





Nature Conservation and Recreational Opportunities in the Green Belt

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Foreword

The Green Belt is a great national success story. England's Green Belts have prevented the costly and ugly urban sprawl seen in many other countries, and contributed to the economic growth and vitality or the towns and cities they surround. But this very vibrancy now leads people to question whether Green Belt policy should be weakened to allow cities to grow out into the surrounding countryside.

Critics of the Green Belt often query the environmental value of Green Belt land. But the Green Belt is a planning designation, not a mark of environmental or landscape quality. Its five purposes are to check urban sprawl, safeguard the countryside, prevent neighbouring towns merging, preserve the settings of historic towns and cities, and aid urban regeneration.

The Green Belt needs no other justification. It does its job regardless of its environmental or amenity value.

But given that the Green Belt covers around 12.5% of the land area of England and is the countryside nearest to where 30 million people live, we should get the best value from it that we can. Where it is unlovely, we should work to improve its quality. As the case studies in this report show, yesterday's Green Belt car parks and sewage works can become the valued wetland and woodland of today and tomorrow. But only if the Green Belt is defended and Green Belt planning policies are enforced.

Most of the Green Belt is farmland, providing food that will become increasingly essential given climate change and the other uncertainties that lie ahead. But the Green Belt gives us with much more than food, including natural woodland, a dense network of public footpaths and many local nature reserves.

The fact that Green Belt land is protected gives us the chance to make even more of it. We do not face a binary choice between building houses or keeping it as it is. There is a third way: working towards a Green Belt that is even better used by people and even richer in nature.¹

The future of the Green Belt will depend critically on post-Brexit support for land management. Given its natural capital potential, we should consider directing public support to improving its quality. As the Natural Capital Committee has argued², more woodland and wetland on the edge of towns and cities would do much to help climate change adaptation and the recovery of nature.

This report shows that such a programme of public funding would go with the grain of what is already happening in the Green Belt. It would help achieve the Government's goal to be "the first generation to leave the natural environment of England in a better state than we found it" and it would do so by improving land close to where people live.

The Green Belt is successful and popular. But we are nibbling away at it month by month, and the Government is looking the other way. Let us stop this erosion of the Green Belt and commit ourselves instead to improving its quality and getting even more value from it.

Shaun Spiers

Chief Executive, CPRE

2. Natural Capital Committee, The State of Natural Capital: Protecting and Improving Natural Capital for Prosperity and Wellbeing, January 2015 - https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/516725/ncc-state-natural-capital-third-report.pdf

^{1.} In defence of the Green Belt, Dieter Helm, April 2015 - http://www.dieterhelm.co.uk/assets/secure/documents/ Green-Belt-Paper-.pdf

Vision

CPRE imagines a countryside on our doorstep where agriculture is less intensive, where there is space for nature that people can explore and enjoy and which is accessible to all. Green Belts can play a crucial role in enhancing the sustainability of our cities by providing essential ecological functions and recreational benefits which are fundamental to health and wellbeing.

Green Belts must continue to deliver the primary aim "to prevent urban sprawl by keeping land permanently open"³. However, we can also expect the land within them to deliver much more than just the management of urban growth. Green Belt policy helps create valuable places by providing open land that should be protected from inappropriate development in the long term. CPRE's vision for Green Belts is that they should provide recreational opportunities and contact with nature where people need it most - close to where they live. This can go hand in hand with sustainable agricultural production and climate change mitigation.

The Government has made commitments to improve the environment and people's access to it. Measures to achieve this will be set out in the promised 25 year Plan for the Natural Environment. Green Belts cover 12.5% of England and can make a substantial contribution to these commitments. 30 million people live in cities surrounded by Green Belt, and these areas of countryside could be managed to serve the urban population to a much greater extent. For biodiversity, the Green Belts offer a unique opportunity to create and restore natural habitats at a sufficient scale to re-establish ecological networks threatened by development or intensive agriculture; and to help meet the Government's target of planting 11,000 trees by 2020.

^{3.} NPPF Paragraph 79

Summary and Recommendations

The aim of the study is to analyse nature conservation and recreational opportunities in land designated as Green Belt in England. This study builds on the report Green Belts: a greener future published jointly by Campaign to Protect Rural England and Natural England in 2010. The objective was to identify both the overall extent and spatial distribution of these opportunities, in order to highlight the overall nature conservation and recreational benefits found on Green Belt land and identify opportunity areas in each Green Belt. For analytical purposes, the qualities of Green Belts were compared with England as a whole as well as urban fringe 'comparator areas' covering rural land without Green Belt designation, but also close to urban areas. The same comparator areas were also used in the 2010 report.

The Natural Capital Committee's third *State of Natural Capital* report published in January 2015 places a strong emphasis on the need for measuring and monitoring changes in natural capital. This study has provided an analysis of the current levels of priority habitat, giving a measure of natural capital, and recreational opportunities and Public Rights of Way providing a measure of accessibility. Overall the key findings are that the Green Belt is a particularly valuable part of the wider countryside in terms of a dense public footpath network, broadleaf and mixed woodland, and local nature reserves.

This work has been carried out using the most recent datasets available and provides a benchmark against which future developments can be compared. The ability to monitor progress or decline in natural capital and access within Green Belt land is fundamental in securing the long term vision for the Green Belt.

Summary of statistical findings

The statistical findings are set out in the figure 1 and summarised below.

Priority Habitat

The analysis found that Green Belts contain 12% of England's Priority Habitats by area, a proportion that is close to the overall proportion of land (12.5%) that Green Belts cover. Within this, there are particular concentrations of deciduous woodland, lowland heathland, lowland meadow, and lowland fen. This provides evidence that Green Belt land contains significant resources of natural capital, and discredits the notion that Green Belt land is poor quality.

Recreational opportunities

There is a high proportion of a number of types of recreational land in Green Belts. There are particular concentrations of Country Parks; Woodland Trust Land; Local Nature Reserves; and Registered Parks and Gardens. These figures provide evidence that Green Belts provide an important recreational and cultural resource for the urban populations they surround. In addition, 34% of Community Forest Land is within the Green Belt.

158 Local Nature Reserves have been created between 2009 and 2016, including 48 in Green Belts (over 30% of the total new designations).

The presence of Open Access Land and Common Land, as well as National Nature Reserves and National Trust Land is relatively low in Green Belt and Comparator Areas. These categories of land are generally more concentrated in rural upland areas.

Public Rights of Way and National Cycle Network

The analysis shows that the countryside in Green Belts is highly accessible.

There is a good network of rights of way including public footpaths and bridleways. 17% of England's public rights of way are located within Green Belts compared to 13% in Comparator Areas. The average density of these rights of way is significantly higher than for England as a whole. The reason for this is that there are generally more public rights of way near large settlements, and less in more remote areas. Green Belts also contain 12% of National Cycle Network trails. There is a notable concentration of motor traffic -free routes is high at 18% (19% for Comparator Areas). This is concentrated more in some Green Belts than in others, with Avon having the highest density (m/ha).

Figure 1. Environmental attributes of green belt land in England

Emboldened figures are where the Green Belt or the Comparator Areas contain a relatively high proportion of England's total of a given environmental attribute, as expressed by the proportion being higher than the proportion of England's land area covered by the Green Belt or the Comparator Areas.

Priority Habitat	Percentage of the all England total found in the Green Belt	Percentage of the all England total found in the Comparator Areas
Deciduous woodland	19 %	13%
Lowland heathland	15%	9%
Lowland meadow	15%	9%
Lowlands fen	14%	14%
Good quality semi-improved grassland	12%	15%

Recreational Land	Green Belt	Comparator Areas
All recreational land	13%	10%
Country Parks	47%	7%
Community Forests	34%	14%
Woodland Trust Land	35%	15%
Local Nature Reserves	34%	20%
Increase in Local Nature Reserves 2009-16 (with number of new sites)	30% (48)	31% (49)
Registered Parks and Gardens	23%	6%
Village/Doorstep/Millennium Greens	13%	11%
National Trust Land	10%	9%
National Nature Reserves	9%	3%
Common Land	8%	4%
Open Access Land	5%	5%
Public Rights of Way	17%	13%
National Cycle Network	12%	12%
National Cycle Network traffic-free sections only	19%	19%
Percentage of all England's land area	12.5%	10%

What can we do to make the Green Belt more accessible and wildlife friendly?

The Government should:

Prioritise investment in natural capital in the Green Belts in the 25-Year Plan for the Natural Environment, particularly woodland and wetland creation joined by wildlife corridors to form a stronger ecological network. Professor Dieter Helm has called for a Green Belt with 'lots of natural capital' including 'much greater public access' and 'woodlands located next to people'. Similarly, the third State of Natural Capital Report⁴ describes investments in natural capital that offer the greatest economic returns. Those that are particularly relevant in the Green Belts include woodland planting, wetland creation, expanding urban greenspace, improving the environmental performance of farming and managing catchments. Improvements could be financed through targeted incentives similar to the current Countryside Stewardship Scheme.

Combined authorities, Local Enterprise Partnerships and local government should aim to enhance the Green Belt through some or all of the following activities:

Use regional park funding models more widely.

The lack of sustainable funding is a major barrier to implementing change. This research has investigated funding models including a Regional Park, a Community Forest, a Local Nature Partnership and two Nature Improvement Areas. Of these, the Lee Valley Regional Park Authority to date has the most sustainable funding model. This model, or elements of it, should be taken up more widely.

Introduce long term management plans in order to deliver enhancements to natural capital and recreational opportunities. Long term management plans are already produced for National Parks and Areas of Outstanding Natural Beauty (AONBs). Much of the work could be based around existing local authority green infrastructure strategies that cover a number of Green Belt areas. 'Opportunity maps' showing areas where there is particular scope for improvement are available from CPRE.

Market the Green Belt as a visitor destination in its own right. This is already being done by the Friends of the Ontario Greenbelt around Toronto, Canada. In England, initiatives like the Oxford Green Belt Way led by CPRE Oxfordshire have helped to provide a sense of identity and make the Green Belt feel more accessible. The Lee Valley Regional Park promotes local walks and places of interest within the Green Belt areas that it covers.

Create new Green Belts where they can be

particularly justified. CPRE believes that exceptional new designations can be particularly justified around Norwich and Southampton. Green Belts are particularly valuable resources for nature conservation and recreation. The long term protection offered by Green Belt designation would give more confidence to Government departments, local authorities and landowners to invest in better land management.

CPRE / ADAS, November 2016

^{4.} See D Helm, In Defence of the Green Belt, April 2015. State of Natural Capital reports are available from www.gov.uk.

Figure 2. Lee Valley Regional Park. Aerial photograph of Gunpowder Park © LVRPA. **Figure 3. Mersey Forest. Rimrose Valley Country Park entrance before improvement works.** © McCoy Wynne Photography.



Figure 4. Mersey Forest. Rimrose Valley Country Park after improvement works. © McCoy Wynne Photography.



Challenges

People recognise the potential value of the Green Belt for recreation and biodiversity, and there have been some great examples of projects that have achieved both goals. But more needs to be done to promote access, create recreational opportunities and improve habitats at a landscape scale.

Some of the key challenges are:

- Lack of positive management requirement for Green Belt in planning policy. Although paragraph 81 of the National Planning Policy Framework (NPPF)⁵ states that local planning authorities should plan positively to enhance the beneficial use of Green Belt, there is no requirement for a management plan to guide implementation of coordinated change.
- Lack of incentives to improve environmental quality of, access to, and recreational opportunities in agricultural land in the Green Belt. Agri-environment schemes have traditionally targeted more remote, upland areas, rather than peri-urban areas. According to the CPRE / Natural England 2010 study, agri-environment schemes only covered 53% of all utilisable agricultural land in the Green Belt, compared to 67% of all utilisable agricultural land in England as a whole
- Development pressure on the Green Belt. The Green Belt's integrity is under continual threat from developers and every parcel lost to private housing is an irreversible loss of an asset that could have provided more natural capital value to the wider public. An undefined test of 'exceptional circumstances' in the National Planning Policy Framework allows for Green Belt boundaries to be reviewed and land removed from them for development. This undermines the sense of permanence needed to invest in the long-term management of Green Belt land

^{5.} NPPF Paragraph 81: Once Green Belts have been defined, local planning authorities should plan positively to enhance the beneficial use of the Green Belt, such as looking for opportunities to provide access; to provide opportunities for outdoor sport and recreation; to retain and enhance landscapes, visual amenity and biodiversity; or to improve damaged and derelict land.

An Introduction to Green Belt and this Study

The aim of the study is to analyse nature conservation and recreational opportunities in land designated as Green Belt in England. This study builds on the report Green Belts: a greener future published jointly by Campaign to Protect Rural England and Natural England in 2010. The objective was to identify both the overall extent and the spatial distribution of these opportunities, in order to identify opportunity areas in each Green Belt. This will help identify specific places as well as broad areas requiring further action by the Government, NGOs and others.

In addition to spatial analysis, this study has collected a range of evidence from academic literature, Government reports and conservation organisations in order to gain a better understanding of the opportunities to enhance natural capital and recreational provision in the Green Belt, and the challenges that need to be overcome to achieve them, and the management models and funding options currently used to manage land. An expert group of stakeholders representing leading academics, policymakers, Government agencies, conservation organisations and farm bodies was also convened to provide further qualitative input.

Based on the literature review, case studies and spatial analysis, the study provides recommendations about how natural capital or recreational opportunities within the Green Belt could be improved and/or increased.

