- 3.1. In order to move forward, it is necessary to first understand why the Crane Valley is important and valuable. Unpacking what is meant by value, its relative nature, to whom and why, both now and in the future, highlights the subjectivity of the term and the need to set out a robust framework to help guide us through the process of understanding the value of the catchment.
- 3.2. Understanding the value of the catchment in a systematic way will provide a robust, consistent evidence-based approach to identifying a Strategy and Vision for the future of the Crane Valley. It uses language that partners', stakeholders and those that the Strategy seeks to influence can relate to, raising awareness and the profile of the catchment.
- 3.3. There are numerous ways of understanding value, both current and potential, and assessing it. Whilst it was not within the scope of this Strategy to undertake a standalone assessment of value, several approaches have been used to develop a framework to consider the current and potential value of the catchment, guide discussions with Partners and Stakeholders, and help identify a way forward for the catchment. These approaches and the framework developed are set out in more detail below.

A framework for understanding value

- 3.4. The catchment is made up of a number of physical components, or natural capital assets (e.g. freshwater, parks, woodland etc), and identifying them is an important first step to improving understanding about the catchment. It is then possible to determine the functions or 'ecosystem services' that these assets perform and in turn the benefits that they provide people. However, this ecosystem services approach does not necessarily tell us which assets and services are most important to the catchment environment, the people who live and work there and society at large.
- 3.5. Defra is currently promoting The Natural Capital approach which builds on this concept of 'ecosystem services'. It recognises the range of natural capital assets in a given area and seeks to place an objective value (measured in physical or monetary terms) on the services these provide to society. Examples of these assets and services, and the relationship between them and the overall benefits to society, are shown in **Figure 3.1**.

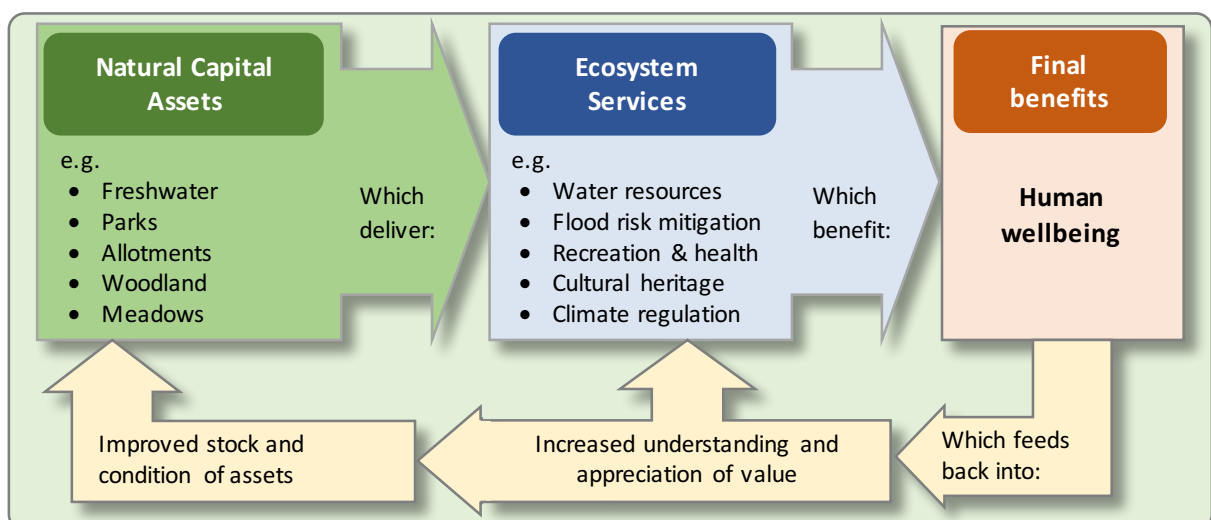


Figure 3.1. The relationship between natural capital assets, services and benefits to society
After ONS (2017). Principles of Natural Capital Accounting

- 3.6. The Natural Capital approach is useful for understanding the Crane Valley and the benefits it provides to the people who live and work there, and more widely to society as a whole. It recognises the physical and cultural assets that provide the ecosystem services they provide, and it recognises the connections between them and the wider economic and social interactions. This Strategy uses the concept of natural capital as the underpinning framework for working out what is valuable from a catchment perspective, and why. More information about the concept is available from the reports of the Natural Capital Committee.⁵
- 3.7. The Natural Capital approach can be taken a step further, attributing a monetary value to assets and services (known as Natural Capital Accounting). It was not felt that an Accounting approach would be appropriate for the Crane Valley at the present time. Attributing a monetary value to assets that are traded and have a recognised 'market' economic value (such as drinking water or crops) is relatively easy to do and a number of studies have done this⁶. However, generating a monetary value, that people recognise as realistic, for things that are not currently traded (such as biodiversity or clean air) is more difficult and has not been attempted for this Strategy.
- 3.8. In the early 2000s the Countryside Agency, English Heritage, English Nature, and the Environment Agency collectively developed an approach called The Quality of Life Capital (QofLC) approach. It provides a way of prioritising the importance of assets and services where monetary values are not available. It was felt that QofLC was a much more appropriate approach which to base a framework around for understanding the Crane Valley. The QofLC approach uses a deliberative process that is well-suited to workshops and interviews, taking participants through a series of 'What Matters and Why' questions such as:
- Why they are important?
 - To whom?
 - At what spatial scale are they important?
 - How important are they? – Are there enough of them, are they replaceable / interchangeable?
- 3.9. The answers to these questions can be used to help understand both the current and future potential value of the catchment and prioritise the need for policy interventions. Variations on these questions formed the basis of the workshop with the Partnership and in-depth interviews with Partners and Stakeholders.

This Strategy uses the Natural Capital approach to recognise what is valuable and why, in the context of the catchment.

It uses the Quality of Life Capital approach to consider the relative priorities and values of different natural capital assets and the services they provide

⁵ <https://www.gov.uk/government/groups/natural-capital-committee>

⁶ For instance, see the Natural Capital Account produced for the Beam Parklands in the Borough of Barking and Dagenham in 2015. https://www.london.gov.uk/sites/default/files/beam_parklands_natural_capital_account_final_report_eftec_november_2015.pdf

What is valuable about the Crane Valley and why?

- 3.10. The River Crane is one of the most natural rivers in London and a main tributary of the River Thames. The river source is in Harrow, north London where it is called the Yeading Brook. It flows through five west London boroughs – Harrow, Hillingdon, Ealing, Hounslow and Richmond – changing its name to the Crane where it crosses beneath the Grand Union Canal in Hayes and joining the Thames at Isleworth. The River Crane becomes tidal near the Thames.
- 3.11. The River Crane system includes the Duke of Northumberland's River which links the Crane Valley to the Colne Valley. This channel was built in the 16th Century as an artificial water supply and used as a source of water power for mills and to provide water to Syon Estate.
- 3.12. The Longford River is not hydrologically linked to the River Crane but has been included in the Crane catchment as part of the Environment Agency's sub-catchment mapping and formed part of the catchment area since 2013. Built in 1639 on the instigation of Charles I to supply water from the River Colne to Bushy Park and Hampton Court Palace it provides 12 km of artificial river channel and associated green corridor.
- 3.13. The catchment area of the river is 127 square kilometres⁷. The landscape is generally flat (the maximum height at the source near Harrow being 120 m above sea level) and generally the channel is narrow, shallow and slow running throughout its course with small meanders, braided channels and flood plain still evident despite alteration and urbanisation. Sections of woodland, wetland and heath as well as flood plain still survive, recognised as vital wildlife corridors for the area. There are six nature reserves along its length, including Ickenham Marshes, Gutteridge Wood and Crane Park Island (part of Crane Park).
- 3.14. The Crane Corridor Site of Metropolitan Importance for Nature Conservation lies along the river and also covers large open spaces such as Cranford Park and Hounslow Heath. The river corridor has been known, since the Middlesex plan of the 1920's, as the 'West London Green Chain', a 20 mile stretch of interconnected green spaces that runs along the River Crane and its key tributary, the Yeading Brook, to the River Thames. This designation has helped to secure and protect its open space and character.
- 3.15. In order to identify and understand all of the natural capital assets present in the Crane Valley in a methodical way, natural capital assets that were relevant for an urban/sub-urban context such as the Crane Valley were identified using the (UKBAP) Terrestrial and Freshwater Biodiversity Broad Habitat Groups⁸ as a starting point. Ten natural capital assets that either currently or potentially are present in the Crane catchment were defined, these are:

The River Crane is one of the most natural rivers in London with links to significant areas of woodland, wetland and heath, as well as site of historical importance

- Woodlands
- Boundary, linear features and isolated trees (e.g. street trees)
- Farmland (arable, horticultural and pasture)
- Riparian habitats (fen, marsh, carr)
- Standing open water and canals
- Rivers and Streams
- Parks and open spaces (regardless of ownership and accessibility)
- Sports grounds (golf courses, sports pitches etc)
- Land surrounding buildings and infrastructure (private gardens, land on commercial premises, land adjacent to infrastructure e.g. railway sidings)
- Allotments

⁷ Crane Valley Partnership website (<http://cranevalley.org.uk/>) accessed 30/06/17

⁸ Broad Habitat Classification (UK Biodiversity Group 1998b)

3.16. During the preparation of this Strategy, an initial review of the extent of these assets was undertaken. The assets were grouped into categories, based on the level of public access. **Figure 3.2** shows the proportion of the catchment made up by each category of natural asset, together with areas of housing and industrial land. **Figure 3.3** shows the spatial distribution of the categories around the catchment.

