Biodiversity in the city

Practical actions to make our UK cities global leaders
Executive summary

Future trends mean that the benefits we get from biodiversity have never been more vital. The populations of our cities are growing, getting older and often lonelier, and we are living in a world where both technology and climate are changing rapidly. Many of these issues can be mitigated by the biodiversity in our cities, for example, through regulating surface water runoff, alleviating high inner city temperatures and contributing to health and wellbeing. A practical shared vision for our cities and their biodiversity is more important now than ever before.

We have opportunities to collaborate to enhance biodiversity hand in hand with the provision of infrastructure and development, supporting economic growth and improving our health and wellbeing.

Drawing on successful case studies, from interviews with experts, from our experience and from published literature, we provide a vision to demonstrate how we can increase the quality of our cities whilst becoming resilient to change.

We offer practical challenges to different sectors, encouraging us all to make greater efforts in re-imagining our urban spaces and the opportunities they can bring. By encouraging everyone to play a part in increasing the biodiversity of our cities, we can work collectively towards achieving our vision for a network of truly biodiverse cities across the UK.

Our vision for cities is to see

- Skyline parks and gardens that give people access to green space with fantastic views.
- Rivers full of wildlife that are managed and cleaned using natural processes.
- Neighbourhoods, towns and city districts that support life in its many forms with ‘green hearts’ providing safe and accessible public spaces.
- Green streets permeating the urban landscape, seamlessly linking the rural with the heart and lungs of the cities.
- ‘Wilder’ parks, managing our green spaces in ways that are more harmonious with natural conditions, processes and other creatures.
The challenges to achieving our vision are:

1. How can we maintain and enhance the biodiversity we already have and optimise opportunities to increase it?
2. How can we prioritise building biodiversity into new developments?
3. How can we better understand and articulate the benefits biodiversity brings to development, society and businesses and how can we fund these green spaces?
4. What part could you play to help make our vision a reality?

- **City councils and local authorities** – incorporate policies that promote retrofitting biodiversity to existing buildings, changing the management of new and existing green spaces to support the local ecosystem and requiring new developments to deliver net gain for biodiversity in core planning policy including local plans.
- **Landscape managers** – rethink the maintenance of green spaces to adopt practices which improve biodiversity, using more sustainable and less intensive management techniques to achieve more diverse environments that balance the needs of people with other flora and fauna.
- **Water companies** – ensure that biodiversity is promoted, incentivised and adopted within the assets of the water companies and in particular through sustainable drainage (SuDS) schemes.
- **Land owners, transport organisations and Business Improvement Districts (BIDs)** – exploit opportunities to green the city in innovative ways by creating new green streets, creating biodiverse sky gardens and allowing vacant land to be claimed by greenery.
- **National Health Service (NHS) and public health bodies** – build on the NHS healthy new towns project by working with other organisations to set standards on the quality of all our green and biodiverse spaces.
- **Built-design professionals** – integrate biodiversity from the inception of all projects; it is a vital part of infrastructure, not just an add-on.
- **Businesses** – improve your understanding of your business’s dependence upon biodiversity and ecosystems by assessing or even valuing their benefits.
- **Everyone** – try our five simple steps (p.11) to support wildlife near your home.
Conceptual urban greening and SuDS

Produced in collaboration with the London Borough of Southwark

Conceptual urban greening and SuDS
Our vision

We believe that our cities should be recognised as a distinct biome supporting a rich variety of wildlife in its buildings, streets, open spaces, parks and rivers helping us all to live healthy and vibrant lives.

Skyline parks and gardens that give people access to green space with fantastic views
• All buildings supporting biodiverse green and brown roofs – ‘skyline gardens’ – to decrease surface water runoff and improve water quality and thermal performance whilst giving people access to new green spaces.

Rivers full of wildlife that are managed and cleaned using natural processes
• Catchment scale natural flood risk management: holistic solutions to flooding that are adaptable and resilient to change
• Embedding biodiverse Sustainable Drainage Systems (SuDS) into existing streets and new developments to decrease runoff and improve water quality.

Neighbourhoods, town and city districts that support life in its many forms with ‘green hearts’ providing safe and accessible public spaces.
• Radically increasing the extent of living elements, rich in wildlife, throughout the public realm to provide great places for everyone in the heart of our urban landscape.