The Green Belt's purpose is to safeguard the countryside around our major towns and cities from unrestricted urban sprawl. This is an essential function and to date just under 1.64 million hectares of land is protected by this designation. The fundamental characteristics of the Green Belt are its 'openness' and 'permanence'. Neither term has been clearly defined, but case law and practice over time has generally interpreted 'openness' as an absence of built development, and 'permanence' as lasting as far as can be seen ahead, and beyond the end of a 15-20 year period for a typical local plan. The Green Belt's open, undeveloped quality gives it another role as a natural capital asset that could deliver even more to society. The total population of England in 2011 was 53.01 million⁶, of which approximately 30 million people live in urban areas surrounded by Green Belt, equivalent to 57% of the population of England. For those fortunate enough to live in a town or city with a Green Belt, this area will represent the nearest countryside for recreation or to enjoy the natural environment. In addition the Green Belt offers a unique opportunity to create and restore natural habitats and re-establish ecological networks at a landscape scale.

There are 14 Green Belts in England with a total area of 1,637,123 ha, shown on Figure 5. This is equivalent to 12.5% of the area of England at mean high water (13,050,388 ha). In this study we have compared Green Belt Land with England as a whole, and also with other similar urban fringe areas which we have called 'Comparator Areas', also shown on Figure 5. The Comparator Areas face many of the same challenges and opportunities as Green Belt land due to their proximity to major urban areas. The Comparator Areas cover an area of 1,323,861 ha, equivalent to 10.1% of England.

The map of Green Belts shows that the Green Belts vary greatly in size, the largest being the London Metropolitan Green Belt with an area of 484,173 ha. The second largest is the North West Green Belt around Liverpool and Manchester (247,708 ha) and third largest is the adjacent South Yorkshire and West Yorkshire Green Belt (248,241 ha) surrounding Sheffield and Leeds. The fourth largest is the West Midlands Green Belt (224,954 ha) around Birmingham. These four Green Belts surround the largest urban conurbations in England. The remaining ten Green Belts are substantially smaller, surrounding smaller cities.

^{6.} ONS 2011 Census data

Figure 5. Green Belt and Comparator Areas in England



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Key Findings

This study has included an analysis of key elements of both natural capital as represented by the Priority Habitat Inventory, and recreational opportunities, as represented by the datasets for publicly accessible land, Public Rights of Way (PRoW) and the National Cycle Network (NCN). Further information on sources of data and methodology is provided in Annex 1. The full results of the analysis are shown in Tables 1-3 in Annex 2. Maps showing the existing natural capital and recreational opportunities have been produced for all the Green Belts, and examples of these are provided in this chapter. In addition, opportunity maps were produced using Geographic Information System (GIS) spatial analysis, showing areas of high, moderate and low natural capital and recreational opportunity. These maps show where provision is already good and where there are opportunities for enhancement. The full set of maps is available from CPRE.

Natural Capital - Priority Habitat Inventory

Priority Habitats have been mapped for each Green Belt, using the Priority Habitat Inventory. Table 1 in Annex 2 shows the amount of Priority Habitat in each Green Belt as well as for Comparator Areas and England as a whole.

Results

The analysis shows that 13% of all Green Belt land, covering 207,453 ha, is Priority Habitat. In comparison, there is an equivalent amount of priority habitats in the Comparator Areas, where 14% of the land area is Priority Habitat. In England as a whole, Priority Habitats cover 14% of the country.11% of all Priority Habitats in England are located within Green Belt land.

Figure 6 below shows the Priority Habitat types that are most common in Green Belt areas.

Priority Habitat	Definition	Green Belt	Comparator Area
Deciduous woodland	comprises predominantly broadleaf tree species including the following categories: Broadleaved; Mixed - predominantly broadleaved; Coppice; and Coppice-with-standards.	19%	13%
Lowland heathland	dominated by heathers or dwarf gorse species, generally occurring on well-drained acid soils, on peat less than 0.5m thick in lowland areas.	15%	9%
Lowland meadow	most forms of unimproved neutral grassland in lowland areas. Includes grasslands cut for hay and unimproved neutral pastures where livestock grazing is the main land use.	15%	9 %
Lowlands fen	defined as minerotrophic mires (receive their water supply mainly from streams or springs) in lowland areas, usually over peat more than 0.5m deep. The water table is at or just below the surface.	14%	14%
Good quality semi- improved grassland	grasslands which have been modified by artificial fertilisers, slurry, intensive grazing, herbicides or drainage, and consequently are less diverse and natural than unimproved grasslands.	12%	15%

Figure 6. Most common Priority Habitat types in Green Belt with percentages of the total area in England of each that are within the Green Belt or comparator area



Saline lagoons

Traditional orchard

Coastal saltmarsh

Deciduous woodland

Good quality semi-improved grassland

Lowland heathland

Lowland meadows

Mudflats



The Green Belt with the highest percentage land cover of Priority Habitat is the South West Hampshire and South East Dorset Green Belt where 28% of the land area is Priority Habitat. The London Metropolitan Green Belt has the second highest percentage land cover of Priority Habitat at 18%.

The North West Green Belt has the most diverse range of Priority Habitats, with 23 different habitats present. The Tyne and Wear Green Belt is the second most diverse area with 20 Priority Habitats present.

Recreational opportunities

The datasets for recreational opportunities included Country Parks, National Nature Reserves, Local Nature Reserves, Registered Parks and Gardens, Open Access Land Common Land, Community Forests, National Trust Land, Village/Doorstep/Millennium Greens and Woodland Trust Land. The publicly accessible land was mapped for each Green Belt and the full results are provided in Table 2 in Annex 2.

Results

47% of Country Parks are in Green Belts compared with 7% in Comparator Areas. Country Parks are typically found on the urban fringe, and therefore it is not surprising that there is a high presence in Green Belts, surrounding the largest urban areas. The Country Parks are clearly an important asset in Green Belts. SW Hampshire and SE Dorset, North West, Nottingham and Derby and West Midlands have the highest proportion of Country Parks (1.9% - 1.7%) while York, Oxford and Avon have the lowest proportion (0% - 0.4%).

34% of Community Forest land is within Green Belts compared with 20% in Comparator Areas. There are eight Community Forests and five Community Forestry Initiatives located in and around the largest towns and cities with the aim of creating high-quality environments for people by revitalising derelict land. As the analysis demonstrates, almost half of Community Forest land is within Green Belts. Four Green Belts have a particularly high coverage of Community Forest, namely 99% of South Yorkshire and West Yorkshire, 70% of Avon, 49% of North West and 35% of Nottingham and Derby.

35% of Woodland Trust Land is within Green Belts compared with 15% in Comparator Areas. The Woodland Trust campaigns for more accessible woodland through the opening up of inaccessible, privately-owned woods and the creation of new woods near where people live. The analysis of woodland habitat has shown that there is a relatively high proportion of woodland within Green Belts, and the Woodland Trust have succeeded in creating access to many of these. The highest proportion of Woodland Trust Land is found in London, the North West and Tyne and Wear (0.35% - 0.51%), and the lowest levels in Stoke on Trent and SW Hampshire and SE Dorset.



Figure 8. Deciduous woodland cover in Green Belts in hectares and percentage of land area



Figure 9. London Metropolitan Green Belt - distribution of recreational opportunities

34% of Local Nature Reserves are in Green Belts compared with 20% in Comparator Areas. There is a high proportion of Local Nature Reserves (LNR) in Green Belts, and this is due to many LNRs being located close to urban centres, where they are accessible to people. SW Hampshire and SE Dorset and London have the highest proportion of LNRs (1.2% -1.1%) and York, Cambridge and Avon have the lowest levels (0.2% - 0.4%).

23% of Registered Parks and Gardens are in Green Belts compared with 6% in Comparator Areas. Registered Parks and Gardens are designed landscapes such as cemeteries, or landscapes associated with institutions or country estates. The London Metropolitan Green Belt has a particularly high proportion of Registered Parks and Gardens (3.65%) due to many historic country estates located around the capital, with a high proportion also found in Avon and the West Midlands. The lowest levels are found in Burton upon Trent and Swadlincote and York.

13% of Village/Doorstep/Millennium Greens are within Green Belts compared with 11% for Comparator Areas. London has the highest level of Village/ Doorstep/Millennium Greens (0.1%).

10% of National Trust Land is within Green Belts compared with 9% in Comparator Areas. SW Hampshire and SE Dorset has the highest level of National Trust Land (7.0%) followed by London (2.9%). Oxford and York have the lowest levels.

Figure 10. Recreational opportunities in Green Belts and Comparator Areas as percentage of England total

Recreational Opportunities	Green Belt	Comparator Areas
Recreational Opportunities Total	13%	10%
Country Parks	47%	7%
Community Forests	34%	14%
Woodland Trust Land	35%	15%
Local Nature Reserves	34%	20%
Registered Parks and Gardens	23%	6%
Village/Doorstep/Millennium		
Greens	13%	11%
National Trust Land	10%	9%
National Nature Reserves	9 %	3%
Common Land	8%	4%
Open Access Land	5%	5%

9% of National Nature Reserves are within Green Belts compared with 3% in Comparator Areas. SW Hampshire and SE Dorset and North West have the highest levels of National Nature Reserves (NNR) and the lowest levels are found in Oxford, York and Stoke on Trent.

8% of Common Land is within Green Belts compared with 4% in Comparator Areas. South Yorkshire and West Yorkshire has the highest level of Common Land (3%) followed by SW Hampshire and SE Dorset and London. Nottingham and Derby, Tyne and Wear and Gloucester and Cheltenham have the lowest levels.

5% of Open Access Land is within Green Belts compared with 5% in Comparator Areas. This relatively low proportion is due to most Open Access Land being located in more remote upland areas, rather than urban fringe areas. SW Hampshire and SE Dorset has the highest proportion of Open Access Land (12%) followed by South Yorkshire and West Yorkshire (6.6%). The lowest levels are found in Gloucester and Cheltenham and Stoke on Trent.



Figure 11. Area in hectares of all types of recreational opportunities in Green Belts

Figure 12. Total area of recreational opportunities in Green Belts and Comparator Areas



Comparisons with 2010 and changes over time

The area of Green Belt calculated for the purposes of this study is largely the same as in current Government Green Belt statistics, and has been calculated using different methods to those employed in the 2010 CPRE / Natural England study. The effect of this has been that the overall areas of most Green Belts are larger, with the exception of the South West Hampshire and South East Dorset Green Belt, where the New Forest has been taken out of the Green Belt, and Cambridge, where the area has reduced slightly. See Annex 1 for further detail. The increases in nature conservation and recreational designations are proportionally greater in some cases than the increases in overall Green Belt area, and show that the Green Belt is more valuable than first thought in 2010. On Local Nature Reserves, there is data to show that there has been a particular concentration of new designations in the urban fringe, with a clear majority (over 60%) of new sites notified being in either the Green Belt or comparator areas.

The area of Local Nature Reserves has increased in most Green Belts, most notably in London where the area has increased by 935 ha (21%). In the West Midlands it has increased by 510 ha (40%) and in the North West by 494 ha (24%). Between 2009 and 2016, 158 LNRs have been created in England of which 48 were within Green Belts, equivalent to 30%, and 49 were created in Comparator Areas (31%). The North West saw the largest increase in LNRs with 16 sites created. The Green Belts and urban fringe areas more generally contain a particularly high concentration of Local Nature Reserves. Figure 13. Local Nature Reserves (LNR) created in Green Belts, Comparator Areas and England from 2009 to 2016

Green Belts	LNRs			
1	0			
Avon	0			
Burton upon Trent and Swadlincote	0			
Cambridge	2			
Gloucester and Cheltenham	0			
London	11			
North West	16			
Nottingham and Derby	8			
Oxford	0			
SW Hampshire and SE Dorset	0			
South Yorkshire and West Yorkshire	4			
Stoke on Trent	1			
Tyne and Wear	0			
West Midlands	6			
York	0			
LNRs Total within Green Belts	48			
LNRs Total within Green Belts as % of England Total	30%			
LNRs Total within Comparator Areas	49			
LNRs Total within Comparator Areas as % of England Total	31%			
All England Total	158			





Key

Ib Crown according to and statisticant right (2018) Detailers used: PROW datasets from Social Authorities/Councy Councils, National Cycle Retennix dataset from Sustains (Kiny 2016). Detailers were denrifted using network threads (print). Cell Sin: 10ms20e. Citcle englobourhood: 100Gm tables. The langth of the Public, Rights of Way (PRW). Rational Cycle Hourse (NCH). National Cycle Network: Linis (Mith, and Jugional Cycle Reprint). Was not taken into installeration to generate the denotes.

National Trail PRoW High Moderate

Low

PRoW data not available

National Cycle Network

Public Rights of Way and National Cycle Network

No national dataset for Public Rights of Way (PRoW) currently exists. PRoW data for the whole of England was therefore sourced from county councils and local authorities specifically for this project, and the dataset compiled covers 93% of the country. This is now the most complete and up to date dataset of PRoW currently available. For the remaining 7% of the country, PRoW were either not digitised, or digitisation was in progress. The full results are shown in Table 3 in Annex 2.

Results

17% of England's PRoW are located within Green

Belt compared with 13% in Comparator Areas. The London Metropolitan Green Belt alone accounts for 6% of England's PRoW (on 3.7% of England's land area) with more than 10,466 km of publicly accessible footpaths, bridleways and byways. This makes it the Green Belt with the longest accumulated length of PRoW in England.

The average PRoW density in Green Belt is 20 metres per hectare (m/ha). The highest density of PRoW is found in Gloucester and Cheltenham, Avon and North West Green Belts with respectively 28, 25 and 23 m of PRoW per hectare. In comparison, the density of PRoW within Comparator Areas is slightly less with 19 m/ha. The average density for both Green Belt and Comparator Areas is significantly higher than the average for England as a whole, which is 8 m/ha. The reason for this is that there are generally more PRoW near settlements, and fewer in more remote areas. In addition, large areas of Open Access land, where PRoW are not necessary, are more frequently found in more remote areas.