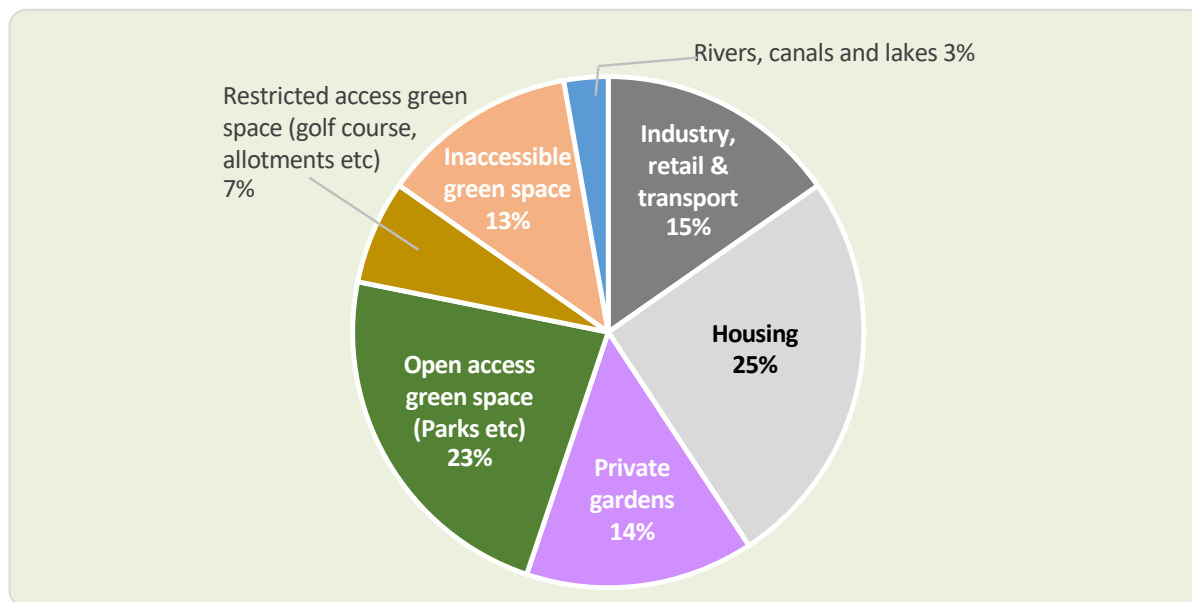


Figure 3.2. Breakdown of land use and natural capital assets in the catchment

Source: Initial spatial analysis of natural capital assets undertaken for this strategy

3.17. **Figures 3.2 and 3.3** reveal the following conclusions about the significance of natural capital in the catchment.

- Well over half of the area of the catchment (59%) is covered by green or blue space, providing a very significant reservoir of natural capital.
- Natural capital is widely distributed throughout the catchment and many of the larger sites lie next, or close, to the river corridor. The rivers can be seen as the central thread running through the catchment connecting a rich network of natural capital assets which extend out into the rest of the catchment.
- Publicly accessible green space occupies one third of the catchment (23% having open access and 7% having restricted access). Again, these areas are strongly clustered along parts of the river network, particularly around the Yeading Brook Meadows/Gutteridge Wood/ Islip Manor Meadows, Cranford Park, Hounslow Heath and Bushy Park.
- Despite the strong clustering of publicly accessible green space along the river network, there are parts of the catchment where there are few such areas, such as along the middle and upper reaches of the Yeading Brooks (East and West) and in the Lower Crane.
- Concentrations of privately owned and publicly inaccessible green space, which nevertheless potentially has a value as natural capital, lies in development land and farmland north of Heathrow and around RAF Northolt.
- Private gardens are a ubiquitous and largely unrecognised (in public policy) natural capital asset.

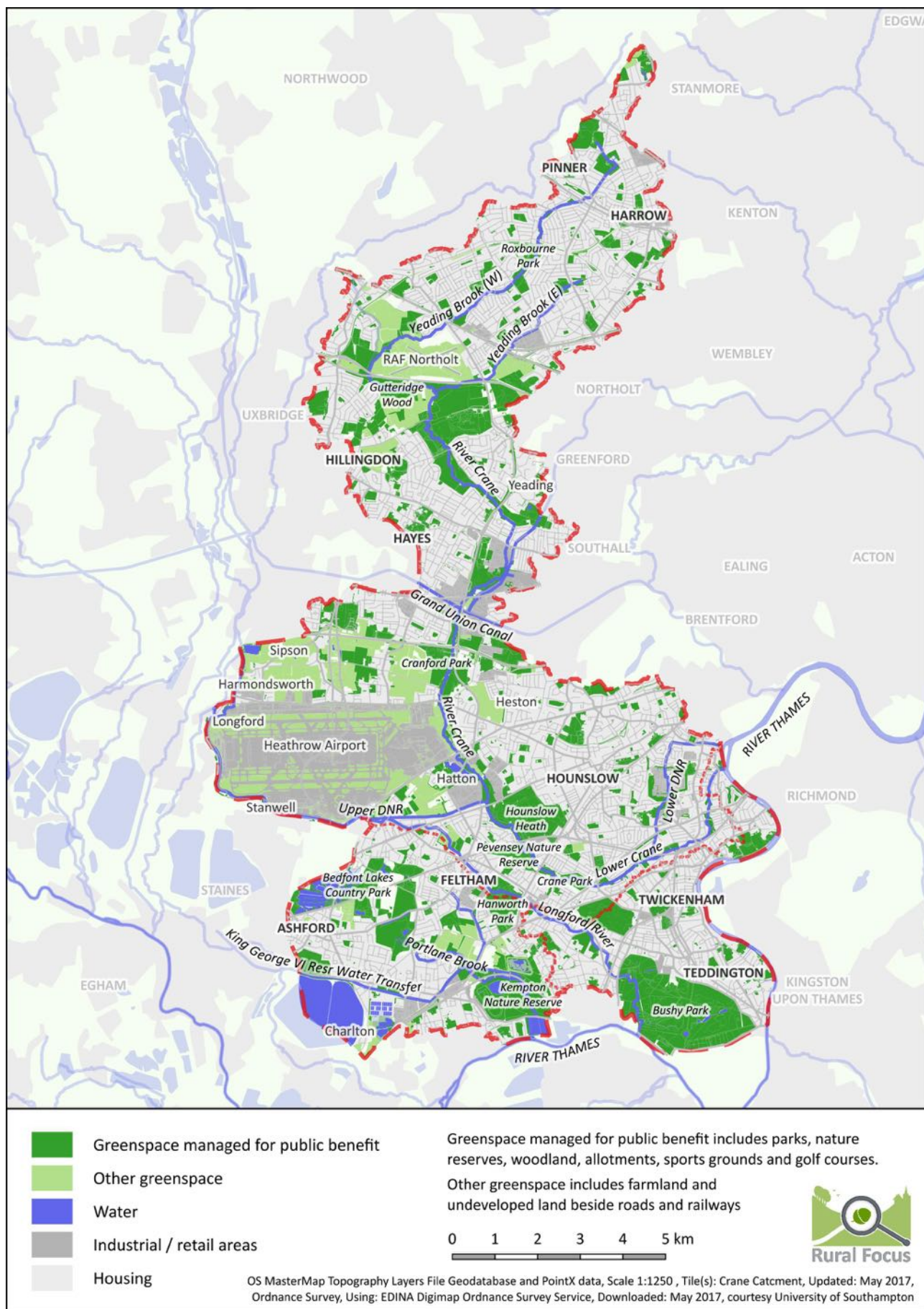


Figure 3.3. Distribution of natural capital in the project area

Source: Spatial analysis undertaken for this strategy

The benefits to society provided by natural capital in the catchment

- 3.18. As **Figure 3.1** demonstrates, each natural asset in turn provides multiple ecosystem services. A description of these ecosystem services is given in **Table 3.1**.