Green corridors permeating the urban landscape seamlessly linking the rural with the heart and lungs of the cities
• Working with communities to build wildlife links across public and private gardens
• Greening streets and pedestrian and cycle corridors to inspire more active commutes linking the suburbs with workplaces and allowing free passage for flora and fauna.

‘Wilder’ parks, managing our green spaces in ways that are more harmonious with natural processes and the creatures they support
• Celebrate the existing places for wildlife: our cities are richer because of them
• Adapt the management required in our existing parks to include more natural areas that support more diverse wildlife balancing the needs of people and other flora and fauna
• Inspire homes and families to support wildlife through simple, practical measures.
Maintaining and enhancing the biodiversity we have now, retrofitting biodiversity into existing places

Our urban public realm has lots of untapped potential for biodiversity

City councils and local authorities

Our wonderful cities are here to stay, so investigating how we can alter them to make them more biodiverse is an exciting prospect. By increasing our understanding of the opportunities for biodiversity in urban areas, large-scale strategic implementation can become widespread. The opportunities for biodiversity to be retrofitted into our cities are cutting edge, exciting and can ensure we are providing benefits to society. In order to do this, we need to work together to redesign the public realm and shift our ideas about what normally constitutes public open space.

Peter Massini, the Principal Policy & Programme Officer for Green Infrastructure at the Greater London Authority, said:

“We’ve been designing cities around cars for the last 50 years. But in the future we could re-purpose many of our streets as public realm, where cars (electric vehicles) will be permitted but not have priority. Once you start recognising that streets at the local level could be public realm first and thoroughfare second, they could be designed to be a lot greener, to promote walking and cycling and to increase connectivity between existing parks and green spaces. In combination with more thoughtful management of amenity green space and the installation of more urban greening features such as green roofs, it’s about creating healthier streets, more liveable neighbourhoods and ecological networks at a finer grain throughout the city. It’s a shift in thinking about what the spaces between the buildings in cities are for.”

How city councils and local authorities could be instrumental in achieving urban biodiversity

• Set targets for everyone to be within a five-minute walk from a biodiverse green space, pocket park or accessible green roof.
• Set standards for retrofitting biodiversity within current urban areas and for accessible green space in all new developments.
• Set up a ‘Biodiversity in the City’ challenge for landowners, business improvement districts and others to showcase and celebrate success.
• Stop herbicide and pesticide use across the city in all council-owned public places.
• Make it easier for communities to retrofit biodiverse features such as domestic green roofs or taking up areas of paving to create mini gardens.
• Change the management of existing green spaces to support the local ecosystem for example by restoring and daylighting rivers.

Daylighting the Quaggy River

The Quaggy River’s history includes intensive channelling and routing the river underground, which resulted in flooding problems due to losses in the river’s natural floodplain. A restoration project in conjunction with the local community saw the river being brought back into the open, which increased the area’s flood water storage capacity to 85,000m³, as well as reducing peak flow rates and flood risk, making it a safer place to live. Hand in hand with this, the project increased the area’s biodiversity, brought the community together, improved water quality and facilitated maintenance.
Landowners, transport organisations and BIDs

The BIDs’ work on ‘Greening the BIDs’ and TfL’s work on ‘Healthy Streets’ are excellent examples of work that can be done to transform grey urban areas to green. Through working together and including local landowners, we can demonstrate the economic and social benefits of biodiversity to businesses, employees and the public. This could include the creation of ‘sky gardens’ which offer clean air and green space within urban areas. Not only does this combat the negative environmental impacts of city life, but having more interesting and attractive green areas has been demonstrated to attract more customers, increase employee engagement and raise the wellbeing of those using the space.

How landowners, transport organisations and BIDs could be instrumental in overcoming these challenges

• Create new green streets by radically greening pedestrian areas, including planting large canopy street trees where space allows. These green spaces and corridors will decrease flood risk, improve air quality, allow free movement for everyone and create lively environments for shops and businesses. These ‘green hearts’ in city centres will complement and connect with the parks – the lungs of any city.