12% of the National Cycle Network (NCN) is within

Green Belts and 13% is located in Comparator Areas. The total length of NCN for England is 17,212 km, with 2,126 km in Green Belts and 2,189 km in Comparator Areas. 9% of on road cycle routes are found in both Green Belts and Comparator Areas, while 18% of England's traffic free cycle routes are found in Green Belts and 19% in Comparator Areas. The longest accumulated length of NCN within Green Belts is found in the North West with 591 km, followed by London with a total length of 514 km. In contrast, Burton upon Trent and Swadlincote has less than 1 km of NCN.

The average NCN density in Green Belts and England as a whole is 1 m/ha. Comparator Areas have a higher NCN density of 2 m/ha, although the overall length is only slightly higher than within the Green Belt. Of the Green Belts, Avon has the highest density with 3 m/ ha and North West, Tyne and Wear, and York have a density of 2 m/ha.



Figure 15. Density of Public Rights of Way within Green Belts and Comparator Areas



Figure 16. Density of natural capital and recreational opportunities in the London Metropolitan Green Belt

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> Datasets used: Natural capital: Priority Habitat Inventory (December 2015). Recreation: PROW datasets from Local Authorities/County Councils, National and Regional Cycle Routes from Sustrans (May 2016), publicly accessible land from data.gov.uk (download March 2016), National Trust and Woodland Trust.

Key



PRoW data not available

Opportunity Maps

A key output of this study is the production of opportunity maps that show which parts of the Green Belts have good provision in terms of natural capital and recreational opportunities, and where enhancement could be given further consideration. Two different maps were produced. Figure 16 is an example of a density map, where Priority Habitats, publicly accessible land, PRoW and NCN are combined to show where there are concentrations of provision in blue, and poorer provision in light green and yellow. This map does not distinguish between natural capital and recreation but does provide a clear picture of where high and low provision may be found.

Figure 17 is an example of a spatial analysis plan that shows areas of high, moderate and low recreational opportunities against areas of high and low natural capital. The areas identified as high natural capital are the areas of Priority Habitat.

The method used to produce these plans is described in more detail in Annex 1.



Figure 17. Spatial analysis of natural capital and recreational opportunities in the London Metropolitan Green Belt



© Crown copyright and database right (2016) tasets used: Natural capital: Priority Habitat Inventory (December 2015). Recreation: PROW datasets m Local Authorities/County Councils, National and Regional Cycle Routes from Sustrars (May 2016), blicly accessible land from data govuk (download March 2016), National Trust and Woodland Trust.

Case Study Areas



Figure 18. Colliers Moss. © The Mersey Forest Team.

The purpose of these case studies is to gain more in-depth information about organisations that have focused on the delivery of natural capital and recreational opportunities within specific areas of Green Belt land. The review analyses some of the projects undertaken by the organisations selected, as well as aspects of governance to investigate whether any of the organisational models studied could be applied to enhancing areas of Green Belt.

This section considers examples of Community Forests and Regional Parks as well a number of Local Nature Partnerships (LNPs) and Nature Improvement Areas (NIAs), introduced in the 2011 Natural Environment White Paper.

LNPs and NIAs cover selected areas of England, and a number include designated Green Belt within their remit.

Lee Valley Regional Park

Aims and objectives

Lee Valley Regional Park is a 40,000 ha, 42 km long linear park, serving London, Hertfordshire and Essex. 82% of the Regional Park is Green Belt and, cumulatively, Green Belt and Metropolitan Open Land cover 97% of the park area. The park follows the course of the River Lea or Lee along the Lee Valley from Ware in Hertfordshire through Essex and the north east of Greater London, through the Queen Elizabeth Olympic Park, down to East India Dock Basin on the River Thames. The Lee Valley was once home to a diverse range of industries, gravel pits, waterworks sites, distilleries and munitions factories, however, over time, much of the land across the valley became neglected and derelict. In 1963 the Civic Trust undertook an appraisal of the valley's potential as a vast leisure and recreational resource. Following promotion of the Lee Valley Regional Park Bill in Parliament, the Lee Valley Regional Park Authority was formally constituted in 1967.

The Authority took on responsibility for regenerating derelict and neglected land into high quality public open spaces and wildlife habitats of ecological importance, as well as preserving the region's historical value. As such, the Regional Park is now made up of a diverse mix of countryside areas, urban green spaces, heritage sites, country parks, nature reserves, lakes and riverside trails, as well as leading sports centres. It offers a rich variety of habitats including eight Sites of Special Scientific Interest (SSSI), and Amwell, Rye Meads, Turnford and Cheshunt Pits, as well as Walthamstow Reservoirs form the Lee Valley Special Protection Area (SPA) and Ramsar sites. In addition there are 31 Local (or County) Wildlife Sites, 11 Areas of Metropolitan Importance and 26 areas of Borough Importance. The Green Belt policy has been important for achieving the objectives of the Regional Park by safeguarding land, which is under severe development pressure.

The Authority's remit also extends to developing and preserving leisure, recreation and sport throughout the Regional Park. As part of this, the Authority is playing a leading role in delivering the legacy from the London 2012 Olympic and Paralympic Games, owning three London 2012 venues - Lee Valley White Water Centre in Hertfordshire, and Lee Valley VeloPark and Lee Valley Hockey and Tennis Centre, both located at the Queen Elizabeth Olympic Park.

The current Lee Valley Regional Park Plan (adopted in 2000) sets out a vision to: be a cohesive, sustainable and valued regional green lung; be an area of enhanced and protected natural biodiversity for the enjoyment of all; achieve full utilisation of the unique land and water assets of the regional park for specialist leisure and recreational facilities developed in accordance with principles of sustainability and design excellence; and be an accessible and permeable, integrated visitor attraction to serve the region which will include local communities. More recently, the Authority's Business Plan set out a vision to establish Lee Valley Regional Park as a world class destination for sport, leisure and nature by 2020. There are differences in approach between national Green Belt Policy, where there is a permissive approach to agricultural development, and the Lee Valley Regional Park, where greater priority is given to promoting nature conservation and sport and leisure.

Organisational structure

The Lee Valley Regional Park Authority has an appointed board of 28 members who set the strategy for the Authority. The members are nominated by their own constituent local authorities from across London, Essex and Hertfordshire. Twenty of the members are from the riparian authorities (those whose borders are crossed by the Lee Valley Regional Park boundaries), and a further eight members are appointed through London councils. In addition, the Authority also has two co-opted Members; one from the Canal and River Trust and one from the Environment Agency. Appointments are for a 4-year term of office. Nine senior board members make up the Authority management team. Figure 19. Extent of the Lee Valley Regional Park in relation to the London Metropolitan Green Belt and Priority Habitats



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In April 2015, Lee Valley Leisure Trust came into operation. The Trust runs 14 of the major sports venues and other sites owned by Lee Valley Regional Park Authority, including the three London 2012 venues, Lee Valley Athletics Centre, Lee Valley Riding Centre, Lee Valley Ice Centre, a visitor farm, golf course, two marinas and three camping and caravan parks.

The Authority also works in partnership with a range of national and local organisations and key individuals across the public and private sectors. In particular this is to develop new income streams through a strong focus on sponsorship and corporate partnerships, as well as partnerships with businesses in the commercial leisure sector, for example the Youth Hostel Association.

Lee Valley Regional Park is a mixture of old and new habitats, including a mosaic of wetland habitats that has created many opportunities for wildlife. To ensure the protection and enhancement of this existing ecological resource, a framework of objectives called the Biodiversity Action Plan has been produced. This highlights key habitats and species and drives conservation work through specific targets. The day to day management of the open spaces and wildlife sites is carried out by the Ranger Service, comprising 22 full-time and part-time rangers who perform a variety of duties to ensure that the Regional Park remains a valuable nature and conservation location.

Funding mechanism

The Authority operates on a budget of approximately £25 million per year. Over half of this comes from money generated by its own commercial and investment activities, with £14 million of revenue income expected to be generated by the Authority in 2015/16. The Authority continues to seek all appropriate opportunities to maximise its commercial income from external sources, existing facilities and services, including from its three London 2012 venues.

The rest of the funding comes from a levy on council tax payers in Hertfordshire, Essex (including Thurrock) and each of the boroughs in Greater London. This amounts to £11.1 million in 2015/16 (a decrease of 2% since 2014/15), and equates to £0.98 per person per year in the region (down from £1.01 in 2014/15). The ceiling for the levy is determined by a formula set out in *The Levying Bodies (General) Regulations 1992* which is adjusted annually to account for inflation. However, the levy charged by the Authority is just 47.9% of the maximum chargeable.

Projects undertaken to enhance recreation and natural capital

A number of nature-based projects have been undertaken in recent years. In 2013, the Authority joined forces with water companies, the Environment Agency, Hertfordshire and Middlesex Wildlife Trust, volunteer conservation groups and environmental charities to improve the health of the River Stort, whilst also encouraging people to find out about and get involved with the river. Also in 2013, Authority staff and volunteers planted over 26,000 reeds to enhance the reedbed at Seventy Acres Lake, thus providing additional habitat for the bittern.

The Authority is keen to promote recreational walking, and has a webpage dedicated to advertising a number of circular and linear walks through the Lee Valley. Some of the walks are designed to take walkers past particular wildlife hotspots, for example otters at Seventy Acres Lake, or sculptures and natural play pieces, such as at the River Lee Country Park. Another webpage gives the best examples of where to go to spot wildlife, for example the Cornmill Meadows Dragonfly Sanctuary. One of the duties of the Authority's rangers is to develop and implement guided walks and talks, helping to get people out into the countryside and engage with nature.

The rangers are also responsible for delivering events on behalf of the Authority and enabling other organisations to run events on the open spaces, for example the 'Lee Valley Park Ranger Experience' and 'Community Tree Planting Day'. More than 500 events take place each year in the Regional Park, often focused on encouraging vulnerable and underrepresented groups to take part. For example, 2010 saw the launch of 'Wild Space, Your Place' - a Heritage Lottery Funded project with the RSPB bringing the joys and benefits of open spaces to under-represented groups in London boroughs.

As part of the remit to develop and preserve leisure, recreation and sport, the Authority is creating a zone of sporting excellence throughout the Regional Park, which includes centres for athletics, horse riding, ice skating, sailing and golf. Other sporting and recreational opportunities such as running, cycling and angling are also promoted through the Authority's webpages, with cycle routes including a 16 mile 'Pedaller's Paradise' starting and finishing at Gunpowder Park.

Case studies

- Gunpowder Park
- River Lea County Park
- Seventy Acres Lake (EU LIFE programme⁷ funded project)

^{7.} LIFE is the EU's financial instrument supporting environmental,

²⁵ nature conservation and climate action projects throughout the EU.

Case Study: Gunpowder Park



A Green Flag award winning-park with an explosive history!



Figure 20. Views from the Field Station. © LVRPA.



Figure 21. Network of surfaced paths. © LVRPA.

In 1999 this 90 ha site and adjacent 33ha of agricultural land were purchased by Lee Valley Regional Park Authority. Through a multimillion pound investment by the Authority, the land has been reclaimed and regenerated from its former use as a Royal Ordnance munitions testing facility. After 100 years as a closed site, it has been transformed into a dynamic country park for the benefit of people, wildlife and the arts. The site was officially opened on 4 June 2004 by His Royal Highness the Duke of Edinburgh. The site was awarded its first Green Flag in 2006 and in 2015 was awarded a London in Bloom Gold award and named Country Park of the Year. Gunpowder Park receives over 400,000 visits per year.

Gunpowder Park provides an important strategic link between River Lee Country Park to the north and other open spaces to the south and west. This area of the park is under severe development pressure, and Gunpowder Park provides an important green buffer to industrial and residential growth.

The park is an ideal place for walkers and cyclists, with a comprehensive network of surfaced paths in all weathers. A host of events take place throughout the year including a successful weekly parkrun that attracts over 120 participants. The field station was designed to reflect the site's industrial heritage and to also be a state of the art, environmentally friendly building. It has gabions made from recycled crushed concrete which contain artifacts found on site as well as bat roosting boxes, a green roof that ensures that the building requires very little heating and a rainwater recycling system from the car park to flush the toilets.

The site is designated as a Local Wildlife Site and has an important invertebrate assemblage with the known presence of 11 Red Data Book species. Large expanses of grassland are a key feature of Gunpowder Park; these are bounded by hedgerows and farmland managed by Lee Valley Park Farms under a Higher Level Stewardship agreement. Osier Marsh to the south consists of wet willow and dry birch woodland naturally regenerated on former gravel pits, which were in-filled with pulverised fuel ash (PFA), and used as burning pits for waste from the ordnance activities. This is now a wildlife refuge area, with public access limited to a series of boardwalks and paths. In 2015 there were over 750 volunteer hours undertaken at Gunpowder Park which included survey work for butterflies and bats and habitat creation works focusing on reptiles.

Case Study: River Lee Country Park



A diverse park containing thre SSSI and the Lee Valley White Water Centre

The **River Lee Country Park** is a 1,000 acre Country Park stretching between Waltham Abbey in Essex to Broxbourne in Hertfordshire, in the Lee Valley Regional Park. The area receives approximately 1.5 million visits annually and has a good network of built infrastructure allowing visitors to easily wind their way through the complex of gravel pits and grassland habitats. New visitors and active engagement are encouraged through the installation of innovative features including a dog agility course, disc golf, natural play area and sculpture trail.



Figure 22. River Lee Country Park: Disc Golf. © LVRPA.



Figure 23 River Lee Country Park: The Shrine sculpture. © LVRPA.



Figure 24. River Lee Country Park: Stag Beetle Sculpture. © LVRPA.