Table 3.1 Description of the ecosystem services ('natural benefits') provided by the catchment

Water quality	Provision of good or high biological and chemical status of water in rivers, watercourses, lakes and ponds
Water flow	Maintenance of an adequate flow of water in rivers and streams, sufficient to maintain healthy populations of aquatic life
Flood risk management	Interception and slow release of rainfall, reducing the risk of flooding from groundwater, surface water or rivers
Soil quality and retention	Conservation of healthy living soils, supporting rich biodiversity and retaining water and organic matter
Air quality	Filtration and purification of air, removing particulates and other forms of air-borne pollution
Climate regulation	Cutting emissions of greenhouse gasses (e.g. carbon dioxide, methane and nitrous oxide) and sequestration of carbon in vegetation and soils
Wildlife (biodiversity)	Conservation of a range of semi-natural habitats and healthy populations of wildlife, including key indicator species
Food	Provision of nutritional food and drink produced to high standards of environmental care, animal welfare and social benefit
Recreation	Provision of public access for a range of outdoor recreational activities, including active sports as well as more passive enjoyment
Corridors for movement / access	Maintenance and enhancement of the network of green space, accessible to people and wildlife, enabling connections across the catchment
Landscape amenity	Provision of high quality outdoor spaces where people gain a sense of place and wellbeing from nature
Historic and cultural heritage	Preservation and public appreciation of sites and activities which tell the story of the area's past and/or keep alive cultural knowledge and memory
Education / Teaching resource	Development of human knowledge and understanding, amongst all ages and communities
Employment / livelihoods	Provision of fulfilling and rewarding work that provides valued goods and services to society, whether on a paid or voluntary basis

- 3.19. The relationship between the natural capital assets found in the Crane Valley and the ecosystem services that they currently provide and have the potential to provide in the future is set out in **Table A.1** in the **Technical Annex**. This initial assessment, which is based on the judgements of the consultants rather than a rigorous analysis of data or consultation with stakeholders, provides an initial starting point for understanding the current benefits provided by the Crane Valley.
- 3.20. The assessment suggests that the most valuable natural capital assets are **woodlands** and **public parks** because of their role in supporting the majority of ecosystem services that were reviewed. **Allotments** also provide broad value and, perhaps surprisingly, so does the publically inaccessible **open space that surrounds infrastructure such as roads and railways**. As expected, the **rivers and associated wetland habitats** have a vital role in supporting such as water flow and quality, but are also significant for landscape character, biodiversity and cultural heritage.
- 3.21. This initial assessment has not been able to examine how the condition of natural capital in the catchment affects service delivery. This is something that deserves further attention.

Who is the Crane Valley valuable to?

- 3.22. The benefits that the catchment deliver vary in their impact. Whilst some benefits can only be of use and enjoyed by those in the immediate vicinity of the catchment others make up a vital part of systems that are regional, national or even international in scale. **Table 3.2** below identifies the geographic scale of ecosystem services delivered by the Crane Valley. This contrasts the global scale of the climate regulation service (where actions like sequestration of carbon in vegetation have a widely dispersed impact) to the more localised benefits from services such as flood risk management, food and landscape amenity.

Table 3.2. The geographical scale of the ecosystem services provided by the catchment

Service / Significance	The Planet	United Kingdom	London	Crane Valley	House-holds
Water Quality		•	•	•	•
Water Flow				•	•
Flood risk management				•	•
Soil quality and retention				•	•
Air Quality			•	•	•
Climate regulation	•	•	•	•	•
Wildlife (biodiversity)		•	•	•	
Food				•	•
Recreation			•	•	•
Corridors for movement			•	•	•
Landscape amenity				•	•
Cultural Heritage			•	•	•
Education			•	•	•
Employment / livelihoods			•	•	•

- 3.23. In turn, those that benefit from them and value them might come from different sections of society either decision makers, businesses or local residents. The same benefit may be of significantly different value to different people. It is important to recognise this when looking at the value that the catchment holds that the needs of different groups may be different at different spatial scales and depending on the scarcity of that service in that locality and its availability to that group of people.
- 3.24. The Crane Valley is home to 567,246 people⁹ with a further 86,852 people living in the Portlane Brook catchment¹⁰. Around 620,000 people work in the catchment, a high proportion of them in and around Heathrow, many travelling into the area from outside. The catchment is socially varied in terms of age structure, income levels, economic activities and health outcomes. The ecosystem services provided by the Crane Valley are potentially valuable to everyone living and working there. However, services such as landscape amenity, recreation, high quality food, education and employment may be particularly valuable to people with poor access to services and life opportunities. **Figure 3.4** maps the areas with relatively high levels of multiple deprivation (showing communities classified by the Department for Communities and Local Government as being in the bottom 20% across England).

⁹ Crane and Longford catchment 2011 ONS Census Data

¹⁰ Portlane Brook catchment 2011 ONS Census Data

How rare and replaceable are the benefits provided by natural capital in the catchment?

- 3.25. The final part of the jigsaw in understanding the environmental value of the catchment requires an understanding of how dispensable (replaceable or transferable) the benefits are provided by natural capital. For instance, areas that provide essential benefits that either cannot, or would take a long time, to be recreated elsewhere should be considered more valuable than those where the benefits can be easily transferred. Making these judgements needs to take account of the wider geographical setting of the catchment as well as opportunities that may exist for creating or improving the quality of natural capital. A detailed assessment of this task is beyond the scope of this Strategy, requiring both analysis of evidence and a deliberative process of discussion with partners. However, the following broad judgements can be made:
- Biodiversity and cultural heritage are two services that take a long time, or are impossible, to relocate or recreate. Natural capital that delivers these services, such as nature reserves and sites of historic importance have a high value and should receive priority in their protection and conservation.
 - A number of services need to be located in specific areas to be of value, but there may be flexibility over time, allowing movement and recreation in new areas, or in improving the quality of provision on key sites. For instance, natural capital can only provide landscape amenity value if it can be experienced (seen or visited) by people, but this value can be relatively easily be created or improved. The same considerations apply to services such as flood risk management and water flow.
 - Greatest flexibility and opportunities for transferring the benefits of natural capital apply to services such as climate regulation, food production, education and employment (although distance from people is a factor in several of these).
 - In heavily built up areas such as the Crane Valley, the potential for relocating or creating new natural capital is significantly compromised by the availability of undeveloped land.

Conclusions on the value of the Crane Valley and its catchment

- 3.26. The following overall conclusions can be drawn from this section.

- The concepts of natural capital and ecosystem services provide a **good framework for thinking about what is valuable** in the catchment, and what the future **priorities for protection, conservation and enhancement** should be. While it is not necessary to calculate monetary values in order to establish priorities, it is helpful to identify who should benefit from the natural capital and how these benefits can be improved or provided in different ways.
- The catchment contains **an extensive network of natural capital** occupying nearly half of its area. This network collectively provides a **wide range of services and benefits** to the people who live and work there, as well as to wider society on London and beyond. There are opportunities to **improve awareness and understanding**, amongst the public and decision makers, of the value of this natural capital.
- Much of the natural capital is **clustered along the river corridor**, which provides **the central thread** connecting up and reaching out to green space across the catchment.
- Some of the area's natural capital is **indispensable and irreplaceable**, meaning that the highest priority must be given to conserving these sites. In other areas, the natural capital is renewable, and benefits provided may be transferable.
- This analysis offers opportunities for **engaging with planners and developers** over the role that green spaces and natural capital should play in the future.

4. What does the future hold for the catchment?

- 4.1. It is essential that the Catchment Partnership's future strategy anticipates and responds to the major changes that are in store for the Crane Valley. Of course, no one can be sure precisely what will happen, but this section draws on horizon scanning of national and regional research and the views of local stakeholders to identify the key drivers of change and the sorts of policy responses that will be needed over the next ten years.