• Create biodiverse sky gardens – put biodiverse green and brown roofs onto all new buildings and retrofit green and brown roofs onto existing buildings. Open these up and provide public access wherever possible.

• As car ownership continues to decrease in urban areas, transform former car-parking spaces into biodiverse green spaces or SuDS schemes, in collaboration with water companies and others.

• Enable vacant land to be temporarily used as green space, creating short-term greenery that moves around the city as land-use changes.

Landscape managers

Cities in the UK already host some fantastic wildlife, from peregrines to water voles, from curlew to cockroach. Creating biodiverse cities is not about recreating the rural environment or trying to take rural habitats and put them into an urban setting. It is recognising the fantastic wildlife we have in our cities already, giving it space and helping it thrive. UK cities are known for their green spaces which provide us with so much to do and see.

Whilst our parks and recreation areas are already beautiful and great for recreation, the benefits these spaces provide could be enhanced if we alter how they are managed. If we allow and accept minimal maintenance regimes leading to ‘wilder’ parks and green spaces, we will not only get more wildlife, but we could also benefit from improved air quality and water management.

Local authorities and landscape maintenance teams have fewer resources, yet they are under immense pressure to continue to provide high-quality urban green space for the benefit of the local community. Already, approaches such as limiting mowing regimes to allow flowering of meadow species are being trialled around the country. Positive public responses have been encouraged through awareness-raising interpretation boards and clear delineation of areas. The learning from this should be cascaded to all teams and support provided for them to devise their own wildlife-friendly maintenance regimes. This should be tested in cities across the country now so that we can apply this learning across all our green spaces.

Merrick Denton Thompson, President of the Landscape Institute, said:

"Every landscape has the potential to rebalance the support of the natural systems and people’s needs ... We need to restructure our spaces, and biodiversity has to be one of the objectives ... There is a basic lack of understanding that humanity depends upon ecosystem services, which depends upon a biologically healthy environment ... Until you can see the consequences of not intervening on biodiversity you won’t get an intervention."

How landscape managers could be instrumental in overcoming these challenges

• Rethink the maintenance of green spaces in ways which improve biodiversity through inhibiting the use of herbicides and allowing areas to become wilder.

• Take advantage of opportunities to re-invest the money saved back into the green spaces.
Sheffield Grey to Green project

The inspiring Grey to Green project in Sheffield transformed 1.2km of redundant road in the city centre with SuDS, rain gardens and a range of planting for wildlife. As well as achieving three CEEQUAL 2016 awards for Landscape, Water Environment and the Eric Hughes Award 2016 for Outstanding Contribution to Improving Sustainability, the level of biodiversity in the area has been massively enhanced. The increase in vegetative species not only provides more habitat types for wildlife, but also benefits the local community by providing aesthetically pleasing spaces to encourage outdoor activity, as well as decreasing the flood risk.

Greening for growth in Victoria

London’s Victoria BID, a space full of business and buzz, undertook a green infrastructure audit which identified 1.24 hectares of space for new green infrastructure, as well as 1.69 hectares of existing green infrastructure that could be enhanced. The current green infrastructure within the Victoria BID diverts up to 112,400m³ of storm runoff which equates to up to £20,638 in reduced CO₂ emissions savings and £29,006 in energy savings every year, as well as providing the potential to reduce peak summer temperatures by 5.1°C. This shows the fantastic possibilities for all urban areas and demonstrates what is achievable for other BIDs.
Brownfield metamorphosis – public acceptance of biodiverse urban green space

A brownfield-inspired garden designed by Martyn Wilson who runs Wilson Associates Garden Design, won a gold medal in the prestigious RHS (Royal Horticultural Society) Hampton Court Palace Flower Show. The garden used a mix of different plants that withstand minimum maintenance regimes including grasses, ferns, herbaceous perennials and self-seeding annuals and which helped to soften the hard landscaping. Although not a typical show garden, the award of a gold medal by the RHS judging panel was accompanied by extremely positive public interest. This demonstrated that there is already a level of public understanding surrounding the need to make different use of our green spaces and a willingness to embrace a less maintained and more biodiverse network of urban green spaces.
Water companies

Prioritising ‘soft’, biodiverse vegetation-based systems over highly engineered ‘grey’ systems can increase functional benefits such as the absorption of water and uptake of pollutants by the vegetation. SuDS reduce the risk of flooding by allowing water to naturally soak back into the earth thereby slowing the release of flood water. There are opportunities for water companies to work with ecologists and landscape architects to alleviate the impacts of flooding and also increase the ecosystem services provided by their investment.

