

Strategic-Scale Environmental Opportunities Mapping

Doubling Nature in the Oxford-Cambridge Arc

Arc-wide Local Nature Partnerships

April 2020

Doubling nature in the Oxford-Cambridge Arc

The need to act – biodiversity decline

The UK is in the midst of a “silent crisis” of species decline. Losses of habitat and hedgerows, as well as pollution, climate change, pests and diseases and related pressures are contributing to and accelerating a continued species decline dating from the 1970s. 41% of our species continue to decline since 1970, while 33% show little change; only 25% have increased. Butterfly and moth numbers have been hard-hit and a quarter of our mammals face extinction. Faced with this wildlife crisis, with the scale of planned development for the Oxford-Cambridge Arc, and in understanding how nature contributes to benefits for all, we have a collective, unique opportunity – and responsibility – to act now to safeguard and enhance our wildlife areas and natural green spaces.

Development pressures

The scale and pace of proposed development in the Oxford-Cambridge Arc presents us with a stark choice – to plan early and strategically for the environment, to protect and grow it for wider benefits whilst major development is also being planned – or risk losing our wildlife areas and green spaces forever. Existing habitats, restoration opportunities and development pressures co-exist at a landscape scale. The Local Nature Partnerships across the Arc have therefore endorsed an aspiration to double nature in the Oxford-Cambridge Arc, and have identified, at the very large-scale, how and where such efforts should be focussed.

The LNPs’ strategic-scale environmental opportunity zones map

The Local Nature Partnerships covering Bedfordshire, Buckinghamshire and Milton Keynes, Cambridgeshire and Northamptonshire, along with representatives of the Oxfordshire Environment Board and local authorities, have responded to the challenge by producing collaboratively a map to illustrate the priority strategic-scale environmental opportunity zones in the Oxford-to-Cambridge Growth Arc.

The map shows:

- Green numbered zones – these are strategic-scale and collectively-agreed areas of high environmental value and opportunity and large-scale investment potential – for example to create or enhance biodiversity, habitats and/or green infrastructure. The accompanying guidance document indicates the opportunities envisaged for each numbered zone.
- White areas – of more local-scale opportunity and investment potential. Opportunities for nature exist throughout these areas, but at the smaller-scale and could be away from centres of population. Smaller-scale opportunities are still hugely valuable for nature and local communities, and serve as corridors and stepping-stones for wildlife to move between

larger sites and habitats – which improves the resilience of wildlife to external pressures such as development and climate change. Positive action in these areas could include nature-friendly farming, restoration and creation of orchards, meadows and other landscape features and involve local authorities, parish councils, community groups and individuals.

Next steps – making the case for wildlife and benefits for all

Strategic planning and broader commitment to delivery of a doubling in nature in the Arc would provide many benefits to wildlife – as well as contribute to better health and wellbeing, clean air and water, carbon reduction, natural flood risk management, pollination for food production, social cohesion and quality of life, education opportunities, recreation and access, and many other benefits.

Unprecedented scales and rates of development will require corresponding scales of action for wildlife. Achieving a doubling of nature in the Arc means unprecedented action for wildlife, with schemes properly funded and with the effects lasting into the long term. We will need to retain existing nature and make it better; ensure exemplary development standards for biodiversity; invest in large-scale natural areas and nature reserves outside development areas (for wildlife that cannot co-exist with development, for large-scale managed recreation opportunities, and to help compensate for the *indirect* impacts of development that would not otherwise be recognised or compensated for – e.g. increased air pollution, impacts on hydrology, visitor pressure, etc.) and commit to ambitious funding models to deliver the scale and longevity of what is needed.¹

The LNPs' mapping work will be used for engagement and influencing by all the LNP areas to highlight the importance of early and strategic planning and commitment to doubling nature in the Oxford-Cambridge Arc – and how supporting its delivery is essential to unlocking the broader benefits for all, when faced with the prospect of rapid and extensive development

End-notes:

The mapping work follows two other collaborative areas of work across the Growth Arc completed by the area's Local Nature Partnerships and Oxfordshire representatives:

- [Natural Capital Investment Planning](#) for the Oxford-to-Cambridge Growth Corridor
- 6 Asks for the natural environment of the Growth Arc : [Connecting People and the Environment](#)

The environmental opportunity areas show landscape-scale areas of opportunity. Putting these into practice will require collaboration, understanding, adequate funding and resources from a range of partner organisations.