International and national drivers of change

- 4.2. This section highlights the impacts of three big external pressures that will act on the catchment: the growing population, the changing climate and wider economic / social change.

The Growing Population

- 4.3. London's population is predicted to increase by 20% over the next 25 years (from 8.7 M to 10.5 M people). This will have significant impacts on the catchment, including the increase use of the major roads and rail links and, if the rate of house growth was replicated in the catchment, another 130,000 residents. Suggested policy responses to the growing population that will be relevant to the Catchment Partnership and natural capital are likely to include:

- **Major investment in sewerage and dirty water treatment.** It will be important that an expanded and improved water treatment system, funded through development schemes, improves the existing connectivity of the network and reduces the risk of pollution to water bodies and groundwater.
- **Increase in housing stock, employment land and amenities.** It will be important that natural capital is protected as there is pressure to increase housing employment and amenity densities. Ensuring there is space for water and runoff through natural drainage will be particularly important so the burden on the waste water system is not increased.
- **Expansion in transport infrastructure** (roads, rail and air as well as the pedestrian and cycle network). Steps need to be taken to ensure that increased road and rail use do not increase pollution to air and water and that unavoidable emissions are safely dealt with. This should include containment measures as part of transport schemes to trap and treat potentially polluted run-off and airborne particulates, in which natural capital can play an important role.
- **Better use of undeveloped areas** to provide high quality green and blue infrastructure. The planning system must ensure that adequate resources are channelled from development to enhance both the the stock and condition of natural capital so that it supports the widest possible range of ecosystem services. It is likely that the area of developed land in the catchment will increase but this must be accompanied by an increase in the quality of the remaining natural capital and the benefits it provides to society.

London's growing population will have significant impacts on the catchment, requiring major investment in water treatment, measures to address pollution from transport and increases in the quality and use of green spaces

The changing climate

- 4.4. The warming world is bringing a host of interrelated changes, including sea level rise, increased storminess (and the potential for flash flooding), increased periods of high temperatures and drought (with the risk of heat stress for people and the environment) and changes in the distribution of species. Suggested policy responses that will be relevant to the Catchment Partnership will include the following:

- **Strengthening the resilience of the natural environment (and society)** to adapt to change. Ensuring that habitats, soils and water bodies are in optimum condition and free from stresses such as pollution will ensure that they are best able to adapt to extreme weather and long-term changes to the climate. This should include giving nature sufficient room and connections across the catchment. New pests and diseases are already being encountered and decisions will be needed about how much change can be resisted and countered, and how much should be accepted and adapted to.
- **Reducing greenhouse gas emissions**, helping to reduce climate change. There is much that can be done to harness natural capital to reduce emissions of carbon dioxide and other greenhouse gases. This includes renewable energy generation to replace fossil fuels and locking up carbon dioxide in plant tissue and soils. Although the scope for these in an urban catchment such as the Crane Valley is limited, there will be important opportunities to use natural capital to raise awareness and demonstrate solutions to residents and businesses. The catchment does however hold great potential to help promote sustainable modes of transport providing a natural corridor which can help deliver an improved network of walking and cycling routes.

The warming world requires action in the catchment to strengthen the resilience of nature to change, as well as using of area's natural capital to raise awareness of what can be done to reduce it

Wider social and economic change

- 4.5. A range of broader changes affecting people's lives and occupations will take place and will affect the work of the Catchment Partnership and the condition of natural capital. These include:

- **Ongoing economic recovery and Brexit.** The next ten years should see a gradual recovery from the last ten years of austerity which have seen declining public spending and low private investment. However, it is likely that the budget of local authorities will continue to be tightly constrained and this will affect their role as major land owners, managers and regulators in the catchment. The precise impacts of Brexit are as yet difficult to predict but, as far as natural capital is concerned, are likely affect the pace and direction of economic development and may include changes to environmental regulations and incentives.
- **Technological innovation** and how society responds to this are particularly difficult to predict. However, it is likely that increased automation will affect many parts of our lives, including manufacturing and transport. The focus of innovation is also likely to be on improving resource efficiency and reducing unwanted impacts such as pollution. If the past is anything to go by, new technologies and innovations are likely to increase people's leisure time, increasing demand for outdoor recreation and interest from people in voluntary work in the natural environment.

The slow recovery from the period of austerity will continue to affect the public funding available for catchment work

Wider technological and social change could see increase demand for recreation and volunteering in the natural environment

Specific policy changes likely within the catchment

- 4.6. The large scale external changes described above will produce local responses from policy makers, businesses, communities and consumers. Four specific developments that will or may take place within the catchment are highlighted here: Local Authority Planning Cycles, the third runway at Heathrow, Thames Water's proposal for a Smarter Catchments programme and London Mayoral initiatives.

The 25 Year Environment Plan

Whilst this Strategy was being finalised the Government published its 25 Year Environment Plan (YEP) (February 2018), which is intended to set out a comprehensive and long-term approach to protecting and enhancing England's natural landscapes and habitats. It is intended to set the direction for environmental policy making at both the national and local level not just for the Government and Local Authorities but a wide range of other stakeholders.

Although specific details are as yet unknown, the 25 YEP strongly promotes a catchment-based approach and highlights the potential roles that Catchment Partnerships can play in promoting it. This is a significant opportunity for the Crane Valley Partnership that needs to be carefully monitored as details emerge about delivering the Plan.

Among the actions that the Government pledges to take, several specifically mention using a catchment approach, including:

- Respecting nature in how we use water;
- Improving how we manage and incentivise land management;
- Supporting large scale woodland creation; and
- Developing a nature recovery network.

The role that Catchment Partnerships might play in delivering the 14 Area Integrated Plans that will develop into Natural Capital Plans covering the whole country is also highlighted.

Planning policy

- 4.7. The way in the catchment will be shaped by future built development will be determined by the new London Plan (currently in preparation) and by the various Local Plans (adopted or in preparation). From the strategic policies, to the specific development policies and site allocations, these plans will determine where development is encouraged and discouraged and what safeguards are required to protect and enhance the environment and public services.
- 4.8. It will be essential that the needs of nature and natural capital in the catchment continue to be strongly supported in the delivery of planning policies, ensuring that the obligations of landowners and developers are met. The Catchment Partnership could have a key role in helping to co-ordinate the delivery of planning policy in relation to the protection and enhancement of natural capital. This can be achieved by the Local Authority representatives on the Partnership raising the profile of the information held by the Partnership, and other partners, on natural capital and ensuring it is used

The Partnership could have a key role in policy to protect and enhance natural capital in the catchment

as evidence for policy development. The broad multi-agency nature of the Partnership means that it is unlikely to have a role in lobbying or commenting on specific planning policies or decisions, in the way that individual partner organisations may wish to do.

Heathrow Third Runway

- 4.9. The current proposals to add a third runway would involve the large-scale redesign and redevelopment of the area around the airport, particularly to the north west of the current site. This redevelopment includes an increase in transport and support infrastructure as well as new business parks, hotels and housing, many of which would increase pressure on greenspace, but could also improve the quality and accessibility of natural capital. There would be major hydrological changes to the neighbouring Colne Valley and also changes in the Crane Valley to the Duke of Northumberland's River and the Longford River, as well as new balancing ponds beside the River Crane itself. These have the potential to affect the flow and quality of these water bodies (positively or negatively), depending on the measures included in the Masterplan.
- 4.10. Although the development poses challenges to natural capital, it also has the potential to offer many opportunities to improve the stock, condition and public enjoyment of natural capital, both as part of the mitigation and enhancement measures delivered through the Masterplan and also as a result of the subsequent development and management this would lead to.
- 4.11. The Catchment Partnership could have a major role to play in the development and delivery of these measures, and in ensuring that natural capital is adequately protected and conserved. The Partnership's role should be one of helping all parties to identify and deliver practical solutions. As noted above, its broad structure means that it should avoid seeking to influence planning decisions; rather it should assist effective delivery once decisions are in place.