Case Study: Seventy Acres Lake



Developing a strategic network of reed beds for bitterns through the EU LIFE Nature Programme



Figure 25. Seventy Acres Lake during LIFE works. © LVRPA.



Figure 26. Numbers of breeding bittern are increasing annually. © LVRPA.

Seventy Acres Lake sits in the heart of River Lee Country Park, straddling the Hertfordshire and Essex border and bounded by urban development along its entire western boundary. The redundant gravel pits have either been in-filled to create a mosaic of grassland or scrub habitats, or have been allowed to fill with water which over time have become used by a range of wetland birds and mammals.

The Authority has created a network of surfaced paths winding through the lake complex. The park receives more than 6 million visits per year from people from across the region and beyond.

The importance of Seventy Acres Lake for wildlife was already apparent as it forms part of the Lee Valley Special Protection Area and is designated as a Site of Special Scientific Interest; bittern numbers are a key feature in both these designations.

The LIFE project on Seventy Acres Lake included the removal of willow scrub from the dome-shaped islands, which were a remnant of the gravel extraction. The islands were then excavated down to water level and thousands of Common Reed planted. The project nationally has been a huge success with numbers of breeding bittern increasing annually. The Lee Valley has yet to see bittern breed but the scale and quality of the reed bed now present will certainly provide potential for breeding sites in the future.

Fishers Green has long been well known as an excellent place to visit to see wintering bittern and the bittern Information Point is often the first point of call. The original hide has been extended a number of times to cope with the additional demand. The most recent addition created an area where dedicated volunteers who staff the hide at weekends can engage with visitors, talking to them about the wildlife of the site, with a focus on bittern in the winter and Common Tern, who nest on artificial rafts on the lake, in the summer. The volunteers have given a total of 1,430 hours over the past year and engaged with all visitors to the site from the ardent birdwatcher to dog walker and families on day out.

The Authority is now looking at the possibility of improving the facilities with a newly designed ecofriendly hide to meet the growing demands and provide the best possible visitor experience.

The Mersey Forest

Aims and objectives

The Mersey Forest is an area of 1,370,000 ha, of which 50% is Green Belt, serving Liverpool, Warrington, Chester, Formby and Northwich. The area covers the local authority areas of Liverpool, Sefton, Knowsley, St. Helens, Warrington, Halton, Cheshire West and Chester. 1.7 million people live in the Mersey Forest Area. Formed in 1991, The Mersey Forest is the largest of the 12 areas of England chosen by government to be the focus of long-term tree planting programmes to improve their environment and benefit local communities. These areas were designated as Community Forests. The aim of community forests is to:

"...deliver a comprehensive package of urban, economic and social regeneration, creating high-quality environments for millions of people by revitalising derelict land, providing new opportunities for leisure, recreation, and cultural activities, enhancing biodiversity, preparing for climate change and supporting education, healthy living and social and economic development.'

The current Mersey Forest Plan (adopted in 2014) sets out the vision:

'Our vision is to get 'more from trees' to help make Merseyside and North Cheshire one of the best places in the country to live.'

Organisational structure

The Mersey Forest is formed of a core partnership of seven local authorities (Cheshire West and Chester, Halton, Knowsley, Liverpool, Sefton, St. Helens, and Warrington) as well as Natural England, the Forestry Commission, and the Environment Agency, coordinated by The Mersey Forest team. Officers and councillors from these organisations attend the steering and working groups. The Community Forests have an accord with the Forestry Commission which is reviewed annually and provides a rolling three year accord. This accord sets out what is and will be done, identifying actions where joint work and a developing partnership will be of mutual benefit for the Forestry Commission and England's Community Forests.

These partners are from the public, private and community sectors; operate at different spatial scales from local and sub-national, to national and international; and play many different roles in helping to deliver The Mersey Forest Plan.

Funding mechanism

The Mersey Forest Teams operate on a budget of approximately £1.4 million per year. In comparison, the Lee Valley Regional Park has an annual budget of £25 million per year for an area a small fraction of the Mersey Forest (3%). The local authorities have a partnership agreement with each other, and contribute funding to The Mersey Forest team. The team and partners then draw on other funds to maximise the value and impact of all investments. Cheshire West and Chester Council is the host partner, providing employment, finance and accounting services. The Community Forest Trust, a company limited by guarantee with charitable status, provides further support to The Mersey Forest. The Mersey Forest team secures and manages additional funds from grants, consultancy work, corporate social responsibility, unrestricted donations, and other innovative mechanisms such as through the planning system. They use an investment model as shown in the diagram on page 31 to maximise budget.

Case studies

- Bold Forest Park
- Griffin Wood
- Northwich Woodlands

These are in areas designated as Green Belt.

Figure 27. Extent of the Mersey Forest in relation to the North West Green Belt and Priority Habitats



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Figure 28. Investment model diagram produced by The Mersey Forest showing how re-investment of income supports strategic capacity building activities such as partnership development and policy influencing as well as maximising funds available through bringing different funds together. The Mersey Forest Plan, 2014. © Mersey Forest.

Case Study: Bold Forest Park





Figure 29. Community festival in Bold Forest Park. © McCoy Wynne Photography.

Since 1991, The Mersey Forest has brought together a range of partners to transform an area of St.Helens, previously dominated by colliery spoil heaps, into a burgeoning Forest Park and natural asset. South St.Helens has faced significant social, economic and environmental challenges since the demise of the local coal mining industry. However, the creation of a cluster of community woodlands spanning 220 hectares, including Sutton Manor, Clock Face Country Park and Griffin Wood, has dramatically improved the image of the area and offers a future source of economic development. Landowners including the Forestry Commission and St.Helens Council are working together with the local community to harness the collective potential of the maturing woodlands under the banner of Bold Forest Park. The woodlands are already proving a popular local resource, attracting 200,000 visitors per year. In an area where health and wellbeing are important considerations, the Forest Park provides a valuable space for walkers, cyclists and families.

Case Study: Griffin Wood



This 12 hectare site is owned by Community Forest Trust, a charity that supports the work of The Mersey Forest. In 2006 it was just an empty field with a scrap of woodland in one corner, but ten years later it's well on the way to being transformed into a beautiful new woodland in the Green Belt south of St.Helens.

The Mersey Forest Team worked with the local community to plan the creation of a new woodland and Griffin Wood was planted in early 2007 with the participation of local people. The woodland has encouraged wildlife to the area, and has become an integral part of Bold Forest Park. A network of all-access paths has been created across the site, and in the spring and summer the whole site is a riot of colour as wildflowers take advantage of the young trees to form a meadow.

Today the woodlands are extensively used by local schools and adults as part of a variety of events including Forest School, local scout troops and wellbeing activities for adults with mental illnesses.



Figure 30. Artistic signage at Griffin Wood. © The Mersey Forest Team.



Figure 31. Wildflower meadow at Griffin Wood. $\ensuremath{\mathbb{G}}$ The Mersey Forest Team.



Figure 32. Extensive tree planting at Griffin Wood. $\ensuremath{\mathbb C}$ The Mersey Forest Team.

Case Study: Northwich Woodlands



Over the past 30 years, Northwich Woodlands has been created from derelict industrial wasteland into thriving community woodland as part of The Mersey Forest that is rich in wildlife habitat and local heritage. A partnership of organisations were instrumental in the transformation, and still continue to support the work of all those who manage the woodlands.

Much of the landscape work across the 323 hectares is now complete and links between the nine different sites are in place. Today, the woodlands are a popular retreat for the residents of Northwich and beyond, providing 28 km of off-road walking, cycling and riding and canal tow paths.

But what do the people of Northwich and the surrounding villages think about it? To find out, in August last year The Mersey Forest and Cheshire West and Chester Council commissioned a market research company to ask what people thought of Northwich Woodlands. By interviewing over four hundred people most residents said that the woodlands were good for their health and wellbeing and provide a good quality of life, whilst some even mentioned that they thought that it added value to their property.

People interviewed also suggested that the woodlands contributed to them choosing to stay in the areas or to move to the area - in fact 40% of people who have moved into the area in the last two years said that the woodlands were one of the factors that influenced them to choose Northwich. Others reported that they valued different aspects of the Woodlands: "...absorbs rain and prevents floods" "keeps us healthy" and "lift our moods" were some of the responses.



Figure 33. Northwich Woodlands. © The Mersey Forest Team.



Figure 34. Teddy Bears' Picnic at Marbury Park. © Alan Redley, Friends of Anderton and Marbury.



Figure 35. Tree planting at Carey Park. © Alan Redley, Friends of Anderton and Marbury

North East Local Nature Partnership

Aims and objectives

The North East Local Nature Partnership (NELNP) was created by the merger of two smaller organisations, the Northumberland Lowland and Coast Nature Partnership (NLCLNP) and the Three Rivers LNP (3RLNP). The NLCLNP part of the area covered a range of landscapes and seascapes across Northumberland including the Newcastle upon Tyne and North Tyneside urban areas, but excluding the National Park and coastal AONB area. The 3RLNP area covers lowland Country Durham, Gateshead, Sunderland and South Tyneside. 71,038 hectares or 11%, of the NELNP area is Green Belt around Newcastle upon Tyne, Sunderland and Durham, but it includes virtually all of the Green Belt area (see map).

Organisational structure

LNPs are set up as self-sustaining strategic partnerships of a broad range of local organisations, businesses, and people with the credibility to work with, and influence, other local strategic decision-makers. They are intended to, amongst other things:

- Develop a shared strategic vision and set of priorities for the restoration and enhancement of their local natural environment at a landscape scale, focusing on outcomes that integrate economic and social as well as environmental needs.
- Have a broad membership that includes active involvement of economic, health and environmental interests and a range of public, private, NGO and local community organisations, including local authorities and those directly involved with land management.

Funding mechanism

The North East LNP is currently in a period of transition and is in the process of setting up an endowed trust. The LNP is hosted by Durham Wildlife Trust, but the intention is for the NELNP to be independent and financially sustainable by 2017. In the first years the four local authorities within the 3RNLP boundary provided between £4,000 - £7,000 per

year to support the establishment of the LNP and over the past 18 months for specific projects, such as developing HLF bids and engaging in environment design review processes. The NELNP is now creating 50 and 100 year landscape visions, to which the endowed trust is central and local funding is crucial for this activity to commence. Currently, three out of seven local authorities have now committed to providing £15,000 each for 2017/18 running costs and meetings are being planned with the remaining local authorities. Defra have indicated interest in this approach and in contributing funds, and further funding is planned through working with businesses. The aim is for the LNP to focus on working at a strategic level rather than on project delivery and it is the endowed trust that will allow the NELNP to work independently irrespective of the political and financial climate and to engage more effectively with the health and economic sectors.



Figure 36. Atmos Consulting, Ecosystem Service and Opportunity Mapping Study. Potential contribution to the regulation of surface water runoff. © Atmos Consulting.



Figure 37. Extent of the North East Local Nature Partnership in relation to the Tyne and Wear Green Belt and Priority Habitats

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Projects undertaken to enhance recreation and natural capital

Atmos Consulting, an ecological consultancy, delivered a project in 2015 to produce a GIS tool that would enable the NLCLNP to identify opportunities to enhance the natural environment and deliver sustainable economic growth.

The tool uses a variety of datasets to identify areas within the NLCLNP boundary where the following 'ecosystem services' are being provided: carbon storage; water regulation; provisioning (food, renewable energy, fibre); recreational sites and routeways; tourism destinations; designated sites; and other areas of biodiversity, landscape or aesthetic value.

The modelling approach was adapted from the methodology set out by the Countryside Council for Wales report *Sustaining Ecosystem Services for Human Well-Being: Mapping Ecosystem Services.* Modelled datasets were generated so that each layer had a range of values that classified the contribution to ecosystem service from low (10) to high (30). Where factors could have a negative contribution to an ecosystem service (e.g. steep slopes contributing to higher surface water runoff), negative values were applied.

Opportunities were identified by considering the four strategic objectives of the NLCLNP, and looking at how



the provision of ecosystem services relate to each objective. Five particular areas were identified within the NLCLNP area and a simple matrix indicates whether each area has potential to deliver each of the four strategic objectives. The five areas selected differ in terms of location and scale, and include:

- Sandstone Hills a large area in the west of the LNP area that is some distance from the Newcastle metropolitan area, but includes some of the Green Belt.
- The Newburn Industrial Estate a small parcel of industrial/commercial land on the urban fringe to the west of Newcastle, and adjacent to a Green Belt area.
- South Newsham a moderate size agricultural area to the north of Newcastle, much of which is within the city's Green Belt.
- Newbiggin-by-the-Sea a small coastal town north of Newcastle and outside the Green Belt.
- Tweed Farmland a large area of agricultural land in the northern part of Northumberland on the Scottish border and some considerable distance from the Green Belt.

The most pertinent example is South Newsham, which is described below.

South of Newsham, within the Tyne and Wear Green Belt, there is an area of agricultural land with an extensive network of Public Rights of Way. The biodiversity scoring part of the assessment shows that there are areas of high biodiversity value (purple grid squares) around the edges of the area, but lower value in the main parts, which are largely agricultural land. It is also the part of Northumberland the least well connected to the rest of the ecological network. There would be opportunities to take advantage of existing water courses and patchy woodland to create a more extensive ecological corridor across the area. The greatest opportunities seem to be around objectives 3 (engagement with nature) and 4 (health and wellbeing) due to the extensive network of existing PRoW and the proximity to Blyth, Cramlington, and north Newcastle.

Figure 38. Atmos Consulting, Ecosystem Service and Opportunity Mapping Study. South Newsham. © Atmos Consulting.

Case Study: Northumberlandia



Northumberlandia is a unique piece of public art set in a 18.6 hectare community park with free public access and 4 miles of footpaths on and around the landform.