When putting in place specific local and larger projects that will collectively contribute to the landscape-scale opportunities, further challenges and factors will need to be taken into account – for example locally-designated landscapes, national landscape character areas, areas currently being brought forward for development, historic environment factors, existing wildlife and habitats, the demand and supply of ecosystem services and other local factors.

¹ For example – see pages 40 - 41 of the [NIC Partnering for Prosperity report](#) and its support for a Development Corporations approach stating that: “Playing these roles will give the public sector the greatest opportunity to capture the increases in land values that result from the development of new settlements and using these to repay the costs of upfront investment in local infrastructure.”

LNP Environmental Opportunities in the Oxford-Cambridge Arc: Map Guidance Document

Based on the Mapping Workshops 11 July 2019 and 17 October 2019

1 Rockingham Forest into John Clare Country	
Current natural assets	<p>Woodland and limestone grassland are priority habitats. Meadow and wetland are also present. There are priority botanical, invertebrate and reptilian species assemblages present.</p> <p>This area includes the Wildlife Trust for Bedfordshire, Cambridgeshire and Northamptonshire (WTBCN) Rockingham Forest and John Clare Country Living Landscapes.</p>
Main conservation activity	<p>Opportunities for increased land purchase and habitat creation to link and extend key habitats (woodland and limestone grassland), as well as links with neighbouring counties.</p>
Ecosystem service & GI aspirations	<p>Opportunities for improved access to nature, enhanced health and wellbeing.</p> <p>This area can also make significant contributions to biodiversity, pollination, carbon sequestration, recreation and access, and sense of place.</p>

2 Nene Washes	
Current natural assets	<p>Priority habitats include waterways, wet grassland, swamp and wetlands. Access to nature including the Nene Valley Way and RSPB Nene Washes.</p> <p>Priority species include black-tailed godwits, breeding waders, crakes, crane and new colonisers, and over-wintering wildfowl. Considerable work is currently taking place developing exemplar lowland wet grassland habitat for priority species.</p>
Main conservation activity	<p>Opportunities for wetland creation including grassland, marshy grassland and swampy habitats, and linking with neighbouring counties.</p> <p>Opportunities for increased land purchasing and wetland creation including grassland, marshy grassland and swampy habitats, and natural flood management.</p>
Ecosystem service & GI aspirations	<p>Public access taking pressure off of Special Protection Areas (SPAs).</p> <p>This area can also make significant contributions to biodiversity, natural flood management, and sense of place.</p>

3	Nene Valley	
Current natural assets	<p>Habitats include waterways (Nene River and tributaries), wet grassland, swamp and wetlands. SPAs include gravel pits. There is access to nature, including the Nene Valley Way.</p> <p>Key species include golden plover, wigeon and dragonflies.</p>	
Main conservation activity	<p>Opportunities for wetland creation including grassland, marshy grassland and swampy habitats, along with backwater restoration (NIA, Nenescape, HLF) and natural flood management.</p> <p>There are also opportunities to link with neighbouring counties.</p>	
Ecosystem service & GI aspirations	<p>Public access taking pressure off of SPAs.</p> <p>This area can also make significant contributions to biodiversity, pollination, carbon sequestration, recreation and access, sense of place, and natural flood management.</p>	

4	Great Fen	
Current natural assets	Reedbeds, fen, wet grassland, swampy habitat and wetlands.	
Main conservation activity	<p>Considerable work is currently taking place purchasing and developing exemplar fen, reedbed and wetland habitat for reedbed and wetland species assemblages.</p> <p>Opportunities for increased and accelerated land purchasing, habitat creation and research into new methods of farming on peat wetlands.</p>	
Ecosystem service & GI aspirations	Opportunities for flood store/management, carbon sequestration, biodiversity, water availability, access to nature, enhanced health and wellbeing, heritage value and tourism.	