The Partnership could have a key role in environmental work arising from a Third Runway

Thames Water Smarter Catchments

- 4.12. Thames Water is proactively seeking to develop new approaches that build better functioning river catchments in ways that improve drinking water quality, reduce pollution, manage flood risk and improve the environment¹¹. It is currently working with stakeholders in the Evenlode catchment in the headwaters of the Thames but intends to expand its piloting approach to further catchments in future, dependent on approval from OFWAT as part of its Price Review 2019 (PR19).
- 4.13. Thames Water has identified the Crane catchment as one its new pilots, representing the range of issues and opportunities typical of an urban river system. There will then be an opportunity for the Catchment Partnership to engage closely with Thames Water to explore how the Partnership could help Thames Water develop and deliver this initiative. This could offer a significant opportunity for the Partnership to develop its work in coming years.

There may be an important opportunity for the Partnership to engage with Thames Water's Smarter Catchments Project

Mayoral initiatives

- 4.14. The London Mayor is responsible for leading public policy across London on a range of topics relevant to the Catchment Partnership including the environment, transport and planning (covered above).

¹¹ <https://corporate.thameswater.co.uk/About-us/Protecting-our-environment/Smarter-water-catchments>

- 4.15. The London Environment Strategy and the Mayor's Transport Strategy are both currently out to consultation. The Environment Strategy will establish London-wide objectives and actions addressing issues such as air pollution, green infrastructure and climate change, while the Transport Strategy adopts the Healthy Streets approach to improving health and safety. For all of these there are likely to be significant opportunities for activities in the catchment involving the conservation and wise use of natural capital. The Catchment Partnership could have a significant role in championing and helping to deliver these objectives.

The Partnership could have a significant role in delivering aspects of the Mayor's environment and transport strategies

What does this mean for the Partnership?

- 4.16. These impending changes present the Crane Valley Partnership with a number of issues about what its objectives should be and how it will be best able to address them. These can be framed in the following questions which are addressed in the following sections of this Strategy:
- What is the Partnership's **Vision** for the future of the catchment? How does it want the catchment to change and be perceived by people?
 - What is the Partnership's **Ambition** for itself? What should its role be in helping to bring about its Vision?
 - What **priority themes** should the Partnership work on? What outcomes does it wish to focus on and what actions are needed to achieve these?

5. The Vision and Ambition

- 5.1. Understanding the value of the Crane Valley - what, why and to whom - and the challenges it faces in the future enables a vision for the future of the catchment to be proposed. This section sets out this **Vision** of the future of the Crane Valley that should guide the work of the Partnership. It also suggests what the **Ambition** of the Partnership should be in the way it helps bring about that vision, informed by an understanding of the successes of the Partnership to date and the context that it will have to operate in going forward.

Vision for the catchment

- 5.2. The following Vision sets out a goal for how the rivers and all the natural capital in the Catchment Partnership Area should be recognised, used and cared for. While it is intended that this Vision will be 'owned' by the Partnership, it should be understood and accepted by all the public bodies and large businesses that own, manage or have responsibility for regulating land and water in the catchment. It restates and develops the themes set out in the Partnership's previous mission statement (**Table 1.1**), such as the importance of raising awareness of sustainable management, the need to improve biodiversity and promote connectivity along the river corridor, and its importance as a resource for healthier living and education.
- 5.3. The Vision is intentionally broad, high level and long term, covering the period to 2028. The policy priorities and actions that arise from it over a shorter period are described in **Sections 6-8**.

Vision of the Crane catchment in 10 years' time

The rivers and waterbodies in the catchment are widely **recognised and valued** as the **'central thread'** that links together the natural environment around the north-west quadrant of London - the wildlife habitats, public parks and other green spaces. This corridor of natural capital is perceived as essential to the areas prosperity, health and wellbeing and it is understood that the natural environment of the catchment forms the backdrop, underpins and is the foundation for all forms of activity in the catchment.

Those **living and working in the catchment** can easily access the length of the rivers, waterbodies and surrounding greenspaces, where the wildlife and biodiversity are thriving, and pollution levels are low.

Local residents, businesses and policy makers understand the way that **natural capital enriches people's lives** and the **interconnected** nature of the catchment. They understand the way that their actions affect it and impact on how well it can deliver the benefits that it provides them.

Local communities, businesses and policy makers that fully represent the diverse makeup of the catchment are **actively involved** in caring for, and improving knowledge about, natural capital and feel a shared sense of responsibility to look after and ensure that it thrives in the future. The needs of natural capital are **prioritised in decision making** at all levels and by all bodies, and resources are allocated to it to enable action to be taken.

Ambition for the Partnership

- 5.4. The following Ambition establishes the priorities that will guide the work of the Partnership in helping to realise the Vision. The timescale for this Ambition is shorter, at five years, than that for the Vision. This recognises that the role of Partnership will continue to develop during this period and new opportunities for how it can work most effectively will emerge.

The Ambition of the Crane Valley Partnership over the next 5 years

The primary role and justification for the Partnership is that it will **fill gaps and add value** to the work done by its partner bodies. In other words, it will focus on the things that partners are individually less able to do. It will do this in three ways, by being:

- **The champion for natural capital in the catchment:** The Partnership will adopt a strategic role as an influencer and enabler, working through its partner bodies to ensure that the needs of, and benefits provided by, all the green and blue spaces in the catchment are fully recognised and prioritised by its partners and by other key landowners and policy makers involved in the catchment.
- **The gateway for public understanding and participation in caring for natural capital:** The Partnership will co-ordinate and promote activities by its partners and others that engage and involve the public in learning about, conserving and gaining benefit from the catchment and its natural capital. It will support and develop partners' communication with local residents and businesses, helping to build community capacity and local resources to enhance the stock and condition of natural capital.
- **The conduit for funding to enhance and extend natural capital:** The Partnership will provide the administrative facilities and shared identity for programmes of work in the catchment involving partners and others. It will add value to partnership projects, writing or co-ordinating funding bids, managing external contracts and providing the monitoring and reporting functions that will deliver projects most effectively.

- 5.5. It should be noted that there are important issues about the legal status, structure and governance of the Partnership that will best enable it to deliver its mission. These issues are not resolved in this Strategy but are considered further in **Section 8**.

Themes for delivering the Vision and Ambition

- 5.6. In order to achieve this Vision for the Crane Valley and the Ambition for the Partnership, there are three streams of activities that need to be prioritised. These are as follows.

Thinking spatially



► Section 6

Involving communities



► Section 7

Gearing up to the big opportunities



► Section 8

6. Thinking spatially

- 6.1. Thinking about and unpacking what, why and to whom the Crane Valley is valuable helps us understand the complexity of the catchment. Spatial planning works with that complexity to find solutions that acknowledge and integrate the competing uses and demands on the catchment and prioritises what is valuable about the catchment and the way it functions. Taking a spatial approach to thinking about the catchment and the interventions and projects that the Partnership pursue is the first theme that will be prioritised by the Partnership to deliver the Vision. Taking a spatial approach will help creating a strong sense of place and help ensure it achieves its full environmental, social and economic potential, strengthening the connection between the natural environment and the people who live and work in the catchment as well as with those further afield.

Spatial themes

The central spine

- 6.2. The catchment's rivers and waterbodies form a central spine bordered by the majority of the catchment's large areas of greenspace. This corridor links together the natural environment in the catchment and provides a strong sense of place not only for the catchment but also for this north-west part of London. Enhancing and connecting to this central spine provides the narrative for the role that the rivers, water bodies and greenspaces provide to the catchment and the people living and working in it.
- 6.3. Whilst looking from the air, the rivers, waterbodies and natural greenspaces of the catchment form a clear central corridor, on the ground the picture is much more fragmented and disconnected. For both people and wildlife there are several key physical (and other less tangible) barriers to travelling the length of the rivers and for many communities it is difficult to easily access significant areas of the greenspace, rivers or water bodies, even when they are on their doorstep. For people and wildlife to find safe corridors to travel from the more distant parts of the catchment (or from surrounding catchments) to the central corridor is especially difficult. Yet for the whole population of the catchment to benefit from much of the natural capital the catchment provides, or has the potential to provide, access to the rivers, waterbodies and large areas of green space is necessary.
- 6.4. The Partnership will work to promote, consolidate and protect and reconnect this central spine and carry out projects that enhance and optimise the natural capital provided by this unifying feature of the catchment and reconnect it both along their length and also with the wider catchment. They need to act as an advocate for the rivers to protect against any further fragmentation. The All London Green Grid River Colne and Crane Area Framework (10) provides a policy framework to promote the design and delivery of 'green infrastructure'. It sets out strategic opportunities and specific projects in the Crane Valley that provide an excellent starting point for identifying project opportunities that are still highly relevant despite being published in 2012. The Partnership will re-evaluate the proposed projects and identify what the next steps would need to be to take them forward, working closely with the Mayor's office. A flagship project that implements elements of the All London Green Grid projects for the area improving connectivity for people and wildlife along the river will be championed and led by the Partnership.
- 6.5. **Figure 6.1** shows how the strategic corridors, links and hubs that were developed in the All London Green Grid (ALGG) Area Framework map onto the catchment. This spatial framework, which was

produced in 2011, remains relevant (fitting closely with the natural capital assets identified in this Strategy) and will be used to guide and prioritise future action.