Figure 39. Northumberlandia. © Duncan Hutt/Northumberland Wildlife Trust

The idea for Northumberlandia originated in 2004 when the Blagdon Estate and the Banks Group were applying for permission to dig for coal and fire clay (for bricks) on farmland near the new town of Cramlington.

The Banks Group and Blagdon Estates recognised that following the working of coal on the site, there was also a unique opportunity to create a spectacular art form that would provide a legacy for future generations. The consortium contacted the internationally renowned artist Charles Jencks to see what could be done - and Northumberlandia was born.

The centrepiece of the park is Northumberlandia, a stunning human landform sculpture of a reclining lady. Made of 1.5 million tonnes of rock, clay and soil, she is 100 feet high and a quarter of a mile long.

Far from being a rigid manicured art form Northumberlandia is a living part of the countryside that will mature over time and change with the seasons. What you see when you visit is only the start of something that will evolve through generations.

The £3 million cost of the project has been privately funded by the Banks Group and the Blagdon Estate.

Northumberlandia is a park is for public benefit and it is therefore important that it is free for everyone to enjoy. Northumberlandia is still evolving, and to help cover the maintenance costs the car park has a £2 recommended donation. There is a visitor centre with toilet facilities which is now managed by Northumberland Wildlife Trust.

Birmingham and Black Country Nature Improvement Area (NIA)

Aims and objectives

In 2012, this largely urban area of the West Midlands became one of 12 NIAs in England, with the aim of achieving long-term environmental gains for the wildlife and people of Birmingham and the Black Country by delivering targeted, on-the-ground, biodiversity projects at a landscape scale. This represents a step-change away from site-focused nature conservation to a joined-up landscape-scale approach.

Organisational structure

The NIA is managed by a partnership of over 50 organisations. The partnership has set a number of objectives to help achieve the overall aim - these have included: the management and enhancement of recently established woodland; the restoration and linking of long-established grassland and heathland habitats; improving the quality of corridors and creating links where gaps have been identified; the linking of geodiversity and biodiversity; and involving people through community engagement.

Funding mechanism

The NIA received £800,000 between 2012 and 2015 spread over the three years as 'seed corn' funding, which was used to fund partner projects to meet ecological priorities and contribute to the ecological strategy. The first three years of the NIA delivered improvements to 102 sites. The Esmée Fairbairn Foundation agreed to fund The Wildlife Trust for Birmingham and Black Country's contribution to the NIA for a further three years with a total amount of £315,000. Approaching the end of the first year of Esmée Fairbairn funding already 36 hectares of land have been improved for biodiversity and wildlife across 17 different sites. The NIA covers the urban conurbation of Birmingham, Dudley, Sandwell, Walsall and Wolverhampton, and is surrounded by the West Midlands Green Belt. There is overlap with the Green Belt at the urban fringes, with 18% (11,480 ha) of the NIA within the Green Belt. In 2013 Birmingham City Council published a detailed assessment of Green Belt Option Areas in order to help identify areas suitable for development. Notably, the majority of Birmingham's Green Belt was discounted from being considered for release for development (for example because of its high ecological value habitats or landscape sensitivity). Key trees, woodland, wetland and other existing green assets on the sites will be protected and enhanced and form the basis for a network of connected green spaces that will permeate the developments and link to each other, New Hall Country Park and the wider countryside.

Case studies

- Castle Vale Meadows
- Woodgate Valley

Figure 40. Extent of the Birmingham and Black Country NIA in relation to the West Midlands Green Belt and Priority Habitats



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Legend



Case Study: Castle Vale Meadows



Magnificent meadows replace little-used poor quality open space with species-rich meadow



Figure 41. Hay making on Castle Vale Meadows. © Reg James.

Situated on the edge of Castle Vale estate in Birmingham was an area of little-used and biodiversitypoor open space. Working with a local charity, the Community Environmental Trust, along with the University of Wolverhampton NIA staff designed and delivered a project to create two new species-rich meadows.

In July 2013 green hay was harvested from 'donor' sites Eades Meadow SSSI and Draycote Meadows SSSI and then strewn on the site during two days of local community events.

Through the NIA 4.8 hectares of new meadows have been created in the area. The partnership with Birmingham City Council ensured these meadows are now in appropriate management.Feedback from local stakeholders has included the following

"The project has delivered health benefits to those who volunteered as well as bringing together local residents and community groups"

"This once overlooked and peripheral area of 'wasteland' is developing as a high quality area of local greenspace"

What worked well?

Community Ownership

The community events were a great success with many volunteers taking part.

Media Response

There was a very good response from the local media. This has helped the local and wider community understand the significance and opportunities that exist for improving nature locally, and how these contribute to improving nature in the wider landscape context.

Long-term sustainability building blocks

The long-term management and ecological monitoring has been secured.

Case Study: Woodgate Valley



Improved assets in a long-established country park



Figure 42. Bourne Brook before removal of the weir and the channel following modification. © Birmingham and Black Country NIA.

Woodgate Valley is a large country park that sits at a critical point in one of the Nature Improvement Area's 'Ecological Linking Areas'.

Over the winter of 2013/14 the Wildlife Trust and Birmingham City Council led a project that saw over 5 hectares of plantation woodland thinned by 40%.

Following the works, Woodgate Valley and Growing Local Flora volunteers under-planted the woodlands with locally native trees and shrubs and introduced field-layer species through seeding and planting. At the same time as the plantations were being thinned a small area of grassland known to support a large population of common spotted orchid was cleared of invasive scrub.

The Bourn Brook which flows through Woodgate Valley was failing to meet objectives under the EU Water Framework Directive (WFD) due to low invertebrate diversity and elevated ammonia levels. There are ten weirs on the brook in Woodgate Valley which disrupt sediment movement and form barriers to fish and invertebrate movement. To help improve the ecological status of the waterbody a trial project has been completed which has seen a number of these structures modified or removed.

What worked well?

Successful partnership

Working in partnership the Wildlife Trust, Environment Agency and Birmingham City Council identified a number of complementary projects in Woodgate Valley which together have seen the ecological and social value of the site improved. Following on from the initial project the council are continuing to manage the woodlands for the benefit of wildlife, whilst Freshwater Invertebrate Network (FIN) volunteers continue to monitor the Bourn Brook's invertebrate populations.

A new asset for the Country Park

Formally in and overlooked parts of Woodgate Valley have now been opened up so that visitors can walk through the woodlands and enjoy the developing wildflowers, some of which were already in flower by the spring of 2014.

An excellent training and mentoring programme

The FIN training programme consists of an intensive one-day workshop followed by field surveys to consolidate what's been learnt. Groups benefit from the ongoing support of a FIN mentor.

Dearne Valley Green Heart NIA

Aims and objectives

The Dearne Valley is located in South Yorkshire in an area historically known for its heavy industry and coal mining. In 2012 it became one of 12 Nature Improvement Areas (NIA) in England, with the aim of transforming the valley into a place where people and nature can thrive together, and a vision to restore the ecological functionality of the river, its floodplain and its link to habitats on surrounding sandstone and limestone hills. As such, the valley is now characterised by a diverse mixture of wetlands, farmland and woodland.

Organisational structure

The NIA is managed by the Dearne Valley Green Heart Partnership, which consists of Natural England, the Environment Agency, the RSPB, wildlife conservation organisations, local authorities and communities. The partnership has set a number of objectives to help achieve the overall aim and vision. These have included:

- creating 61 ha and restoring 27 ha of floodplain habitat and delivering flood storage schemes through direct land management;
- restoring 150 ha of woodland and 1,150 ha of farmland habitats through advice on management and environmental stewardship;

- producing a NIA Supplementary Planning Document, with contributions and input from all three local authorities; and
- engaging with the community through community wardens and a programme of events, cycle tours, and education visits. One project includes creating a cycling network to provide leisure opportunities and promote sustainable transport, with another being an extensive community outreach programme known as the 'Hidden Gems of the Dearne' project.

Objectives to preserve areas of open land extending into the urban areas from the countryside which have an existing or potential recreational or amenity value, and to preserve easy access to open country and outdoor recreation in pleasant surroundings, were considered to be particularly important.

Case studies

• Carlton Marsh

No information was supplied by the NIA regarding the details of its funding mechanism.



Figure 43. Extent of the Dearne Valley Green Heart NIA in relation to the South Yorkshire and West Yorkshire Green Belt and Priority Habitats

Service Layer Credits: Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user © Natural England copyright. Contains Ordnance Survey data © Crown copyright and database right (2016)

Legend



Case Study: Carlton Marsh



Habitat creation and flood alleviation project



Figure 44. Carlton Marsh before restoration. Reed bed dry, raised and lacking in open water bodies and channels. \odot Yorkshire Wildlife Trust.

Issues

- 1. Carlton Marsh physically disconnected from Cudworth Dyke;
- 2. Poor condition of reedbed habitat on the marsh; and
- 3. Low value as a flood alleviation asset due to accumulation of debris and sedimentation.

The Scheme

The Dearne Valley Green Heart NIA team proposed to tackle these issues by implementing a multipurpose flood alleviation/habitat creation scheme.

Representatives from the NIA, Environment Agency, Barnsley Council Parks Department, Barnsley Council Flood Resilience team, and the Carlton Marsh Friends Group worked together to explore various options.

The final design included:

- Removing 21,360 m³ sediment and reedbed debris to create extensive wildlife pools and channels;
- Excavating a new course for Cudworth Dyke through the marsh;
- Creation of circa 21,360 m³ extra flood storage capacity;
- Creation of an access bund along the edge of the marsh for future management;

- Creation of an area of wet woodland to the east of the marsh;
- Creation of a natural flow through the reedbed from Cudworth Dyke into the main marsh;
- Removal of the encroaching mature scrub;
- Installation of drop-board sluice water control structures; and
- Creation of the Southern Meadow wader scrape a shallow pool of open water with controlled inflow and outflow to Cudworth Dyke providing habitat and more flood resilience capacity.

Funding

- £50,000 was diverted to the Carlton Marsh project from another major habitat creation project in the Dearne Valley NIA that was delayed; and
- Barnsley Council made £17,000 Section 106 funding available for amenity improvements / habitat creation at Carlton Marsh and this was used to create a scrape in the Southern Meadow.



Figure 45. Aerial photograph of Carlton Marsh during works. Excavation of years of silt and reedbed debris to create increased water/reedbed interface, beneficial to reedbed species such as bittern. © Yorkshire Wildlife Trust.



Figure 46. Carlton Marsh. Development of reedbed eight months after works. Note excellent regrowth and large reedbed/water interface created by pools and channels and wildfowl present. © Yorkshire Wildlife Trust.

Outputs

- Circa 21,360 m³ extra flood storage capacity;
- 7 ha reedbed habitat has been restored;
- 7 ha floodplain grazing marsh restored and open water created;
- The original course of the Cudworth Dyke through the marsh has been reinstated;
- Reed-filtered inflow from Cudworth Dyke to marsh created to provide purer water; and
- Vastly increased open water area created for attracting migrant waders and other species.

Outcomes

- Major Water Framework Directive improvements made;
- Reduced risk of flooding down stream;

- Cudworth Dyke and the marsh water already appears cleaner than in recent years;
- The public reaction to the work has been extremely positive, due to increase in birdlife;
- Barnsley Council have been motivated to secure 11 ha of adjacent species-rich grassland;
- Water vole recorded on site again for first time in 2 years;
- Bird species increased from 109 to 115 in first year after work;
- The partnership approach in this sub-catchment has been recognised regionally and nationally as the most efficient return on investment; and
- Having invested time and money in the project all partners are motivated to keep up momentum of improvement and prevent pollution incidents.

Green Belt in the Future

This section summarises the findings of the literature review and a workshop held as part of the project. Conclusions and recommendations are then drawn based on this material, and the data and case studies presented in previous sections.

Governance and Management

Governance has been defined by Tacconi (2011)⁸ as "the formal and informal institutions, rules, mechanisms and processes of collective decisionmaking that enable stakeholders to influence and coordinate their independent needs and interests and their interactions with the environment at the relevant scales". Over time, local communities, private enterprises and non-governmental organisations have become more involved in land use decisionmaking processes. However, government still plays an important role in the management and planning of green spaces - particularly large ones (Buijs et al., 2016)⁹.

As a process of controlling and making decisions about something, management is essential if natural capital and recreational opportunities in the Green Belt are to be optimised. Such management may come about through policy, planning or regulations, or by less formalised means, but should include decisions about ownership, access and use rights, partnerships, funding, engagement and conflict management, monitoring and evaluation and delivery mechanisms (Lawrence et al., 2013)¹⁰.

However, there is a noticeable lack of a coherent policy approach to how Green Belts and other areas of urban fringe are planned in the UK (Scott et al., 2013)¹¹, with the authors calling for a more collaborative approach to planning. This point was echoed at the expert seminar, with one attendee suggesting that Green Belt areas need to have more proactive management, ideally in the form of a management plan akin to National Parks and AONBs, and delivered through a partnership of some kind.

Models of governance that are widely recognised to be particularly effective include that of the Lee Valley Regional Park Authority, and in Germany, Grün Berlin GmbH. Grün Berlin GmbH is a private, notfor-profit, company with overall responsibility for all open space development projects in the Berlin city region. Although it has a limited role in direct park management, it is responsible for marketing Berlin's parks and green spaces for both recreation and tourism, as well as promoting Berlin as a green city with a high quality of life (GLA, 2015)¹².

As discussed in the Case Study section of this report, the strategy for the Lee Valley Regional Park Authority is set by its appointed board of members drawn from local authorities across London, Hertfordshire and Essex. Nine senior board members make up the Authority management team, providing dynamic governance and a flexible management structure to ensure that the Authority's sports and leisure sites maximise commercial opportunities and serve communities in the most cost effective way possible. Formal documents including the Lee Valley Regional Park Plan and the more recent Business Plan set out visions to establish the Regional Park as a world class destination for sport, leisure and nature, along with objectives for achieving this.