5	Wildlife Corridor linking the Great Fen with the Ouse Washes	
Current natural assets	<p>Waterways, ditches, wetland, reedbed and grassland. Access to nature includes pathways and waterways.</p> <p>This area includes several nature reserves, including WTBCN Great Fen, WTBCN Holme Fen, WTBCN Woodwalton Fen, and RSPB Ouse Washes.</p>	
Main conservation activity	Opportunities to use the Forty Foot Drain, adjoining land and nature friendly farming zones to connect the WTBCN Great Fen to the RSPB/WTBCN Ouse Washes, by habitat creation and improved, nature-friendly management techniques.	
Ecosystem service & GI aspirations	Access to nature, enhanced health and wellbeing, and habitat creation. This area can also make significant contributions to biodiversity, pollination, sense of place, and flood management.	

6	Ouse Washes	
Current natural assets	Waterways, wet grassland, wetlands and seasonal open water. Priority species include breeding waders and new colonisers, and over-wintering wildfowl.	Access to nature includes viewing hides, visitor centres and the Ouse Valley Way. This area also includes RSPB Ouse Washes, RSPB Ouse Washes Habitat Creation Project, WTBCN, WWT Welney and Ouse Valley Way.
Main conservation activity	Considerable work is currently taking place purchasing and developing exemplar lowland wet grassland habitat for breeding waders and over-wintering wildfowl.	Opportunities for increased land purchasing and wetland creation including grassland, marshy grassland, swampy habitats and open water. There are opportunities to create links with neighbouring counties.
Ecosystem service & GI aspirations	Flood storage/regulation, water quality, habitat provision, carbon sequestration, enhanced health and wellbeing, and tourism.	

7	East Cambridgeshire and Suffolk Fens	
Current natural assets	Habitats include reedbeds, waterways, wet grassland and wetlands. Priority species include bittern, crane, marsh harrier, new colonisers, and reedbed and wetland species assemblages.	This area covers Chippenham Fen SSSI and has links to RSPB Lakenheath Fen.
Main conservation activity	Opportunities for increased wetland creation including reedbeds, grassland and swampy habitats, as well as linking with the neighbouring county.	
Ecosystem service & GI aspirations	Water quality, flood storage/management, and habitat creation. This area can also make significant contributions to biodiversity, pollination and sense of place.	

8	Arc Parkland Forest	
Current natural assets	Forest landscape, including woodland and open habitats, with semi-natural habitat connectivity.	This area contains Grafham Woodlands, Grafham Water, Tove, Yardley and Whittlewood. Access to nature includes: viewing hides, visitor centre, strategic long-distance footpath, trails and foot/cycle routes. Tove includes wetlands and grasslands along floodplain.

Main conservation activity	<p>Opportunities for increased land purchase, habitat creation, woodland linkage, improved habitat connectivity and improved access to nature.</p> <p>Woodland and woodland link creation, with an aspiration to achieve 30% to 50% coverage of area over the next 50 years (2070) and linking with neighbouring counties. Other habitats to be encouraged include: parkland, permanent grassland, scrub, agroforestry, hedgerows and hedgerow trees.</p>
Ecosystem service & GI aspirations	<p>GI services include CO2 sequestration and 'slow the flow' benefits.</p> <p>This area can also make significant contributions to biodiversity, pollination, natural flood management, recreation and access, and water quality and supply.</p>