Whole catchment

- 6.6. The work of the Partnership has to date, largely focussed on the rivers and this central spine. Yet the catchment is naturally defined by surface water hydrology and as a result many of the issues facing the river originate in activities taking place in the wider catchment.
- 6.7. Whilst this central spine will remain an important focus for the work of the Partnership, the Partnership needs to take a truly catchment wide approach to tackle many of the problems facing the catchment at source. This will affect the type of projects undertaken as well as their spatial location. In order to maximise the impact that the Partnership can have, projects will focus on this catchment wide approach and either work on interventions that apply across the whole catchment or are piloted in one area with a clear plan for how they can be rolled out across the catchment. Taking a broad and consistent approach across the catchment should help to reduce fragmentation, divergence along the catchment, tackle problems at the source and develop a truly integrated catchment.
- 6.8. Again, the All London Green Grid Area Framework that covered the Crane (No 10) provides a valuable source of information and suggested priorities for projects. The Technical Annex to this Strategy includes a copy of all the potential projects in the catchment that were identified at workshops and by partners during the preparation of the Area Framework in 2010/11. These need to be reviewed, any progress noted and then updated to include new project opportunities. An updated list can then be used to prioritise funding and delivery.

Portlane Brook

- 6.9. The Portlane Brook on the south-western edge of the catchment is not hydrologically linked to the catchment or currently covered by the Partnership. However, it is included within the Environment Agency's Crane Water Framework Directive operational catchment boundary. Very little is known about the issues that affect the Portlane Brook or the communities that surround it. As the Brook is currently orphaned from any other catchment it is in many respects advantageous to include it within the Partnership's remit. However, further information should be gathered to gain a better understanding of its needs and the challenges it faces and whether the Partnership will be in the best position to adequately address them before a decision is made.

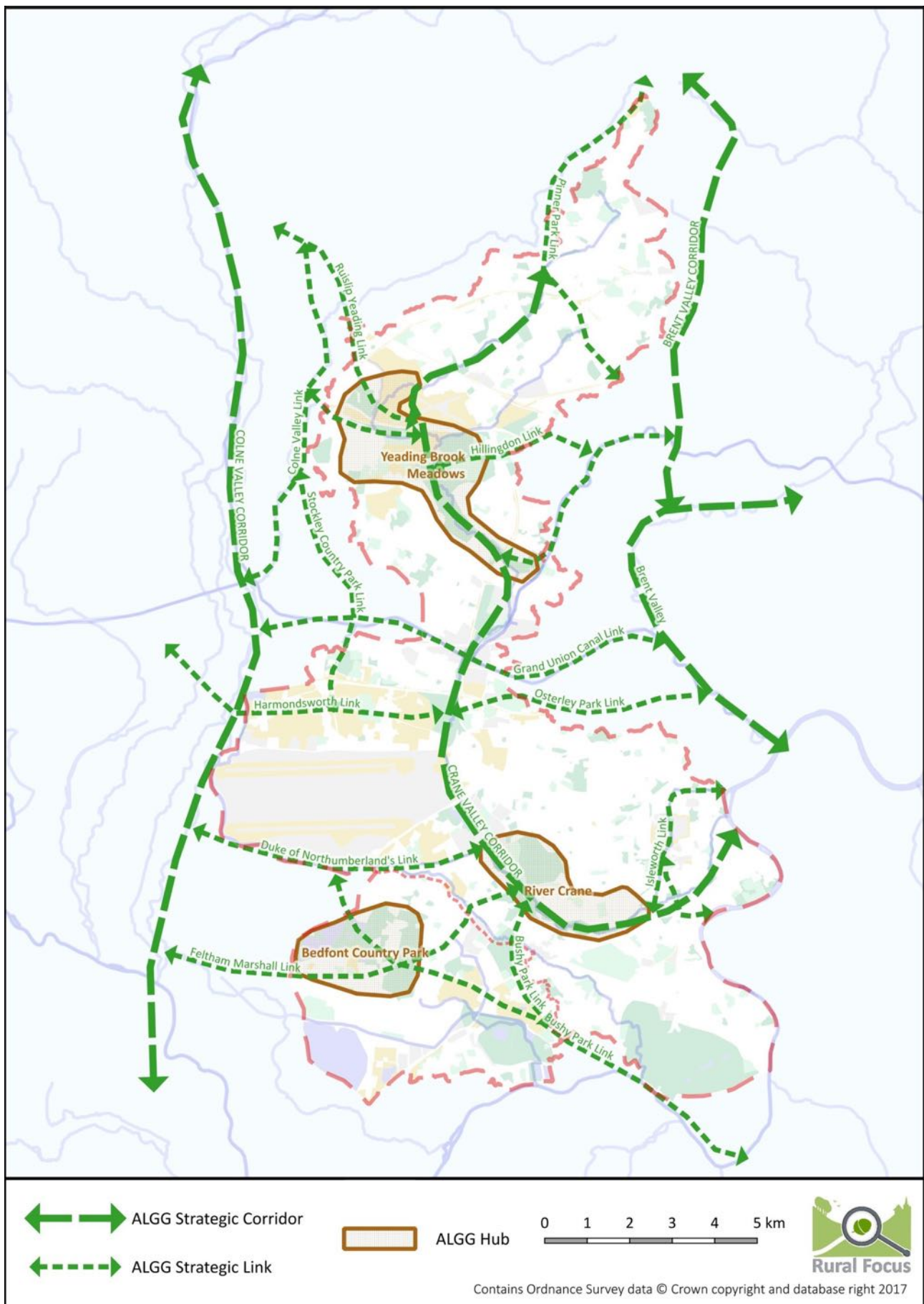


Figure 6.1. The strategic corridors, links and hubs from the All London Green Grid (2012) Area Framework (No.10).

Priority actions for thinking spatially

- 6.10. In order to move to this more spatial way of working the priority actions listed below will be undertaken by the Partnership over the next 5 years. The Partnership will need to engage with others, link in to existing policy, take advantage of funding opportunities and in-kind contributions and influence future decision making in order to achieve this. In particular a wide range of departments within the Boroughs will need to be engaged with going beyond those that traditionally have had a mandate to deal with open spaces and the natural environment for example the highways department. A full listing of the key organisations that the Partnership will prioritise working with to achieve this more spatial way of working is given in the **Technical Annex**.

- **Review membership of the Partnership.** Identify where new Partners might be advantageous in order to help the Partnership respond to more spatial planning concerns and respond to the changing funding environment.
- **Gather further information** on the characteristics, challenges and opportunities along the Portlane Brook and its associated catchment, before making a decision whether the Partnership should extend its geographical remit to this area.
- **Seek to proactively influence development** taking place in the catchment to ensure it takes account and maximises benefits for the catchment.
- **Put together a portfolio of future projects** in the catchment that clearly set out what they are trying to achieve, the benefits that they will deliver along with outline costings, ready to take to the Borough Councils and Developers for early discussion.
- **Re-evaluate the All London Green Grid** River Colne and Crane Area Framework (10) projects relevant to the catchment, identify potential partners and mechanism that might deliver them.

7. Involving communities

- 7.1. Everyone living, working or even just passing through the catchment benefits in some way, consciously or not, from the ecosystem services and benefits that the catchment provides. However, it is a relatively narrow section of the community that are actively engaged and involved in activities related to the catchment. Much of the community are not fully taking advantage of the benefits it offers on a regular basis. For the Partnership to expand and grow its activities to protect and enhance the catchment requires a broader cross section of those living and working in the catchment to understand, support and get involved.