There is a need to create long-term advance planning mechanisms for funding the effective maintenance of biodiverse SuDS schemes to ensure their sustainability. Although the integration of biodiversity features within SuDS schemes is currently a top priority for many water companies, ensuring their effective long-term maintenance is currently a big issue when considering their cost effectiveness.

How water companies could be instrumental in overcoming these challenges

• Work together with other stakeholders including lead local flood authorities, nature conservation organisations and local communities to ensure that the use of appropriate and biodiverse SuDS is incentivised as part of a strategy toward a more sustainable management of surface water runoff.

• Develop effective schemes for the long-term funding of maintenance for biodiverse SuDS by working with local authorities and developers through, for example, payment for long-term maintenance as part of a development.

Everyone

Our gardens, windowsills and even a few flower pots can become vital havens for wildlife when part of a wider network along a street or through a neighbourhood.

How everyone can play a part to overcome these challenges

Try five simple steps to support wildlife where you live:

1. Welcome wild and less maintained greenery into your garden e.g. leave a corner un-mown to provide for invertebrates.

2. Avoid the use of herbicides or pesticides such as insecticide sprays, weed killers and slug pellets.

3. Consider permeable paving solutions that encourage greening and sustainable drainage, such as grass pavements.

4. Choose plants for pollinators – even on a window sill think of bees’ needs.

5. Sit back and enjoy!
Oslo – private urban garden campaign

The city of Oslo, Norway, has adopted a campaign to encourage residents to replace their highly trimmed gardens with wild flowers and grasses to attract more species to the city, in particular, pollinators. The national strategy has identified an ‘urban insect corridor’ and promotes cultivating attractive and wild plant species in urban gardens in an attempt to slow the decline of Norway’s wildflower meadows. The strategy aims to increase the number of plant and insect species in order to increase the city’s resilience to future climate change. As a by-product, the scheme also brings communities together, with workshops being run on developing skills and ways to work together to increase the biodiversity of urban private gardens.

Manor Ponds – SuDS scheme with guaranteed maintenance

New roads from the development of a new social housing estate created high volumes of surface water runoff. There was also a need for water storage and treatment due to a shallow and inaccessible local sewer network. Water engineering work being too expensive, the council opted for a SuDS scheme and constructed a series of basins and ponds to hold water and to clean it with biodiverse means, such as reed beds and grasslands. Not only was this a cheaper option, the council was able to demonstrate its cost effectiveness and gained a budget of £250,000 for a maintenance contract of the site over 25 years, rather than introducing a management charge or increasing ground rent on local properties.
Densification and competition for space can put biodiversity at the bottom of the list of priorities – but it doesn’t need to be a compromise

Local authorities, city councils and water companies

There is a lot of pressure for space within cities due to the need for new housing, more schools, improved infrastructure and much more. For obvious reasons, green spaces and biodiversity can often be a low priority when fulfilling these other important needs.

However, biodiversity in cities doesn’t have to be a compromise; we can build new developments that meet all of our needs as well as supporting biodiversity – we can have the best of both worlds.

By creating policies concerning the amount of green space that should be included within new developments, we can ensure that new schemes have a higher level of green space than might otherwise have been the case. An example is the Green Space Factor – a planning policy tool that has been adopted by a number of city authorities to increase greening of the built environment by establishing minimum requirements for new development projects.

Steps local authorities and city councils could take to address this challenge

• Set a requirement for all new buildings to have green or brown roofs and walls, relative to their surface area, and ensure all pedestrian areas are predominantly green space.

• Require new buildings to deliver a net gain in biodiversity.

• Work with water companies and developers to create long-term advance planning mechanisms for the effective maintenance of biodiverse SuDS schemes to ensure their sustainability.

Steps water companies could take to address this challenge

• Work with city councils and developers to ensure that biodiverse SuDS are included as standard within new developments.