9	Ouse Valley Corridor	
Current natural assets	<p>Waterways, wet grassland, water meadows and wetland. It also contains Limestone Villages and pastoral landscapes.</p> <p>Access to nature includes: viewing hides, visitor centres, and footpaths/bridleways. The area also contains RSPB Fen Drayton Lakes, RSPB Ouse Fen, RSPB Berry Fen, WTBCN Paxton Pits, Great Ouse Valley Trust and Ouse Valley Way.</p>	
Main conservation activity	<p>Opportunities for wetland creation including grassland, marshy grassland, reed beds and open water complexes, with links to neighbouring counties.</p> <p>Potential to develop one or more large scale nature reserve aimed iconic species including Crane and Marsh harrier.</p>	
Ecosystem service & GI aspirations	<p>Access to nature including a strategic long-distance footpath linking settlements. GI services include CO2 sequestration and 'slow the flow' benefits. This area can also make significant contributions to biodiversity and pollination.</p>	

10	Wildlife corridor linking the Ouse Washes with the Wicken Fen Vision	
Current natural assets	<p>Waterways, ditches, wetland, reedbed and grassland. Access to nature includes RSPB Ouse Washes, RSPB Ouse Washes Habitat Creation Project, WTBCN, WWT Welney, Ouse Valley Way. Current projects in this area include the NT Wicken Fen Vision and New Life on the Old West project.</p>	
Main conservation activity	<p>Opportunities to use the Old West River, adjoining land and nature friendly farming zones to connect the RSPB/WTBCN Ouse Washes to the NT Wicken Vision, by habitat creation and improved, nature-friendly management techniques.</p> <p>Access to nature including pathways and waterways.</p>	

Ecosystem service & GI aspirations	Tourism, and enhanced health and wellbeing. This area can also make significant contributions to biodiversity, carbon sequestration, flood management, pollination, recreation and access, and sense of place.
------------------------------------	--

11 Wicken Fen Vision	
Current natural assets	<p>Reedbeds, fen, wet grassland, swampy habitat, wetlands and waterways.</p> <p>Considerable work is currently taking place purchasing and developing exemplar fen, reedbed and wetland habitat for reedbed and wetland species assemblages.</p> <p>There are two National Trust nature reserves: Wicken Fen and Anglesey Abbey.</p>
Main conservation activity	<p>Opportunities for increased and accelerated land purchasing and habitat creation.</p> <p>Access to nature including viewing hides, visitor centres and many well-developed pathways, bridleways and waterways.</p>
Ecosystem service & GI aspirations	<p>Carbon storage, access to nature, enhanced health and wellbeing, flood storage/management, and aquifer recharge.</p> <p>This area can also make significant contributions to biodiversity, pollination, and sense of place.</p>

12 Cambridge Green Spaces	
Current natural assets	This area includes Coton CP, Wandlebury CP, and parks and greenspaces in and around Cambridge City.
Main conservation activity	Opportunities for increased tree planting, land purchase, habitat creation and development. Aim to link green spaces and nature reserve areas to produce wildlife corridors and networks.
Ecosystem service & GI aspirations	Habitat creation, tourism, carbon sequestration, access to nature, sense of place, and enhanced health and wellbeing.

13 Sywell Wood Area	
Current natural assets	Ancient woodlands, with a focus on connecting woodlands and meadows. There is public access from Northampton.
Main conservation activity	Planted Ancient Woodland Sites (PAWS) restoration, habitat linkage, and new woodland creation.
Ecosystem service & GI aspirations	Public access for recreation and carbon sequestration.

14	South East Cambridgeshire Ancient Woodland Cluster	
	Current natural assets	Woodlands, including WTBCN and Forestry Commission sites.
	Main conservation activity	Opportunities for increased land purchase and habitat creation, as well as links with other counties.
	Ecosystem service & GI aspirations	Improved access to nature, enhanced health and wellbeing, tourism, flood storage/management, soil conservation, carbon storage, and timber production.