Recognised and valued

- 7.2. Among the communities that live and work there, awareness of the catchment and the impact that it has on their lives is low. The mismatch between the catchment's geographical area and the administrative boundaries of the five London Boroughs that intersect it mean that people do not identify with it and have a clear understanding of the area it covers. Compounding this, as with many low lying urban catchments, it is difficult to read the landscape and there are no visual clues on the ground that help to frame the landscape. This lack of awareness, sense of place and identity results in low levels of ownership and engagement amongst many of the catchment's communities of the rivers, waterbodies and natural environment that make up the catchment.
- 7.3. Awareness is equally low of the full range of benefits that the catchment either currently provides or has the potential to provide. Without awareness, communities are unlikely to value the contribution the catchment makes to their lives and in turn have a desire to protect and enhance it.
- 7.4. Projects that focus on raising awareness will be promoted and pursued by the Partnership. Raising awareness and recognition of the catchment and the services and benefits it provides, is an important foundation for other work that the Partnership carries out. Projects and activities that help to identify the catchment on the ground and in publicity material such as signage, maps and information leaflets will help give raise the profile of the catchment in the public consciousness. Careful 'brand management' will be required in order to maximise the impact they have. Establishing community events, or attendance at other related events, such as a River Festival would be an opportunity to celebrate the catchment, raise awareness and introduce people to the activities of the Partnership.
- 7.5. Education programmes, for all ages, are an important tool. Those that introduce children at an early age to the rivers, waterbodies and natural environment that make up the catchment and the benefits that they provide are a long-term mechanism to engage and build support in local communities. The potential of the catchment as an educational resource in its own right will also be recognised. The benefits of outdoor education and activities such as 'forest schools' are increasingly being acknowledged and promoted, with schools, afterschool and holiday clubs keen to take up opportunities given the right support.
- 7.6. Many organisations both within and outside the Partnership are already doing an excellent job of delivering environmental education and raising awareness about particular aspects of the catchment. The Partnership will avoid any duplication of effort and will seek a distinct role acting as the gateway to education and awareness raising related to the catchment. The focus will be on coordinating, enabling and communicating about these activities and taking on projects which tackle catchment wide issues relating to a broad range of benefits.

Catchment for everyone

- 7.7. The communities that make up the catchment are varied, and include those living, working and notably, given the presence of Heathrow Airport, those passing through on their way to other parts of the world. The Partnership has the opportunity to engage with these diverse communities and to ensure that they feel a sense of belonging, ownership and responsibility towards the catchment. The Partnership needs to reach beyond those that live in the immediate vicinity of the rivers and the interest groups and sections of the population who have traditionally participated in looking after the rivers. There is a wealth of talent, resourcefulness and interest in the wider population that can be tapped into. For example, through involving different community groups such as faith and youth groups. Small and medium sized businesses are also increasingly keen to put something back into their communities through either volunteering, providing funds or in-kind services. Ways of engaging the full range of different communities in the catchment will be explored, reaching beyond the usual suspects and assumptions to create an inclusive and welcoming catchment for all, where everyone benefits from the catchment's natural capital.

Understanding individual impact

- 7.8. Given the challenges that face the catchment particularly relating to pollution, it is vital that those living and working within the catchment understand not only the benefits that they gain from it but also how their individual and collective actions impact on the rivers, waterbodies, natural environment and catchment as a whole. Without tackling issues at the source, the Partnership's actions can only ever be a temporary solution. Educating and raising awareness about the connection between peoples and communities' actions and the effects seen throughout the catchment is the first step to tackling the root cause of problems.
- 7.9. Certain organisations e.g. Thames Water and the Environment Agency, and Partnership projects, the Citizen Crane project, are already working on education and awareness campaigns related to specific issues e.g. household and business misconnections. The Partnership needs to work with Partners to coordinate and spearhead awareness and education campaigns focussing on the whole range of issues related to the interconnectedness of the catchment. E.g. paving over of driveways impact on flood risk, household misconnections impact on pollution in the Crane etc.

Priority actions for involving communities

- 7.10. In order to move to increase involvement of all communities in the catchment and the work of the Partnership the priority actions listed below will be undertaken by the Partnership over the next 5 years. In order to achieve these priority actions, the Partnership will need to engage with others, link in to existing policy, take advantage of funding opportunities and in-kind contributions and influence future decision making. There is potential for the Partnership to work with a broad range of different organisations from the Local Education Authority, neighbourhood partnerships, Business Improvement Districts, faith groups and youth groups to other catchments. The **Technical Annex** includes a full list of the key organisations that the Partnership will prioritise working with.

- **Seek funding for a community engagement and education officer** to build links with all sections of the community and enable them to get involved in the work of the Partnership.
- **Strengthen understanding of the communities** that make up the catchment, their concerns and interests and how they relate to the catchment. The Partnership will commission a study to compile information about the different communities in order to build links and start conversations.
- As a Partnership, **discuss the need for a unified catchment 'brand'** and how and when this might be appropriate to use and outline what form the branding might take.
- **Identify and establish links with education bodies and providers** and expand and consolidate existing links with universities. Explore the appetite for using the catchments natural capital more extensively for education purposes and identify the existing education and awareness raising programs about the catchment and where gaps may exist or opportunities to increase coordination.
- Identify and prioritise which issues that are observed in the rivers have their **root causes elsewhere in the catchment**, which could be tackled by changing individual's behaviour. E.g. paving over front gardens, misconnections, pouring substances down household drains etc.

8. Gearing up to big opportunities

- 8.1. The political and economic context that the Partnership operates in is changing dramatically. Old funding sources are no longer as readily available and government agencies and local authorities are, due to funding and staffing cuts, not always able to carry out the functions they once did. In these lean times, accountability and delivering quantifiable results has taken on a new importance. New funding opportunities are emerging often from the private sector and those managing areas such as highways, air quality and education are taking an interest and seeing the opportunities in looking after the natural environment and open spaces. Innovative models are also developing to take over responsibility of looking after the natural environment and open spaces, for example community interest companies.
- 8.2. The catchment sits on the western side of one of the most dynamic cities in the world. New infrastructure and development projects and innovative ideas for addressing the challenges that face a megacity mean there are significant new opportunities for funding and influencing policy and projects on the ground. However, to take advantage of these new opportunities and successfully operate in this new environment the Partnership will need to adapt.

Structure and governance

- 8.3. Earlier in the Strategy (para. 5.5) it was noted that the structure, legal status and governance of the Partnership may need to be re-examined to enable it to deliver its ambitions most effectively. This issue was reviewed and discussed with partners and others during the preparation of the Strategy but no final conclusion was reached on changes that will necessary over the next five years. It will be an important consideration under this theme of the Strategy, determining the extent to which the Partnership can 'gear up to the big opportunities'. The extent of change is likely to depend on both the **scale** (staffing and access to resources) and **independence** (ability to act on its own account) that the Partnership needs to have.
- 8.4. Since its creation, the legal status of the Partnership has been as an unincorporated association with no powers to act on its own account, instead acting through the powers of its partners, such as the hosting role provided by Green Corridor. This status will limit the scale and independence with which the Partnership can operate in future. The alternative would be for the Partnership to establish a new body with its own corporate identity (such that it could take on assets, responsibilities and liabilities on its own account). A number of different models might be considered (such as a Community Interest Company – which has been chosen by the Colne Valley Partnership, or a Charitable Incorporated Organisation) and are summarised in the technical annex.
- 8.5. Notwithstanding the need for further discussion on this matter, the consensus amongst partners during the preparation of this Strategy was that the current arrangements, where the Partnership acts through its partners, and with the key hosting role provided by Green Corridor, are working well and will continue. The main pros and cons of this arrangement are summarised in **Table 8.1**.

Table 8.1. Assessment of the Partnership's current structure and governance arrangements

Advantages	Disadvantages
<ul style="list-style-type: none"> • Economically efficient, benefiting from the employment and financial management services provided by Green Corridor at low cost. • Hosting body is seen as independent and impartial, employing the Partnership Development Manager but otherwise retaining arm's length involvement in most Partnership activities. • Unincorporated status has not prevented the Partnership promoting its own identity and ideas, but see disadvantage (right). 	<ul style="list-style-type: none"> • Partnership unable to raise funding or take on assets on its own account, so not able to add to resourcing of projects undertaken by others. • Further significant enlargement of staffing allocated to the Partnership (e.g. beyond 3 f.t.e. staff) may become limited by the current size and charitable purposes of the hosting body (depending on decisions by Green Corridor's Trustees). • Lack of independent status may be a limiting factor in development of the Partnership's profile and stature, as perceived by decision makers and opinion formers. • Mix of membership means that the Partnership is currently unable to lobby planners and developers effectively in response to planning proposals.