A number of organisations across Britain have produced proactive management plans that seek to enhance the environment for people and wildlife, but to date these have had little overt focus on the Green Belt. For example, two organisations in 2015 produced a 10year strategy document: the National Trust's describes plans to achieve a *"step change in how we look after our own countryside, and reaching out to partners*

^{8.} Tacconi, L. (2011). Developing environmental governance research: the example of forest cover change studies.

^{9.} Buijs et al. (2016). Innovative Governance of Urban Green Spaces. Green Surge.

^{10.} Lawrence et al. (2013) Urban forest governance: Towards a framework for comparing approaches.

^{11.} Scott et al. (2013). Disintegrated development at the rural-urban fringe: Re-connecting spatial planning theory and practice.

^{12.} GLA (2015). Natural Capital: Investing in a Green Infrastructure for a Future London.

and communities beyond our boundaries"¹³; whilst the Ramblers Association's sets out what they will do to achieve their mission "to create a Britain where everyone has the freedom to enjoy the outdoors on foot and benefits from the experience"¹⁴.

Sustrans reports annually on the number of people using the National Cycle Network, allowing them to monitor capacity across different areas. They also report progress on an initiative to monitor and enhance flora and fauna on a selection of 'greenways' in England, Wales and Scotland. Finally, in 2014 the Wildlife Trusts published helpful guidance for local authorities on how to integrate biodiversity conservation throughout all their policies and strategies in order to protect and enhance species and habitats of principle importance, and provide opportunities for engaging with nature.

Examples of partnership working

Partnerships can be challenging - for example the Local Nature Partnerships have struggled to raise enough funds to achieve meaningful results - but overall partnerships are seen as the most effective way of managing land on a large scale. The Lee Valley Regional Park Authority model was praised by many participants at the expert seminar and is seen as an ideal solution, although a requirement for legislation and levy-raising power might make this difficult to replicate. However, since the Localism Act 2011 local authorities have had a general power of competence, and in the context of the current political climate of devolution it could become easier for local authorities to raise levies.

Nevertheless, the Lee Valley Regional Park Authority works successfully alongside a range of national and local organisations and key individuals across the public and private sectors, enabling mutually beneficial outcomes such as business sponsorship and accommodation for visitors through the Youth Hostel Association. In addition to the 28 local authority members, the Authority's board also has two co-opted members - one from the Canal and River Trust and one from the Environment Agency - that ensure continued focus on environmental quality of the River Lea and its tributaries.

On the opposite side of London and outside the Green Belt but including large areas of Metropolitan Open Land which has equivalent planning protection, the Wandle Valley is also considered to be a successful governance model. In 2011, the Wandle partners including the London boroughs of Croydon, Merton, Sutton, and Wandsworth, the Environment Agency, the National Trust, and the Greater London Authority (GLA) - established the Wandle Valley Regional Park Trust in order to provide leadership, vision and coordination, and ultimately the funding to deliver a regional park over the next decade. The Trust was constituted as a Limited Company in 2012 and became a charity in 2013, with the partners believing its charitable status to be the best 'business model' for growing the regional park over the coming years (GLA, 2015)¹⁵.

Another good example comes from Italy - Boscoincittà (The Forest in the City) is a public nature park located in a Green Belt in the suburbs of Milan, created on abandoned farmland in 1974 in order to provide recreational green areas for the city's residents. The Municipality of Milan retains ownership of the park, but the NGO Italia Nöstra is responsible for developing and maintaining the park, while the Centre for Urban Forestry is the executive unit that launches and coordinates initiatives. Successful networking between associations, groups, citizens, and institutions gained the park international recognition in 2003 (Buijs et al., 2016)¹⁶.

During the expert workshop that took place to inform this project, participants felt that a number of different partners should get involved in the governance of England's Green Belts. These included government departments and agencies; local authorities; landowners; charities and NGOs such as the National Trust, Woodland Trust, Tree Council, RSPB, Wildlife Trusts, and Land Trust; other countryside organisations such as the Ramblers Association; the National Lottery and Lottery Boards; and (big) businesses including those from the energy and food and beverage industries. Such partners could make a concerted effort to improve the connection between urban residents and the Green Belt, with the National Trust's work in Sheffield cited as a good example. Similarly, Sport England seeks to identify partnership opportunities with organisations working in the natural environment to explore the provision of new sports facilities and access to natural resources.

^{13.} National Trust (2015). Playing our part. What does the nation need from the National Trust in the 21st century?

^{14.} Ramblers Association (2016). Parliamentary Briefing: The England Coast Path.

^{15.} GLA (2015). Natural Capital: Investing in a Green Infrastructure for a Future London.

^{16.} Buijs et al. (2016). Innovative Governance of Urban Green Spaces. Green Surge.

The Mersey Forest is formed of a core partnership of seven local authorities and three government agencies. The Birmingham and Black Country NIA is managed by a partnership of over 50 organisations; and the Dearne Valley Green Heart NIA, whose partnership consists of government agencies, wildlife conservation organisations, local authorities and communities. The latter partnership produced an NIA Supplementary Planning Document, with contributions and input from all three local authorities. Other non-statutory partnerships involved in planning and managing green infrastructure at a sub-regional level include the Colne Valley Regional Park, the South East London Green Chain, and the Thames Chase Community Forest.

Empowering communities

For communities to get involved, it is necessary for them to want to get involved, and secondly it is necessary that they can get involved. Local authority ownership of land and NGO management are important factors. During the expert workshop, an example was given from Hatfield and Welwyn Garden City where a woodland was planted but has failed to capture the public's imagination because it is not associated with any particular 'brand' or strong local authority ownership. Indeed, Duinker et al. (2014)¹⁷ believe that NGOs are crucial players in assisting municipal administrations to engage the general public with urban and peri-urban forests, most notably though implementing education and stewardship programmes.

A good example of encouraging interest from the public and thus involvement is that of the Dearne Valley Green Heart Partnership which engages with the community through community wardens and a programme of events, cycle tours, and education visits. The Partnership also runs an extensive community outreach programme known as the 'Hidden Gems of the Dearne' project. The National Trust's 10 year strategy sets out how the Trust plans to offer outdoor experiences that move, teach and inspire people, and is particularly focused on re-wilding childhood. In 2012 the Trust launched a campaign called '50 things to do before you're 11³/₄' which seeks to encourage the interest of the next generation, and to empower them to change their environment for the better. Getting children outside is also a key activity for the RSPB, which is part of The Wild Network; an exciting movement to bring about real change in the relationship between young people and nature.

In many cases it is not a lack of interest per se, but a lack of opportunity or perhaps the presence of physical, mental or social barriers that prevent people from getting involved in community and naturebased activities. Natural England's recently launched 'Outdoors for All' programme aims to find out the barriers that exist for certain user groups that prevents them from using or accessing the countryside, and to create new access opportunities for these groups.

Open data

Public awareness about where Green Belt designations start and end is often limited. Similarly, it can be difficult to find publicly accessible space and rights of way. Although these are shown on Ordnance Survey maps, map-reading is declining as reliance on apps increases and access information is not shown on Google maps, for example. This can be a real barrier to access for the opportunities that already exist. Since 2014 DCLG has published open data of Green Belt boundaries and organisations such as CPRE have used this to create interactive maps to show designated areas. Following a commitment in the 2015 Conservative manifesto, government departments are undertaking a project to map accessible greenspace in England. From 2017, a national dataset should be available from this. It will also include the full digitisation of Public Rights of Way. These sources of open data could provide an incredible resource to help people enjoy existing rights of access in Green Belt, so long as they are used by app developers and promoted widely.

Engaging with landowners

England's Green Belts are typically owned by a large number of different landowners, from public to private, large to small, and managed by an equally great number of people and organisations. One particularly large landowner in the UK is the National Trust, but they are not responsible for managing all of this land, and are thus working with tenant farmers and others to conserve and renew the natural environment.

Other peri-urban and rural landowners are less focused on the cause of the natural environment and human wellbeing than the National Trust, however, and it is these landowners that really need to be engaged with if the natural capital of the Green Belt is to be enhanced. Participants of the Expert Workshop suggested that Green Belt landowners should be

^{17.} Duinker et al. (2014) Paper presented at Trees, people and the built environment II, Birmingham.

helped and supported in the pursuit of this goal, and in particular that there needs to be a way to motivate landowners to find positive uses for their land. Typical uses of peri-urban land include golf courses and horse riding centres because these are self-contained businesses that work with people who live on the outskirts of town. A question for possible future research could be how to develop a range of business opportunities for the Green Belt.

Funding

The localism agenda and the difficulties in achieving integrated planning for cross-boundary issues do not incentivise public investment in an asset like the Green Belt, which often spans multiple (cash-strapped) local authorities. A more joined up approach is required where public and private money can be channelled into identifying, costing and developing suitable projects. The Lee Valley Regional Park Authority's large budget is drawn from two main sources: an annual levy on council tax payers in Hertfordshire, Essex and Greater London (contributing 44% in 2015); and money generated by its own commercial and investment activities, such as charging the public for use of its three London 2012 venues (contributing 56%). This funding model is replicated by the Minneapolis Park and Recreation Board - an independently elected, semi-autonomous body responsible for governing, maintaining and developing the Minneapolis Park System in the United States. The Board's funding is based on a levy imposed on all the taxable property in the city and a system of fees and charges for use of park facilities (GLA, 2015)¹⁸.

Other funding models include those of:

- the Mersey Forest which is funded by local authorities, the Community Forest Trust, grants, consultancy work, corporate social responsibility, donations, and other innovative mechanisms such as through the planning system;
- the Wandle Valley Regional Park Trust which has been in receipt of core funding from the National Trust and the four participating London boroughs; and
- Boscoincittà (Milan's Forest in the City) which is funded mainly by volunteer organisations, institutions (e.g. banks) and individuals through donations and sponsorships, but also by the Municipality through an annual basic grant.

Participants in the expert workshop noted that Landfill Tax credits and National Lottery funding have also been particularly effective in some areas. It was also argued that setting up Business Improvement Districts (BID), combining urban areas with Green Belt areas, funded by a local levy, could be a way of delivering enhancements in the Green Belt. In this model money can be raised from businesses in urban areas to support improvements to the Green Belt. It has proved to be a more widely used method of raising new revenue for environmental improvement than the Lee Valley model. However, we were unable to find any examples of where the BID model has been applied to any area of agricultural land, whether designated Green Belt or not.

Other suggestions include farm diversification models if these are able to attract private funds; using Rural Development Programme money for the setting up of recreational facilities if these can then be maintained using private funds; and direct investment by businesses. One participant stated that business involvement would only work if there is an actual funding mechanism where owners can realise the monetary value of these benefits - so formal valuation exercises and use of 'payments for ecosystem services' type approaches may be advantageous.

From 2017, for example, the £40 million Community and Environment Fund and Business and Local Economy Fund is expected to start providing grants along the route of High Speed 2, which passes through a number of designated Green Belt areas. These funding streams could help offset some of the impacts of the project as well as provide some enhancements. More clarity is needed however in policy governing Nationally Significant Infrastructure Projects about how much they should seek to offset the harm where they need to have a Green Belt location.

^{18.} GLA (2015). Natural Capital: Investing in a Green Infrastructure for a Future London.

Conclusions

The aim of this report was to illustrate the importance of the beneficial use of land designated as Green Belt for people and wildlife. Data on various categories of recreational opportunities was presented. The report shows that Green Belts have particular concentrations of Country Parks and Public Rights of Way. Although there is relatively little land in the Green Belt that is explicitly open access and covered by the right to roam, it is still a part of the countryside where there are plentiful opportunities for recreation, particularly walking and cycling.

Data on nature conservation sites within the Green Belt shows a particular, and in recent years steadily growing, concentration of Local Nature Reserves. There is a significant level of tree cover. In recent decades this is also likely to have increased due to the Community Forest programme and a focus by the Woodland Trust on acquiring land near large urban areas.

Planning for the positive use (in relation to the management of the land for environmental goals such as public access or biodiversity) of the Green Belt is encouraged by the Government's National Planning Policy Framework. The case studies produced for this report show that the methods used to bring about positive use in a proactive way vary widely in terms of organisational structures, resources available and the extent to which the Green Belt is a priority compared to land within the urban area. There is no consistent approach to land management, in contrast with Areas of Outstanding Natural Beauty or National Parks. Of the Green Belt examples considered, the Lee Valley to date has been the most successful in terms of levering in finance and having a sustainable funding model.

A number of recommendations are made. Key among these are that the Green Belt is a source of huge potential to help create an ecological network linking protected sites, woodland and grassland habitat. It is the countryside next door to 30 million people, and so should be prioritised for funding in the Government's forthcoming 25 Year Plan for the Natural Environment. In terms of delivering improvement, there is much to learn from existing models. In particular, the Lee Valley Regional Park model offers a sustainable source of funding, and could be used more widely in areas where there is clear potential for improved management and enhancement with a large urban population and market for recreational activities on open land. The long term protection offered by Green Belt policy is also a reason for considering an extension of the designation to areas at exceptional risk of losing valuable urban fringe countryside to sprawl, such as around Norwich and Southampton.

Figure 47. Mersey Forest. Picnic at Marbury Park, Northwich Woodlands, Cheshire. © Alan Redley, Friends of Anderton and Marbury

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GIS Datasets

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Comparator Area boundaries: provided by Natural England Priority Habitat Inventory version 2.1: Dataset available at: https://data.gov.uk

Recreational land: Country Parks, National Nature Reserves, Local Nature Reserves, Registered Parks and Gardens, Open Access Land, Common Land, Village/ Doorstep/Millennium Green, Woodland Trust Land. Datasets available at: https:// data.gov.uk

Community Forests: Dataset received from Secretariat for England's Community Forests, April 2016.