15	South of Daventry	
	Current natural assets	Acid grassland and meadows, calcareous grassland, and woodland. The rolling countryside has AONB potential including Great Central Railway (disused). Key species include the small blue butterfly and many species of orchids.
	Main conservation activity	Connectivity of habitats and buffering habitats.
	Ecosystem service & GI aspirations	“Slow the flow” benefits and water quality. This area can also make significant contributions to biodiversity, carbon sequestration, natural flood management, pollination, recreation and access, and sense of place/aesthetic value.

16	Greensand Ridge into West Cambridge Hundreds	
	Current natural assets	Woodlands and acid heath. Access to nature includes National Trust properties and visitor facilities, such as Wimpole Hall and Home Farm. It also contains the WTBCN Living Landscape.
	Main conservation activity	Opportunities for acid grassland, heath and woodland creation, as well as increased land purchase and improved access to nature.
	Ecosystem service & GI aspirations	Access to nature, tourism, enhanced health and wellbeing. This area can also make significant contributions to biodiversity, carbon sequestration, pollination and sense of place.

17	Gog Magog Hills	
	Current natural assets	Chalk grassland, woodland and community woodland. There are opportunities for increased land purchasing and habitat creation. Access to nature includes Wandlebury Country Park.
	Main conservation activity	Linking fragments of wildlife habitat to create a large, interconnected area of chalk grassland.
	Ecosystem service & GI aspirations	Carbon storage, pollination, biodiversity, habitat creation, community engagement, access to nature, and enhanced health and wellbeing.

18	Bedford Green Arcs	
	Current natural assets	Ancient woodland connections.
	Ecosystem service & GI aspirations	Carbon sequestration, biodiversity.

19	Forest of Marston Vale	
	Current natural assets	<p>This area is an evolving community forest. Transferring past industrial landscapes is one of the aims.</p> <p>The area includes the Millennium Country Park, which features woodland, extensive wetland and several lakes. There is significant access to nature, including a visitor centre, walking trails, bridleways and cycle routes.</p>
	Main conservation activity	Woodland and wetland creation.
	Ecosystem service & GI aspirations	This area can make contributions to carbon sequestration and access to nature.

20	Bedford-Milton Keynes Waterway Park	
	Current natural assets	This area has good Green Infrastructure connectivity, with access to nature and recreation.
	Ecosystem service & GI aspirations	Potential to link water areas and contribute to water resilience. This area can make contributions to access to nature and sense of place, and make a significant green-blue contribution to soften new communities.

21	Ivel Valley	
	Current natural assets	Floodplain meadows and wet habitats. Recreation should be focused beside this area, not on.
	Ecosystem service & GI aspirations	This area can make contributions to biodiversity, habitat creation and natural flood management.

22	Ouzel River and Grand Union Canal Corridor	
	Current natural assets	<p>This area runs from Milton Keynes to Aylesbury, linking with Bedfordshire and Hertfordshire (not in the Arc zone). This area links and overlaps Area 6: Ouse Washes.</p> <p>There is good access to nature, with walking trails and parks.</p>
	Ecosystem service & GI aspirations	Opportunities for investment in GI services including health and well-being, recreation and access to wildlife.

23	Milton Keynes Green Spaces	
Current natural assets	This area includes the parks, lakes and greenspaces in and around urban Milton Keynes. Milton Keynes has a good network of ponds, as well as woodland, both ancient and recently created.	
Main conservation activity	Milton Keynes has the ambition to be zero-carbon by 2030, so there are opportunities for sustainable development, alongside increased tree planting and habitat creation. Aim to link green spaces and nature areas to produce wildlife corridors and networks.	
Ecosystem service & GI aspirations	Habitat creation, tourism, carbon sequestration, access to nature, sense of place, and enhanced health and wellbeing through community involvement with nature.	