Green roof bylaw, Canada

In 2009, Toronto adopted a bylaw which requires all new developments to meet green roof criteria in order to be granted planning permission. Any new development in Toronto with a floor area of 2,000m² or more has to have a minimum of 20% of its roof area covered in greenery. This rises to 60% for the largest developments. Over a five-year period, this has resulted in 500 green roofs being implemented within the city, equating to around 250,000m² of green roof space – an area equating to around 30 football pitches.
NHS and public health bodies

Patients surrounded by nature tend to recover more quickly and ‘green prescriptions’ give physical and psychological benefits. The NHS and public health bodies are in a unique position to drive the agenda for greater biodiversity due to the potential health benefits that might result. A fantastic job has already been done on the NHS’s own land, as well as through the Healthy New Towns project. The NHS and public health bodies can create a platform to promote and encourage biodiversity in our cities for greater mental and physical health. By leading on this agenda, the NHS and public health bodies could directly contribute to encouraging successful projects which could be for everyone, not only for those communities that can afford to invest in green space.

GreenBlue Urban, an urban landscape and infrastructure design organisation, said:

“It is heart-warming and exciting to know that the NHS has become involved with the design and implementation of Healthy New Towns across the United Kingdom. The case studies / pilot sites chosen from a diverse number of regions are illustrative of the breadth and range of opportunities for intervention to create more sustainable, resilient and healthy communities of the future ... Access to green space and integrated green and blue infrastructure holds the key to mitigating a number of less desirable by-products associated with living in developed, urban areas.”

How the NHS and public health bodies could address this challenge

• Build on the NHS Healthy New Towns project by working with other organisations to set standards across the area and quality of all our green and biodiverse spaces for all our urban environments based on the health needs of the local population.

Developers, built-design professionals, ecologists and landscape professionals

There are exciting opportunities to demonstrate high levels of biodiversity in new developments. But it requires nature conservationists to adopt a flexible and proactive approach to identify opportunities for biodiversity within the design process, in addition to protective measures.

Built-design professionals should be welcoming the input of ecologists and landscape architects to develop shared designs that enhance the development and the ecosystem it sits within. The synergies between landscaping, biodiversity and SuDS should be widely recognised and taken forward through a joint approach involving all relevant specialists.

Multi-disciplinary consultancies are in a great position to deliver integrated design within the built environment. This could include leading the industry by developing and using standards covering the extent and condition of green roofs, SuDS, street trees and areas of green space for all new developments.

Andy Bascombe, Technical Director at WSP, said:

“Businesses that are responsible for empowering (or are in a position to empower) biodiversity creation or enhancement in the city are able to say to a developer or client what their competitors are doing ... There is a real duty of care for architects and consultants to advise clients on the benefits of biodiversity.”

Steps developers, built-design professionals, ecologists and landscape professionals could take to address this challenge

• Work collaboratively from the inception of all projects to integrate biodiversity and ecosystems throughout the process of urban design. Ensure biodiversity is seen as part of the infrastructure and not just an afterthought.

• Set industry-led standards for the extent and quality of green or brown roofs, SuDS, street trees and areas of green space for all new developments. This could be an addition to BREEAM, LEED or WELL.

• Set up an industry-led award for designing and building fantastic biodiverse developments.
Liverpool - Alder Hey Children’s Hospital

This new hospital demonstrates not only biodiversity within its grounds, but also areas of redeveloped land to increase the overall green space of the area. The scheme provides each room with both a view and patient access to green space through integrating the hospital with the surrounding landscape. During the hospital’s design, the benefits of green space were fully acknowledged by designers. The development will therefore not only increase patient wellbeing but also actively feed back into the healthcare service.
Lack of understanding of the value of biodiversity to society and the economy causes a lack of biodiversity in already developed areas

All organisations

Changing how we value biodiversity will help us to understand our dependence upon it and therefore its importance. One way we can do this is by accounting for biodiversity and the benefits it gives us. Using the Natural Capital Protocol, a framework which exists to help companies identify their dependence and account for their impacts upon the natural environment, is one approach to putting monetary figures on the ecosystems services which are offered by biodiversity.