Raising the profile

- 8.6. There is a lot of positive feeling about the work of the Partnership, being able to quantify that success and communicate it will be important for the Partnership going forward. As funding opportunities become more competitive and cuts to organisations reduce the amount of in kind or non-essential involvement staff are able to undertake, it will become increasingly necessary to justify involvement to senior management and demonstrate the successful use of previous funds. Therefore, regular evaluations (both ex ante and post) of projects would help to build up the evidence needed for continued involvement.
- 8.7. It is also important to ensure that the Partnership has a clear vision and objectives and that Partners proactively disseminate this within their own organisations and to others. There also needs to be clarity over the projects and tasks that individual organisations undertake and things that the Partnership pursue and champion. This will help reinforce the distinct role of the Partnership and the benefit that it brings with its involvement.
- 8.8. Every opportunity will be taken to raise the profile of both the catchment and the work of the Partnership. Celebrating successes such as the receipt of funding, successful public engagement events or the completion of projects will be used as an opportunity to let people know (both the public and decision makers) about the work going on either through use of the traditional media, social media, targeted correspondence or celebration events.

Agility

- 8.9. A significant change that many organisations are having to grapple with is the need to become more dynamic, proactive and agile. Rather than waiting for funding announcements to be released and reacting to them, the Partnership needs to have a clear sense of direction, with defined objectives it wishes to achieve that it can clearly articulate and communicate and take to potential funding sources and partners (whether currently part of the Partnership or not). Agendas move quickly, and opportunities often appear at short notice. The Partnership will need to be more agile to respond to opportunities. A clear vision and prioritised objectives will help achieve this.
- 8.10. ‘Oven ready’ projects, that set out the project concept, project partners, detail actions needed, timescales and approximate costs will enable the Partnership to move quickly when opportunities do arise. Proactive project planning will also be an invaluable tool when approaching developers and infrastructure providers to demonstrate what can be done and achieved and how natural capital can be maximised for the benefit of the catchment.

Priority actions to address the big opportunities

- 8.11. In order to gear up to the big opportunities presenting themselves to the catchment and Partnership, the priority actions listed below will be undertaken by the Partnership over the next 5 years. The Partnership will need to engage with others, link in to existing policy, take advantage of funding opportunities and in-kind contributions and influence future decision making. In particular they will need to influence those at the very heart of decision making for example Cabinet members from the five London Boroughs and senior decision makers in Defra. A summary table of the key organisations that Partnership will prioritise working with is given in the **Technical Annex**.

- **High level launch for this Strategy** – including press release in Partner organisations publications and external publications related to the catchment based approach.
- **Seek funding to employ a communications officer** to focus of promoting the Partnership and engaging/lobbying other organisations and decision makers on its behalf.
- **Develop and produce a communication Strategy** for the Partnership in order to share successes and raise the profile of the work of the Partnership. Consideration will be given to the website, use of social media (facebook and twitter), traditional print media (including specialist journals and the internal publications of Partners) and also attendance and contribution at events (e.g. speaking at conferences, meetings etc about the work of the Partnership). This may involve working closely with some partners communications officers e.g. Heathrow and Thames Water.
- **Measure and celebrate success** – set out a framework and mechanism for collecting information, indicators and references from project and ensure success is celebrated via website and social media. Ensure there is room for a short evaluation exercise (ex-ante and ex-post) for all new projects.
- **Put together a portfolio of future projects** in the catchment that clearly set out what they are trying to achieve, the benefits that they will deliver along with outline costings, ready to take to the Borough Councils, infrastructure providers and developers for early discussion.

9. Delivering change

- 9.1. The Vision and Ambition that has been set out for both the catchment and Partnership is a step change from what has gone before. The Priority themes and actions set out in **sections six to eight** are a recommendation of where the Partnership's focus is most needed in order to achieve this change. Some of the priority actions involve behavioural change that will be fairly straightforward for the Partnership to adopt. For example, members of the Partnership need to clearly disseminate the message about the future direction of the catchment and Partnership whether through traditional or social media or conversations with colleagues. However, others are more involved and require more careful thought, consideration, research and energy to achieve results. Given the limited amount of Partnership staff time and capacity of members of the Partnership currently available there is a danger that the process to achieve these first steps that will lead to additional funding and support will prove to be overwhelming and progress will stall at the first hurdle.
- 9.2. To try to avoid this and galvanise the Partnership around a shared way forward that will allow them to make progress on the themes and actions, three delivery mechanisms have been identified that will become the focus of the Partnership's energies in the short term. These delivery mechanisms are:
- **Smarter Catchments**
 - **Heritage Lottery Funding, and**
 - **Developer led action.**
- 9.3. It may be most effective for the Partnership to form three working groups to drive each of these delivery mechanisms forward. The details of these three mechanisms are set out in more detail below with an outline of how and why the Partnership will actively pursue each one and quickly move to a point where funding can be applied for and actions and results achieved.

Smarter Catchments

- 9.4. One of the most significant opportunities for the Partnership to gain funding, advance its agenda and raise its profile is to become the urban pilot for Thames Waters' Smarter Catchments initiative. The Partnership will need to act quickly and decisively in order to do this as a decision in principal as to whether to include the Crane catchment as a pilot is likely in early 2018.
- 9.5. This is potentially too big an opportunity for the Partnership to miss. This Strategy sets out an outline of the things that the catchment needs to work on and how the Partnership needs to adapt to achieve this. This provides a useful starting point to enter into discussions with Thames Water to understand their ambitions for the initiative and where there is alignment and shared objectives. The Smarter Catchments Initiative is proactively seeking to develop new approaches that build better functioning river catchments in ways that improve drinking water quality, reduce pollution, manage flood risk and improve the environment¹². By entering into early discussions with the Thames Water team working on the initiative, the Partnership have the opportunity to not only try to secure the Crane Valley's place as pilot catchment but also influence the approaches being developed and look at how the initiative can help deliver the Partnership's Vision and Ambition.

¹² <https://corporate.thameswater.co.uk/About-us/Protecting-our-environment/Smarter-water-catchments>

Heritage Lottery Fund

- 9.6. This Strategy sets out the important role that the rivers, waterbodies and natural environment play in connecting the people and environment of the catchment and the value of this and how this connection needs to be enhanced. The Heritage Lottery Fund (HLF) grants offer an opportunity to fund projects which reconnect people with nature and the benefits it brings to their lives, health and wellbeing, which directly echoes the Vision for the catchment set out in this Strategy. The advantage of many of the HLF grants is that they involve a two-round funding process with development funding available to develop many of the things that have been identified in the priority actions for this Strategy, such as creating audience development plans and evaluation frameworks.
- 9.7. HLF grants are currently being restructured, in the past the Living Landscapes or Parks for People programmes might have been most relevant to the Crane Valley but in 2018 these programmes will not be available. Funding for landscapes and parks in 2018 will still be available through their open programmes, including Our Heritage and Heritage Grants where between £10,000 - £100,000 and up to £5million are available.
- 9.8. There is a clear link between what is trying to be achieved in the catchment and what HLF looks for in its projects. A strong and compelling story or narrative can be told about the catchment and therefore we feel it is a good candidate for funding. Members of the Partnership have experience in applying for and running their own HLF grant schemes and their expertise will be drawn on. The Partnership will need to look carefully at the application guidance and outline which elements of this Strategy could be developed through HLF, which is the most appropriate grant to apply for and whether it would be possible to draw together the resources amongst the Partnership to submit an application.

Developer led action

- 9.9. The third delivery mechanism that it is worth the Partnership pursuing is slightly more nebulous than the previous two opportunities, but still holds significant potential for the Partnership. This Strategy forms a starting point for identifying the activities and projects that hold the potential for developers to deliver through development opportunities. However, there are two steps that would help move the Partnership closer to being in a position to move quickly if opportunities arise to influence developments taking place.
- The first is to identify the most significant development opportunities taking place in the catchment, what stage in the planning process they are at and where the opportunities for the catchment might lie;
 - The second is to identify those projects (starting with the All London Green Grid Area Framework projects – see the Technical Annex) and activities that have the potential to be delivered through development and also the principals that you would wish to see any development incorporate regarding protecting and enhancing the catchment.
- 9.10. The members of the Partnership from the five London Boroughs will be key to helping undertake these steps. Once these steps have been undertaken it will then be possible to identify further actions that needs to be undertaken such as outline cost estimates for projects or engaging with and setting up proactive meetings with developers.