24	Whaddon Chase Freedom to Roam Parkland	
Current natural assets	<p>A vision for exemplar GI in context of existing and new areas of growth. The modern Whaddon Chase area retains a substantial number of features from its past as a medieval hunting forest. Once extending to c. 9000 ha, the Chase is one part of an extensive band of similar landscapes across central and north Buckinghamshire, Northamptonshire and Bedfordshire.</p> <p>Today the landscape has significant areas of intact and relict landscape features which relate to its previous management. In some areas there are irregular shaped fields, such as assarts cleared in the forest; others areas show an intact system of Parliamentary enclosed fields, the layout of which has preserved the former forest rides and woodland boundaries as part of the hedgerows.</p> <p>Heritage assets include extensive medieval ridge and furrow, deserted medieval villages, fishponds and assorted earthworks.</p> <p>The Chase includes an intimate mix of ancient woodland, semi-improved, wet or improved grassland, hedgerows and green lane networks and scatters of veteran tree interest often linked with historic parkland features.</p>	
Main conservation activity	<p>Protect, buffer and connect existing habitat blocks to a nature rich landscapes. Avoid fragmentation from and indirect impacts of growth (eg. Expressway, unsustainable recreation pressure). Catchment approach to improve water quality, restore wet and semi improved grasslands/fen, and conserve ancient and veteran tree resources.</p> <p>There is a strong desire to maintain a balance between open and wooded landscapes, the intimate mix of the two being a key wildlife resource.</p>	
Ecosystem service & GI aspirations	GI services predominantly being landscape scale public access parkland access of a similar scale to Richmond Park.	

25 Western Valleys and Cotswolds	
Current natural assets	Large-scale complex of high value habitats and attractive landscapes with concentrations of woodland, limestone grasslands and smaller-scale floodplain habitat along Thames tributaries.
Main conservation activity	Protect, extend and connect grassland and scrub/woodland habitats. Promote nature-friendly arable and mixed farming systems.
Ecosystem service & GI aspirations	Address historic channel modifications to restore healthier functioning river systems. Catchment management approach including sustainable farming could have significant downstream benefits along the Thames. This area can also make contributions to biodiversity, carbon sequestration, pollination, recreation and access, and sense of place.

26 Cherwell Valley and Oxford Canal	
Current natural assets	Relict floodplain habitats (hay meadows, wet grassland, riparian features) mostly in poor condition. Breeding waders have largely been lost except for 4-5 pairs of curlews. Significantly modified river with many barriers to fish movement and suffering high nutrient loads.
Main conservation activity	Halt further loss and secure favourable management of remaining assets, such as a land management change to address diffuse pollution and natural flood management opportunities. There is great potential for river restoration, improved floodplain connectivity and restoration of floodplain wetland and wet grassland.
Ecosystem service & GI aspirations	Scope to improve currently underused recreational potential from canal and parallel railway with three local stations. This area can also make significant contributions to biodiversity, carbon sequestration, pollination, recreation and access, sense of place, natural flood management, and water quality/supply.

27 Bernwood Forest, Otmoor and River Ray Complex	
Current natural assets	<p>In part, a relict medieval hunting forest, one of several in the county. High value biodiversity area, with regionally significant concentration of large blocks of high value habitats (ancient woodlands, MG4 and MG5 grasslands and wetlands, large hedgerows and clay rivers). Notable species are numerous, including various vascular plants such as the green winged orchid, mousetail and great burnet, and a long list of invertebrates, such as black and brown hairstreak, forester moth and purple emperor.</p> <p>A critical area for the creation of new habitat, including new large scale nature reserves. It has existing areas of ancient and</p>