Funding for the creation and maintenance of these areas is often the limiting factor, preventing their inclusion in our cities. However, there is now strong evidence demonstrating that green spaces in cities encourages inward investment, attract increased visitor spending, save environmental costs, provide health benefits and generate employment. New funding streams are starting to open up as we better understand the importance of these places.

Re-purposing existing land management budgets will help but not be enough on its own. To this we need to add new payments for the benefits we get from these green places. Payment for ecosystem services is starting to generate new markets for managing run off or dealing with the heat island effect. In addition, developments delivering Biodiversity Net Gain are providing long term funding for the creation and maintenance of areas rich in wildlife across the city.

Mark Gough, Executive Director of the Natural Capital Coalition said:

“We could design cities that functionally mimic ecosystems and provide similar levels of service provision to local natural systems. Scientists would study the nearest functioning natural areas, determine how many species they supported, how much water they filtered, how much carbon they sequestered and so on, and then design a city that meets these performance standards.”

How all organisations could address this challenge

• Improve your understanding of your business’ dependence upon biodiversity and ecosystems. Run an audit of the land you own or manage and assess the benefits it provides by identifying the specific area that provides access to green space, space for wildlife, flood risk management etc. Set targets to increase the area providing these benefits.

• Apply the Natural Capital Protocol to your business operations and make the results available for scrutiny.

• Commit to delivering Biodiversity Net Gain for all new developments.

• Develop a complete inventory of urban green spaces for each city, as recommended in the Wildlife Trust’s ‘Introducing Urban Forests’ report.

• Connect with land managers and other organisations to increase the links between those using ecosystem services and those providing them.
Summary of challenges: could you help make our vision for UK cities a reality?

1. How can we maintain and enhance the biodiversity we already have and/or retrofit biodiversity into existing places?

City councils and local authorities

- Set targets to ensure everyone is within a five-minute walk from a biodiverse green space, pocket park or accessible green roof.
- Set standards for retrofitting biodiversity within current urban areas and for areas of accessible green space in all new developments.
- Set up a Biodiversity in the City Challenge for landowners, Business Improvement Districts and others to showcase and celebrate success.
- Stop herbicide and pesticide use across the city in all council-owned places.
- Make it easier for communities to retrofit biodiverse features such as domestic green roofs or taking up areas of paving to create mini gardens.
- Change the management of existing green spaces to support the local ecosystem, for example, by daylighting and naturalising culverted and canalised rivers.

Landowners, transport organisations and the Business Improvement Districts

- Create new green streets by radically greening pedestrian areas, including planting large canopy trees where space allows. These green spaces and corridors will decrease flood risk, improve air quality, allow free movement for everyone and create great environments for shops and businesses. These ‘green hearts’ in city centres will complement and connect with parks – the lungs of the city.
- Create biodiverse sky gardens – put biodiverse green and brown roofs onto all new buildings and retrofit onto existing buildings. Open these up and provide public access wherever possible.
- As car ownership continues to decrease in urban areas, transform old car-parking spaces to biodiverse green spaces or SuDS schemes, in collaboration with water companies and others.
- Enable vacant land to be temporarily used as green space, creating short-term greenery that moves around the city as land-use changes.

Landscape managers

- Rethink the maintenance of green spaces in ways which improve biodiversity by inhibiting the use of herbicides and allowing areas to become wilder.
- Take advantages to reinvest any savings from reductions in maintenance back into the green spaces.

Water companies

- Work together with other stakeholders including lead local flood authorities, nature conservation organisations and local communities to ensure that the use of appropriate and biodiverse SuDS is incentivised as part of a strategy toward a more sustainable management of surface water runoff.
- Develop effective schemes for the long-term funding of maintenance for biodiverse SuDS by working with local authorities and developers through, for example, payment for long-term maintenance as part of a development.

Homeowners

Try five simple steps to support wildlife where you live:

1. Welcome wild and less maintained greenery into your garden e.g. leave a corner un-mown to provide invertebrate habitats.
2. Avoid the use of herbicides or pesticides such as insecticide sprays, weed killers and slug pellets.
3. Consider permeable paving solutions that encourage greening and sustainable drainage, such as grass pavements.
4. Choose plants for pollinators – even on a window sill think of bees’ needs.
5. Sit back and enjoy!
2. **How can you help us to incorporate biodiversity into new developments?**

**City councils and local authorities**
- Set a requirement for all new buildings to have green or brown roofs and walls relative to their surface area, and ensure all pedestrian areas are predominantly green space.
- Require new buildings to deliver a net gain in biodiversity.
- Work with water companies and developers to create long-term, advance planning mechanisms for the effective maintenance of biodiverse SuDS schemes to ensure their sustainability.