Public Rights of Way: Datasets received from County Councils and Local Authorities, January - May 2016.

National Cycle Network (National and Regional Routes): Dataset received from Sustrans, May 2016

Annex 1: Method

Comparator Areas

In this study we have compared Green Belt Land with England as a whole, and also with other similar urban fringe areas which we have called 'Comparator Areas' (see definition below). The Comparator Areas face many of the same challenges and opportunities as Green Belt land due to their proximity to major urban areas. These areas are the same as those used in the Green Belts: a greener future (2010) report, to enable comparison between the two studies. The Comparator Areas cover an area of 1,323,861 ha, equivalent to 10.1% of England. The comparison is designed to help consider (i) whether the Green Belt designation has any effect on environmental quality, and also (ii) the specific characteristics of countryside in the urban fringe (whether designated Green Belt or not) that mark it out from the countryside as a whole.

In this review land designated as Green Belt has been compared with urban fringe areas which are not subject to Green Belt planning controls. These 'Comparator Areas' are the same as those used in the *Green Belts: a greener future (2010)* report, to enable comparison between the two studies. The Comparator Areas were devised by drawing 5km zones around all major towns and cities with a population in excess of 100,000. All of the area that was not designated as Green Belt was combined. This included the area around 17 towns and cities with no Green Belt, as well as the areas of land not designated around towns and cities partly surrounded by Green Belt.

Changes in Green Belt boundaries

Robust estimates of the area of Green Belt land in England by local planning authorities were first published in 1997. The Department for Communities and Local Government (DCLG) collects the data annually from 197 planning authorities in England and complies Green Belt statistics with updates released each year. The estimates have improved since 2008/09 due to improvements in measuring techniques from digitised data (using geographic information systems as opposed to measurements from paper maps) and the impact of Ordnance Survey's positional accuracy improvement exercise on some local authorities' data. The overall area of designated Green Belt for the purposes of this study has been calculated as 1,637,123 ha. For this study we have used the figure based on measurement of the GIS dataset.

In the statistical release published by DCLG¹⁹ the extent of the Green Belt at 31st March 2015 was estimated at 1,636,620 ha. The statistical release noted a decrease of 2,000ha between 2013/14 and 2014/15. This is due to eleven authorities adopting new plans in 2014/15 which resulted in the decrease in the overall area of Green Belt compared 2013/14. This is the largest annual change in the area of Green Belt reported in the past five years. This is driven by a higher than previous number of local authorities making changes to the boundary in 2014/15. In the previous four years not more than four local authorities made amendments in any one year.

Since the statistics were first compiled in 1997, DCLG has calculated an increase of 32,000 ha in the area of Green Belt from the total in that year of 1,652,310 ha after taking account of the re-designation of some Green Belt as part of the New Forest National Park in 2005. At least some of this increase is due to improved measurement rather than actual changes. For the 2010 study Green Belts: a greener future, Green Belt boundaries on a 1 hectare grid were provided by the University of Sheffield. The boundaries were created using data compiled in 2006 in order that it could be compared to other datasets available up to 2006, such as the Rural Land Registry and National Land Use Data.

The total area of land included as Green Belt in 2010 was 1,619,835 hectares, or 12.4% of England (13,050,388 hectares at mean high water). The data used in 2010 included the Green Belt land within the

New Forest and Test Valley District Councils. The Green Belt designation was removed from 47,300 hectares of Green Belt land in these areas when the New Forest was designated as a National Park later in 2006.

The process of creating the hectare square grid and the timing of data collection resulted in an underreporting of up to 68,000 hectares (or approximately 4.1% of the total area) of designated Green Belt outside the New Forest and Test Valley District Councils, compared to the total area provided by DCLG at that time, which was 1,639,650 ha (12.6% of England).

Spatial analysis of natural capital and recreational opportunities

In the spatial analysis of Green Belts we have analysed recreational opportunities, represented by Public Rights of Way (PRoW), the National Cycle Network and publicly accessible land, and natural capital by looking at the distribution of habitats, using the Priority Habitats Inventory.

This study is an update of the analysis undertaken by CPRE and Natural England in the Green Belts: a greener future study (2010). Between 2010 and 2016 there have been significant updates to the datasets available, hence the need for this study to provide up to date information. The latest GIS datasets available have been used (see References) and the results are therefore different to the 2010 study. It should be noted that the differences are mainly due to refinements in the datasets rather than actual changes on the ground, although in the case of Local Nature Reserves, new sites have been created. We therefore need to exercise caution when interpreting changes over time based on the results of the two studies alone. The quality of GIS datasets are improving continuously, and going forward GIS will become increasingly useful as a monitoring tool to gauge if accessibility and natural capital is improving or deteriorating in Green Belts.

Public Rights of Way

There is currently no national dataset for PROW in England, and data is held by individual authorities. For this study PRoW data was therefore requested from all counties and unitary local authorities in England. A number of authorities are in the process of digitising their Definitive Map or had no digital data, and these areas could therefore not be included in the study. These authorities were: Barnet, Bromley,





Cumbria (but Lake District National Park provided data), Halton, North Yorkshire, Sandwell, Sheffield, Solihull, Southend-on-Sea, Stoke-on-Trent, Sutton and Warwickshire.

A low number of authorities did not respond to the data request or could not supply data for other reasons. These included: Ealing, Haringey, Harrow, Manchester, Middlesbrough, Redbridge, Richmond upon Thames, Salford, Telford and Wrekin, Waltham Forest.

For this reason it was not possible to obtain the full length of PRoW for all of England, but data was obtained for 93% of the country, 88% of Green Belt and 92% of Comparator Areas. The results are shown in Table 3 in Annex 2.

Recreational opportunities

The areas of recreational opportunities have been mapped for each Green Belt area and Comparator Areas, and the areas of each type measured. The area measurements for recreational land were provided by Natural England. The results are shown in Table 2 in Annex 2. The types of recreational land included were: Country Park, National Nature Reserve, Local Nature Reserve, Registered Park and Garden, Open Access Land, Common Land, National Trust Land, Village/ Doorstep/Millennium Green and Woodland Trust Land. The datasets for these designations are available from data.gov.uk. Community Forests were also included, although these are not strictly areas of accessible land, but the administrative boundaries of the Community Forest Partnerships that cover broad areas of land, where the majority of land is not publicly accessible. Community Forest land was therefore excluded from the total area of recreational land.

Natural England undertook the new area measurements and provided the information in Table 2 in Annex 2.

Priority Habitat Inventory

The national Priority Habitats Inventory (PHI), collated by Natural England from a wide variety of national and local data sources, currently provides the best available national datasets for priority habitat distribution and extent. The PHI version 2.1 was released in December 2015, and this dataset has been used for this study. The core objective for the new PHI was simplification, through the consolidation of the existing separate inventories into a new single spatial layer. This addressed significant overlaps (280,000 ha), and improved consistency with other data sources. New data has been added including Higher Level Stewardship (HLS) data, and SSSI feature data, and new survey work has been undertaken. The HLS data in particular has added a substantial number of new sites.

There are some notable differences between the new PHI 2.1 dataset and the BAP Priority Habitat dataset used for the 2010 study. The categories for BAP Priority Habitat and PHI 2.1 are broadly similar, but there are some differences in categorisation. The BAP Priority Habitat includes the categories Fens and Undetermined grassland which are not included in the PHI dataset. Furthermore, PHI includes the following additional categories: Calaminarian grassland, Lowland fens, Coastal saltmarsh, Traditional orchards and Upland flushes, fens and swamps. In addition the PHI 2.1 dataset includes the following Non-priority Habitats: No main habitat but additional habitat. Fragmented heath, Grass moorland, and Good quality semi-improved grassland. These also have significant value in terms of ecosystem services and hence natural capital and have therefore been included in the study. The category 'No main habitat but additional habitat present' is slightly different because it comprises PHI features that are believed to be present but occupy less than 50% of the area within the polygon - and often this is significantly less. This means that priority habitat could be present but it is uncertain how much. Much of the land mapped in this category may potentially be under intensive management.

GIS Spatial Analysis - Opportunity Maps

A key output of this study was the production of opportunity maps that show which parts of the Green Belts have good provision in terms of natural capital and recreational opportunities, and where there are opportunities for enhancement. Two different maps were produced for each Green Belt, a density map and spatial analysis map, described below.

Density Map

The density map shows the combined density of PHI, Recreational Land, PRoW and NCN. The map clearly shows where there are hot spots of provision (in blue),



Figure 49. Cambridge Green Belt. Density Map



Figure 50. Cambridge Green Belt. Spatial Analysis Map

and poorer provision in light green and yellow. This map does not distinguish between natural capital and recreation but does provide a clear picture of high and low provision overall.

Technical method

The output features resulting from the clipping of the datasets were all used to generate the Density of Natural Capital and Recreational Opportunities maps. PHI and Recreational Land polygon features were all converted into points (using inside polygon option), with the exception of Village Greens and Millennium Greens that were already point features. These points were then merged into a single layer in order to generate a density raster using the Point Density tool of ArcGIS (output cell size: 10). The density raster was then imported into ArcMap and displayed with a yellow-blue gradient. Lastly, the 'Light Grey Canvas' of ArcMap was used as map background.

Spatial Analysis Map

The second map is a more detailed spatial analysis plan that shows areas of high, moderate and low recreational opportunities against areas of high and low natural capital. Six categories were thus created as shown in the table below. The areas identified as 'high natural capital' are the areas of PHI. All other areas are considered to be 'low natural capital'.

Technical method

The density raster resulting from the PRoW and NCN and the output features resulting from the clipping of the PHI and Recreational Land datasets were used to generate the map of spatial analysis of natural capital and recreational opportunities in each Green Belt. Polygons resulting from the PHI clipping were used to express the natural capital within each Green Belt. The Union tool of ArcGIS was used in order to unify the PHI polygons to the rest of the Green Belt. Once unified, the polygon layer was converted into a raster using the Polygon to Raster tool of ArcGIS (output cell size: 10). The raster layer was then reclassified using the Reclassify tool of ArcGIS by giving PHI polygons a value of 3 and any polygon remaining a value of 1.

The density layers resulting from the PRoW and NCN merged dataset were reclassified for each Green Belt in 3 different classes using the Reclassify tool of ArcGIS (Natural Break (Jenks) classification). Classes with a value of 1 being for the lowest densities and classes with a value of 3 being for the highest densities.

The outputs resulting from the clipping of Recreational Land datasets were merged in a single layer for each Green Belt. The Union tool of ArcGIS was used in order to unify the Recreational Land polygons to the rest of the Green Belt. Once unified, the polygon layer was converted into a raster using the Polygon to Raster tool of ArcGIS (output cell size: 10).

Recreation Opp.	Values	Natural Capital	Values	Combination results	Values
Low	1	Low	1	Low recreational opportunities; Low natural capital	1
Low	1	High	3	Low recreational opportunities; High natural capital	2
Moderate	2	Low	1	Moderate recreational opportunities; Low natural capital	3
Moderate	2	High	3	Moderate recreational opportunities; High natural capital	4
High	3	Low	1	High recreational opportunities; Low natural capital	5
High	3	High	3	High recreational opportunities; High natural capital	6

Figure 51. Table showing how categories were defined for areas high, moderate and low recreational opportunities combined with areas of high and low natural capital, used to produce the spatial analysis plans for each Green Belt.

Annex 2: Tables

Table 1: Distribution of Priority Habitats (PHI) within Green Belts

	BAP Pr	Tority	Habitats	and rela	ated ar	eas (ha)								
Green Belts	Blanket bog	Calaminarian grassland	Coastal and floodplain grazing marsh	Coastal sand dunes	Coastal vegetated shingle	Deciduous woodland	Lowland calcareous grassland	Lowland dry acid grassland	Lowland fens	Lowland heathland	Lowland meadows	Lowland raised bog	Maritime cliff and slope	Mudflats
	BLBOG	CALAM	CFPGM	CSDUN	CVSHI	DWOOD	LCGRA	LDAGR	LFENS	LHEAT	LMEAD	LRBOG	MCSLP	MUDFL
Avon			2,642			5,303	987	53	44	3	293		18	92
Burton upon Trent & Swadlincote						36			< 1					
Cambridge			436			935	134		45		35			
Gloucester & Cheltenham			183			204	29				7			
London (Metropolitan)			3,265			66,026	1,663	367	535	3,452	720			739
North West	2,561		5,295	1,454		15,269	75	261	1,133	249	404	839	16	485
Nottingham & Derby			339			3,871	41	33	85	108	59			
Oxford			1,705			2,573	22	45	67	< 1	674			
SW Hampshire and SE Dorset			2,098			3,237		149	335	2,247	113		52	354
South Yorkshire & West Yorkshire	5,707		954			19,022	148	218	401	65	325			
Stoke-on-Trent			503			3,135		41	32	161	48	17		
Tyne & Wear		6	187	31		4,612	46	37	11	125	66	32	25	19
West Midlands			1,008			15,011		78	100	1,799	463			
York			265			748			2	451	35			
Green Belt Total	8,268	6	18,880	1,485	0	139,982	3,145	1,282	2,790	8,660	3,242	888	111	1,689
Green Belt as % of England Total	4%	2%	9%	15%	0%	1 9 %	5%	8%	14%	15%	15%	11%	1%	3%
Comparator Area Total	16,568	1	35,261	733	38	98,437	5,356	1,505	2,816	5,194	1,904	150	664	443
Comparator Area as % of England Total	7%	0%	16%	7%	1%	13%	9%	10%	14%	9%	9%	2%	5%	1%
All England Total	230,950	297	217,620	10,227	3,990	736,511	61,857	15,179	20,294	56,419	21,178	7,814	13,349	61,261

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*: Selected PHI non-priority habitats with restoration potential and/or making an important contribution to ecological networks.