	<p>other woodlands, species-rich lowland meadows, grazing marsh, and ancient hedgerows amongst other habitats and links via the River Ray to Otmoor in Oxfordshire. Recognised as critical area for biodiversity.</p>
Main conservation activity	<p>Protect, buffer, extend and connect existing habitat blocks to form one of the largest scale nature rich landscapes in the Arc. Avoid fragmentation from and indirect impacts of growth (eg. Expressway, unsustainable recreation pressure). Catchment approach to improve water quality, restore grassland, woodlands along heavily modified river.</p> <p>To be extended/joined up through large scale habitat creation and restoration to form large scale complex of grassland, wetland and woodland habitats. Restoration of highly modified river channels would require floodplain land-use adaptation, but with significant potential benefits for wetland creation and healthier functioning channels.</p>
Ecosystem service & GI aspirations	<p>Carbon sequestration, water quality improvements and “slow the flow” benefits, as well as biodiversity and pollination.</p> <p>Achieve sustainable levels of recreation use that do not threaten sensitive habitats. Due to sensitive sites and species high volume public access would be discouraged across part of this area. There is however scope in this area for very large nature reserves which could include visitor centres and carefully managed access.</p>

28 The Chilterns	
Current natural assets	<p>A high value nationally protected landscape sandwiched between the growth arc and Greater London. Area of nationally and internationally important wildlife sites (including chalk grassland, arable flora, ancient woodland, chalk streams amongst others) alongside important historic and cultural assets (eg. iron age hillforts, commons, water meadows, woodland archaeology).</p> <p>Nationally and regionally important recreational resource including two National Trails and multiple high volume public access sites with need for carefully managed access in view of sensitive habitats and wildlife sites.</p>
Main conservation activity	<p>Protect, extend and connect woodland and grassland habitats, especially high value chalk grassland along the scarp. Promote nature-friendly arable and mixed farming systems, and more sustainable patterns of recreational use where sensitive habitats are under pressure.</p> <p>Critical need to:</p> <ul style="list-style-type: none"> • enhance habitat connectivity and avoid fragmentation through large scale habitat creation and restoration

	<p>initiatives, buffering high value wildlife habitat.</p> <ul style="list-style-type: none"> • improve management of existing natural assets • avoid indirect impacts of growth, e.g. impacts on SACs of increased air pollution; impact of increased visitor numbers on sensitive wildlife sites. <p>The area to the north west of the chalk escarpment is an important buffer zone with potential for large scale habitat restoration and creation (woodland, grassland, wetland complexes) and creation/enhancement of GI.</p>
Ecosystem service & GI aspirations	<p>Investment in GI services including health and well-being, recreation and access to wildlife. Linking with Middlesex (not in the Arc). Existing strategic plan linked to Heathrow Strategic Planning Group (GI focus).</p> <p>Valuable but threatened natural capital resources and ecosystem services including carbon sequestration within grassland and woods and water resources within the chalk aquifer.</p> <p>Need and opportunity to:</p> <ul style="list-style-type: none"> • Increase areas of woodland and tree planting to sequester more carbon and combat climate change • Reduce diffuse pollution and sedimentation of water courses and chalk aquifer to improve quality of water resource • Improve measures to reduce public overuse of water and, therefore, over abstraction of water from the aquifer to protect flow of chalk streams • Improved, sustainable management and promotion of recreational resource within the AONB and linking to the Vale to the north and west and greater London to the south and east

29	River Lea	
	Current natural assets	Wet habitats, wet woodland. The Lea Valley Park follows much of the River, which provides access to nature including green open spaces, nature reserves and facilities for water sports. A walking and cycling route runs the entire length of the river from its origin in the Chilterns to where it meets the Thames.
	Main conservation activity	Water quality and channel enhancements.
	Ecosystem service & GI aspirations	This area can make contributions to biodiversity, recreation and access, water quality and supply, and natural flood management.

30 Aylesbury Green Ring featuring Black Poplar Landscape	
Current natural assets	<p>Low lying wetland, with poor drainage and water quality. There is urban fringe on eastern side, while the western side is more rural. Within the River Thames catchment, the area includes clay streams with poor water quality and sediment issues.</p> <p>The Grand Union Canal and Wendover arm skirt around the east and south sides of the ring. The Wendover arm is disused and therefore has better biodiversity.</p>
Main conservation activity	Opportunities for a wide variety of landscape and biodiversity themes along with GI services including health and well-being, recreation, water supply, diffuse pollution prevention and access to wildlife. Balance between providing high-value green space for people close to Aylesbury and a less formalised, quiet biodiversity corridor running south west to Thames.
Ecosystem service & GI aspirations	Multi-functional exemplar GI with a high proportion of woodland with good public access.