**Water companies**
- Work with city councils and developers to ensure that biodiverse SuDS are included as standard within new developments.

**National health service (NHS) and public health bodies**
- Build on the NHS Healthy New Towns project by working with other organisations to set standards around the area and quality of all our green and biodiverse spaces for all our urban environments based on the health needs of the local population.

**Developers, built-design professionals, ecologists and landscape professionals**
- Work collaboratively from the inception of all projects to integrate biodiversity and ecosystems throughout the design process. Ensure biodiversity is seen as part of the infrastructure and is not just an afterthought.
- Set industry-led standards to determine the extent and quality of green or brown roofs, SuDS, street trees and areas of green space for all new developments. This could be an addition to BREEAM, LEED or WELL.
- Set up an industry-led award for designing and building fantastic biodiverse developments.
3. Understanding the benefits

**Businesses**

- Improve your understanding of your business’s dependence upon biodiversity and ecosystems. Run an audit of the land you own or manage and assess the benefits it provides by identifying the specific area of land that provides access to green space, space for wildlife, flood risk management etc. Set targets to increase the area providing these benefits.

- Apply the Natural Capital Protocol to your business operations and make the results available for scrutiny.

- Commit to delivering Biodiversity Net Gain for all new developments.

- Work with Local Record Centres to develop a complete inventory of urban green spaces for each city, as recommended in the Wildlife Trust’s ‘Introducing Urban Forests’ report.

- Connect with land managers and other organisations to increase the links between those using ecosystem services and those providing them.

By encouraging everyone to play a part in increasing the biodiversity of our cities, we can work collectively towards achieving our vision for a network of truly biodiverse cities in the UK.
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Glossary

**TfL**

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London Plan [https://www.london.gov.uk/what-we-do/planning/london-plan/current-london-plan/london-plan-2016-pdf](https://www.london.gov.uk/what-we-do/planning/london-plan/current-london-plan/london-plan-2016-pdf)

**NHS Healthy New Towns**

**GLA**
At Home with Nature [https://www.london.gov.uk/sites/default/files/at_home_with_nature_-_encouraging_biodiversity_in_new_housing_developments.pdf](https://www.london.gov.uk/sites/default/files/at_home_with_nature_-_encouraging_biodiversity_in_new_housing_developments.pdf)

**CEEQUAL Outstanding Achievement Awards**
Sheffield Grey to Green Project [http://www.ceedual.com/download/3704/](http://www.ceedual.com/download/3704/)

**Toronto Green Roof Bylaw**

**Manor Ponds SuDS Project**

**National Trust and Green Alliance “New Markets for Land and Nature – How Natural Infrastructure Schemes could pay for a better environment”**

**TfL SuDS Guidance**

**Cross River Partnership - Greening The BIDs**

**Green Victoria - Victoria BID**
[www.victoriabid.co.uk/work/greening-victoria](http://www.victoriabid.co.uk/work/greening-victoria)

**London Global Green City 2016 IPPR report**

**Green Blue Urban on NHS Healthy New Towns**
[https://www.greenblue.com/na/healthy-new-towns](https://www.greenblue.com/na/healthy-new-towns)

**Oslo’s “Urban Insect Corridor” in The Guardian**

**Defra**
To what extent does green infrastructure improvement act as a catalyst for economic growth? An assessment of the international and UK evidence.
WSP is one of the world’s leading engineering professional services consulting firms. We are dedicated to our local communities and propelled by international brainpower. We are technical experts and strategic advisors including engineers, technicians, scientists, architects, planners, surveyors and environmental specialists, as well as other design, program and construction management professionals. We design lasting solutions in the Property & Buildings, Transportation & Infrastructure, Environment, Industry, Resources (including Mining and Oil & Gas) and Power & Energy sectors as well as project delivery and strategic consulting services.

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