Data source: Priority Habitat Inventory version 2.1, published 15th December 2015, downloaded from data.gov.uk

									Non-Pric	ority Ha	abitats*						
Purple moor-grass and rush pastures	Reedbeds	Saline lagoons	Coastal saltmarsh	Traditional orchard	Upland calcareous grassland	Upland hay meadows	METER Weighting Meter Meter Meter Meter <t< td=""><td>5B/Comparator area (ha)</td><td>% of PH within GB/Comparator area</td><td>Number of PH within GB area</td></t<>		5B/Comparator area (ha)	% of PH within GB/Comparator area	Number of PH within GB area						
79	38		135	170					742			643	9,856	11,242	71,672	14%	13
				< 1					< 1				36	36	725	5%	3
2				58					254			58	1,646	1,957	26,154	6%	7
				56					10			6	479	495	7,492	6%	5
36	57	5	745	993					7,753			3,796	82,842	90,151	514,395	16%	13
40	46		2,788	76	6	42	1,204	386	2,568	29	1,285	967	32,628	37,423	259,957	13%	20
	3			49					618			307	4,587	5,511	60,714	8%	9
8	1			24					466			274	5,120	5,859	34,991	15%	11
129	38	<1	236	7					840			222	8,996	10,058	35,545	25%	13
78	33			48		8	4,782	6	2,062	82	3,294	976	31,793	38,205	249,505	13%	14
21	1			8		<1	1		388	7	22	313	3,967	4,698	44,438	9 %	12
<1	12		5	7		3	9		328			186	5,233	5,745	72,372	7%	18
71	5			223					1,459			1,229	18,759	21,403	231,291	8%	9
				8					181			104	1,510	1,795	27,872	5%	6
464	234	5	3,909	1,727	6	53	5,996	392	17,669	118	4,601	9,081	207,453	234,578	1,637,123	13%	26
5%	7%	0%	11%	11%	0%	2%	3%	4%	9%	1%	3%	12%	12%	6%	12.5%		
428	300	154	3,004	1,809	48	36	8,895	413	17,459	284	3,349	10,959	184,158	193,237	1,323,861	10%	27
5%	10%	11%	9%	11%	1%	1%	4%	4%	8%	3%	2%	15%	10%	9%	10%		
9.105	3.136	1.360	34.111	16.023	9.219	2,439	227.646	10.005	207.858	9.017	147.315	74.176	1,772,670	2.211.036	13 050 388	100%	

Green Belts	Green Belt Area (ha)	Country Park (ha)	Percentage Country Park	National Nature Reserve (ha)	Percentage National Nature Reserve	Local Nature Reserve (ha)	Percentage Local Nature Reserve	Registered Park and Garden (ha)	Percentage Registered Park and Garden
Avon	71,672	310	0.4%	191	0.27%	306	0.4%	1,966	2.74%
Burton upon Trent and Swadlincote	725							0.3	0.04%
Cambridge	26,154	196	0.7%			106	0.4%	228	0.87%
Gloucester and Cheltenham	7,492	57	0.8%						
London	514,395	7,221	1.4%	1,929	0.38%	5,408	1.1%	18,761	3.65%
North West	259,957	4,731	1.8%	4,631	1.78%	2,555	1.0%	4,711	1.81%
Nottingham and Derby	60,714	1,014	1.7%			428	0.7%	946	1.56%
Oxford	34,991	113	0.3%	2	0.00%			645	1.84%
SW Hampshire and SE Dorset	35,545	664	1 .9 %	794	2.23%	430	1.2%	535	1.51%
South Yorkshire and West Yorkshire	249,505	1,620	0.6%			2,302	0.9%	5,068	2.03%
Stoke on Trent	44,438	542	1.2%	39	0.09%	328	0.7%	754	1.70%
Tyne and Wear	72,372	454	0.6%			336	0.5%	1,359	1.88%
West Midlands	231,291	3,975	1.7%	883	0.38%	1,788	0.8%	5,787	2.50%
York	27,872	12	0.0%	23	0.08%	52	0.2%	54	0.19%
Recreational Land Total within Green Belts	1,637,123	20,909	1.3%	8,490	0.52%	14,039	0.9%	40,814	2.49%
Recreational Land Total within Green Belts as % of England Total		47%		9%		34%		23%	
Recreational Land Total within Comparator Areas	1,323,861	9,634	0.7%	3,235	0.24%	8,456	0.6%	9,634	0.73%
Recreational Land Total within Comparator Areas as % of England Total		7%		3%		20%		6%	
All England Total		43,686	0.3%	93,635	0.7%	40,487	0.3%	172,891	1.3%

Table 2: Recreational Opportunities (non-linear) within Green Belts compared to all England and Comparator Areas

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Data source: Area measurements provided by Natural England. Datasets downloaded from data.gov.uk.

Open Access Land (ha)	Percentage Open Acces Land (ha)	Common Land (ha)	Percentage Common Land (ha)	Community Forest (ha)	Percentage Community Forest (ha)	National Trust Land (ha)	Percentage National Trust Land	Village / Doorstep / Millennium Green (ha)	Percentage Village / Doorstep / Millennium Green	Woodland Trust Land (ha)	Percentage Woodland Trust Land	Recreational Lands total (ha) excluding Community Forest	Recreational Land Total as % of Green Belt/Comparator Area
852	1.19%	318	0.44%	50,253	70.12%	1,156	1.61%	9	0.01%	68	0.10%	5,175	7%
												0.32	0%
140	0.54%	140	0.54%			256	0.98%	2	0.01%	29	0.11%	1,097	4%
38	0.51%	9	0.12%			54	0.72%			15	0.21%	174	2%
16,909	3.29 %	13,916	2.71%	25,501	4.96 %	14,840	2.88%	521	0.10%	2,610	0.51%	82,113	16%
9,843	3.79%	4,023	1.55%	128,650	49.49 %	4,493	1.73%	68	0.03%	1,109	0.43%	36,164	14%
597	0.98%	4	0.01%	21,539	35.48%			8	0.01%	44	0.07%	3,042	5%
383	1.09%	245	0.70%			2	0.01%	23	0.06%	19	0.05%	1,431	4%
4,329	12.18%	1,024	2.88%			2,476	6.97 %	20	0.06%	3	0.01%	10,275	29 %
16,351	6.55%	7,604	3.05%	246,737	98.89 %	3,057	1.23%	25	0.01%	256	0.10%	36,284	15%
343	0.77%	163	0.37%			266	0.60%	7	0.02%	3	0.01%	2,445	6%
940	1.30%	86	0.12%	10,906	15.07%	760	1.05%	28	0.04%	258	0.36%	4,220	6%
4,568	1 .97 %	2,033	0.88%	17,514	7.57%	2,654	1.15%	36	0.02%	340	0.15%	22,062	10%
301	1.08%	174	0.62%	25,425	91.22%	8	0.03%	5	0.02%	11	0.04%	639	2%
55,594	3.40%	29,738	1.82%	526,525	32.16%	30,021	1.83%	751	0.05%	4,764	0.29%	205,121	13%
5%		8%		34%		10%		13%		35%			
55,355	4.18%	13,765	1.04%	211,218	15.95%	27,209	2.06%	603	0.05%	2,120	0.16%	130,012	10%
5%		4%		14%		9 %		11%		15%			
1,020,086	7.8%	369,393	2.8%	1,545,009	11.8%	305,325	2.3%	5,457	0.04%	13,549	0.1%	2,064,509	16%

Table 3: Recreational Opportunities - Public Rights of Way (PRoW) and National Cycle Network (NCN)

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		PRoW Total PRoW Density* PR		PRoW dataset availability	Natio	NCN Density		
Green Belt Areas		Length in km	(m/ha)		On road	Traffic Free	Total	(m/ha)
	Avon	1,804	25	100%	128	56	184	3
	Burton upon Trent & Swadlincote	16	22	100%	0	0	0	0
	Cambridge	252	10	100%	4	22	26	1
	Gloucester & Cheltenham	211	28	100%	1	3	4	1
	London (Metropolitan)	10,466	21	97 %	185	262	446	1
	North West	5,684	23	95 %	102	191	293	1
	Nottingham & Derby	1,172	19	100%	8	26	35	1
	Oxford	591	17	100%	21	17	38	1
	SW Hampshire & SE Dorset	425	12	100%	15	11	26	1
	South Yorkshire & West Yorkshire	4,455	18	76%	112	188	299	1
	Stoke-on-Trent	835	19	100%	5	19	24	1
	Tyne & Wear	873	15	83%	41	56	98	1
	West Midlands	2,206	16	58%	77	55	132	1
	York	196	9	80%	21	24	44	2
	Green Belt Total	29,187	20	88%	719	931	1,650	1
	Green Belt as % of England Total	17%			8%	19%	12%	
	Comparator Area Total	22,604	19	92%	744	901	1,645	1
	Comparator Area as % of England Total	13%			9%	19%	12%	
	England Total	175,875	8	93%	8,700	4,847	13,546	1

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*: The PRoW total length and the PRoW density were calculated by taking into account the area where PRoW datasets were

Data source: PRoW data provided by County Councils and Local Authorities. NCN data provided by Sustrans, April 2016.

Ravourable or recovering		91		96	100	96	93	83	66	78	66	84	87	87	94	94		49		96
	IstoT ISS2	2,291		392	45	26,268	11,877	436	1,740	5,755	13,480	404	481	4,731	789	68,689	6	123,543	11	1,084,577
	bəssəssA joN																			1
SSSI Condidition	nwonanU																			264
	Destroyed									10	12			ĉ		25	12%	38	19%	201
	Part Destroyed					∞				-						80	2%	-	0.20%	333
	gniniləəQ əldaruovaînU	142		15		278	241	35	16	354	41	∞	47	376	48	1,601	8%	1,302	7%	18,762
	Jnfavourable No Change	67		-		811	598	39	2	925	50	56	15	215		2,781	10%	2,129	8%	26,775
	Unfavourable Recovering	382		164	23	11,019	3,151	264	1,056	2,905	12,335	187	235	2,606	462	34,790	2%	39,376	%9	620,343
	Favourable	1,700		212	22	14,151	7,887	66	665	1,560	1,042	152	183	1,531	279	29,484	7%	20,704	5%	417,899
	RSPB Reserves					2,612	904		394	165	545	11		170		4,801	%6	6,023	11%	52,023
	bnslbooW IneionA	2,142		41	12	35,637	2,301	676	1,626	1,092	8,816	1,379	2,790	5,877	305	62,693	17%	45,513	12%	363,519
	Percentage Local Nature Reserve	0.43%		0.41%		1.05%	0.98%	0.71%		1.21%	0.92%	0.74%	0.46%	0.77%	0.19%	0.86%		0.64%		0.31%
	Local Nature Reserve (ha)	306		106		5,408	2,555	428		430	2,302	328	336	1,788	52	14,039	34%	8,456	20%	40,487
	Percentage National Nature Reserve	0.27%				0.38%	1.78%		0.00%	2.23%		0.09%		0.38%	0.08%	0.52%		0.24%		0.72%
	National Nature Reserve (ha)	191				1,929	4,631		2	794		39		883	23	8,490	%6	3,235	3%	93,635
	h Belts		in upon Trent & Swadlincote	ridge	ester & Cheltenham	on (Metropolitan)	1 West	ngham & Derby	p.	ampshire and SE Dorset	v Yorkshire & West Yorkshire	-on-Trent	& Wear	Midlands		n Belt Total	n Belt as % of England Total	varator Area	varator Area as % of England Total	s for England

Table 4: Nature Conservation

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Data source: Area measurements provided by Natural England. Datasets downloaded from data.gov.uk.

Table 5: Land managed by Environmental NGOs

Green Belts	Green Belt Area (ha)	National Trust Land (ha)	Percentage National Trust Land	RSPB Reserves	Woodland Trust Land (ha)	Percentage Woodland Trust Land	
Avon	71,672	1,156	1.6 1%		68	0.10%	
Burton upon Trent & Swadlincote	725						
Cambridge	26,154	256	0.98%		29	0.11%	
Gloucester & Cheltenham	7,492	54	0.72%		15	0.21%	
London (Metropolitan)	514,395	14,840	2.88%	2,612	2,610	0.51%	
North West	259,957	4,493	1.73%	904	1,109	0.43%	
Nottingham & Derby	60,714				44	0.07%	
Oxford	34,991	2	0.01%	394	19	0.05%	
SW Hampshire and SE Dorset	35,545	2,476	6.97 %	165	3	0.01%	
South Yorkshire & West Yorkshire	249,505	3,057	1.23%	545	256	0.10%	
Stoke-on-Trent	44,438	266	0.60%	11	3	0.01%	
Tyne & Wear	72,372	760	1.05%		258	0.36%	
West Midlands	231,291	2,654	1.15%	170	340	0.15%	
York	27,872	8	0.03%		11	0.04%	
Green Belt Total	1,637,125	30,021	1.83%	4,801	4,764	0.29%	
Green Belt as % of England Total		10%		9 %	35%		
Comparator Area	1,323,861	27,209	2.06%	6,023	2,120	0.16%	
Comparator Area as % of England Total		9 %		12%	25%		
Totals for England		305,325	2.34%	52,023	13,549	0.10%	

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Data source: Area measurements provided by Natural England. Datasets downloaded from data.gov.uk.

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Campaign to Protect Rural England 5-11 Lavington Street London SE1 ONZ 020 7981 2800 info@cpre.org.uk www.cpre.org.uk

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