31 Upper Thames, Wytham and Cothill	
Current natural assets	Large-scale and diverse “river to hill” landscape with numerous SACs/SSSIs and large blocks of quality habitat (floodplain grassland, riparian features, ancient woodland, restored gravel pits in the Windrush and Cotswold Water Park beyond Oxon).
Main conservation activity	Protect, buffer, extend and connect existing sites as part of overall catchment management approach. Create further extensive floodplain grassland, reedbeds and wetland, linking through to the Oxford Meadows SAC and the planned floodplain grazing marsh/grassland as part of the Oxford Flood Alleviation Scheme (FAS).
Ecosystem service & GI aspirations	<p>Potential for natural flood attenuation and high-quality sites for eco-tourism. Cotswold Water Park is a massive existing GI asset close to Oxon boundary and still growing - potential for cross-boundary links.</p> <p>This area can also make significant contributions to biodiversity, carbon sequestration, pollination, and water quality and supply.</p>

32 River Thames and Cycleway Corridor	
Current natural assets	Degraded clay vale floodplain with relict population of curlews.
Main conservation activity	Wetland creation including, grassland, marshy grassland, reedbeds and open water complexes, along with river restoration to restore floodplain connectivity.
Ecosystem service & GI aspirations	Access to nature including a strategic long-distance footpath and cycleway corridor from Oxford to Thames and beyond along Sustrans route 57. GI services include CO2 sequestration and “slow the flow” benefits.

33 Vale of White Horse and North Wessex Downs	
Current natural assets	Concentration of chalk grasslands and woodland/scrub along the scarp. Strong populations of farmland birds and breeding waders including nationally rare species on the Downs. Vale of White Horse is generally lower value but has high potential.
Main conservation activity	Protect, extend and connect calcareous grassland and scrub/woodland habitat along the scarp. Promote nature-friendly arable farming. Woodland creation and floodplain wetland/river restoration in the Vale.
Ecosystem service & GI aspirations	Potential for large water supply reservoir at lower end of valley, with substantial opportunity/need to provide habitat creation including floodplain wetland as part of compensation package if it goes ahead.

34 Burnham Beeches and Black Park	
Current natural assets	<p>Burnham Beeches is a National Nature Reserve, biological SSSI and SAC. It consists largely of beech woodland that is rich in wildlife, including many nationally rare or threatened species. It also includes two Scheduled Ancient Monuments: Seven Ways Plain hillfort, and Hartley Court moated site and enclosure.</p> <p>Black Park is a country park, with woodland and heathland habitat. It includes a biological SSSI and a Local Nature Reserve. The SSSI consists of a variety of habitats comprising dry and wet heath, alder carr (a rare habitat type within Buckinghamshire), mixed and coniferous woodland, and areas of acid grassland.</p> <p>Much of these two parks are open to the public, providing good access to nature.</p>
Ecosystem service & GI aspirations	Opportunities for expansion of 'green links' across the area to provide enriched biodiversity and GI services including health and well-being, recreation, water supply, air quality and access to wildlife.

35 Colne Valley	
Current natural assets	Regional Park including 200km of watercourse, 13 SSSIs, many nature reserves, ancient woodlands, county wildlife sites, 4 country parks, and regional trails, among other assets.
Main conservation activity	Opportunities for species recovery program along predominantly field boundaries and watercourses protecting local landscape character.
Ecosystem service & GI aspirations	Connectivity for people and wildlife through the landscape informed by the Colne & Crane Green Infrastructure Strategy.