Vision and Principles for the Improvement of Green Infrastructure in Buckinghamshire and Milton Keynes



1 Purpose

This document sets out the principles and priorities that the Buckinghamshire and Milton Keynes Natural Environment Partnership (the "NEP") Green Infrastructure and Health Group collectively agrees should be adhered to when creating and improving green infrastructure provision in Buckinghamshire, including Milton Keynes.

The document sets out what is meant by "green infrastructure", our collective vision for green infrastructure in Buckinghamshire and Milton Keynes, and the considerations that should be taken into account when planning for green infrastructure, from strategic scales to individual projects. We will use the principles to influence and advocate good practice at all development scales.

The document serves as a supplementary update to the 2009 Buckinghamshire Green Infrastructure Strategy.

2 What is "Green Infrastructure"?

Definitions

Buckinghamshire's and Milton Keynes' green spaces, rights of way, rivers, lakes, canals, commons and wildlife habitats are important assets that intersperse and connect our villages and towns. By linking these and creating new spaces, Green Infrastructure (GI) forms a planned network of links, hubs and features that have environmental, social and economic qualities associated with them.

The NEP Green Infrastructure and Health Group endorses several definitions of Green Infrastructure. First, that identified in the Buckinghamshire Green Infrastructure Strategy (2009)¹, as was agreed by the Buckinghamshire Green Infrastructure Consortium, as follows:

"Green Infrastructure provides a vital life-support system, encompassing a **network of green Spaces**, access routes, landscapes and natural and historic elements that intersperse and connect Buckinghamshire's urban and rural settlements with each other and the surrounding countryside. Operating at all spatial scales², it enables a holistic overview of the natural and historic environment, acknowledging its **multi-functional benefits** for economy, wildlife and health and wellbeing of local people and communities".

Buckinghamshire Green Infrastructure Strategy 2009

² From local to landscape scales

We also recognise that the notion of "Green Infrastructure" describes a network of multi-functional green spaces, along with associated features such as trees, green roofs and walls, and which also includes "blue" infrastructure – streams, canals and other water bodies. As such, we also endorse both of the following definitions:

i) The Buckinghamshire Green Infrastructure Delivery Plan's reference to the NPPF (March 2012) definition (in the annex at page 52):

"...a network of multi-functional green space, urban and rural, which is capable of delivering a wide range of environmental and quality of life benefits for local communities".

ii) The new PPG section on Green Infrastructure³, which adds that:

" Green infrastructure is not simply an alternative description for conventional open space. As a **network** it includes parks, open spaces, playing fields, woodlands, but also street trees, allotments and private gardens. It can also include **streams, canals and other water bodies** and features such as green roofs and walls."

NB the term "Green Infrastructure", or "GI", throughout this document, encompasses all three definitions

Green Infrastructure is hugely valuable – it provides us with multiple benefits from ecological to social and economic. These are known as "ecosystem services" and need protecting and enhancing

The benefits obtained from our ecosystems, including our networks of green infrastructure, are known as "Ecosystem Services" – and include "…food, water, flood and disease control and recreation" (<u>National</u> <u>Planning Policy Framework 2012 (DCLG)</u>).

The range of benefits provided by Buckinghamshire's and Milton Keynes' Green infrastructure include its intrinsic value for wildlife and biodiversity, and its value to people – for example by improving quality of life, health and wellbeing, recreation, access to nature, attracting businesses, employees, tourists and other visitors, maintaining land value, and climate change adaptation.

The benefits GI can provide are delivered through protecting, enhancing, creating and extending GI and better linking an area's GI network.

The NEP's GI and Health Group's principles for the improvement of GI in Buckinghamshire and Milton Keynes therefore encourage the protection, enhancement, creation and long-term management of GI features and networks, including species-rich features. These GI features and networks should be:

- connected wherever possible across the County's ordinary open countryside; and
- *integrated* not only with Buckinghamshire and Milton Keynes' public open spaces, local green spaces, Buckinghamshire's "Biodiversity Opportunity Areas" (BOAs see principle vi, below) and

^{3 &}quot;Green Infrastructure" - PPG Natural Environment section, accessed March 2016: http://planningguidance.communities.gov.uk/blog/guidance/natural-environment/green-infrastructure/

statutory protected areas - but also integrated with new or enhanced green infrastructure features within existing developed areas and throughout all new developments.

The Group emphasises the need to plan and deliver Green Infrastructure to provide broader ecosystem services - such as wildlife habitat, flood protection, microclimate control and filtration of air and water pollutants - in a more fully-integrated manner.

Our "Vision for Green Infrastructure in Buckinghamshire and Milton Keynes" is set out below, along with the Principles we believe should be upheld across the county to achieve that Vision.

The Vision and Principles are evolving

The Vision and Principles for Green Infrastructure in Buckinghamshire and Milton Keynes will be reviewed and updated on an ongoing basis according to developing need and context by the Buckinghamshire and Milton Keynes Natural Environment Partnership's "Green Infrastructure and Health Task Group". (See Section 8, pg 21 for the role of the Task Group).

3 A Vision for Green Infrastructure in Buckinghamshire and Milton Keynes

"We collectively endorse a vision for Green Infrastructure in Buckinghamshire and Milton Keynes by 2030 that provides, connects, improves and protects our Green Infrastructure assets for their many benefits and into the long term". The key features of our GI are:

A landscape-scale network of green and blue infrastructure

By 2030, Buckinghamshire and Milton Keynes has multi-functional network of natural, semi-natural and man-made green spaces and green links, streams, canals and other water bodies that provide an environmental support system for communities and wildlife. The green infrastructure network is a planned and integrated web of green space and blue infrastructure, designed to deliver both strategic functions and local needs into the future.

Our GI is well-designed, accessible, used and valued by our residents

The network is high quality, bio-diverse and accessible and will further connect urban areas with the surrounding countryside via Rights of Way and access routes. It is widely valued by all those who visit, live, work and play in Buckinghamshire and Milton Keynes. Residents, particularly in our urban areas, have better access to well-designed green space that makes the natural environment relevant to them – from local to large-scale green spaces.

Our GI is connected together at the landscape scale

Our green infrastructure network *connects a diverse range of wildlife habitats* and provides important corridors for species dispersal and migration – so wildlife can be more resilient to pressures such as development and climate change.

Existing GI in Buckinghamshire and Milton Keynes becomes part of the integrated and planned green network across the county wherever appropriate. Planning for and providing *an interconnected green network will take into account existing strategically-important green and blue infrastructure* (for example, <u>The Chilterns Area of Outstanding Natural Beauty</u> - for its inherent beauty and landscape as well as for its wildlife and access; Biodiversity Opportunity Areas in Buckinghamshire and Milton Keynes; and other important sites for wildlife).

Our GI is connected across borders

As wildlife does not respect administrative boundaries, the GI network links with green infrastructure across administrative, including county, borders. *Opportunities for GI to connect with existing or improved GI across borders of all spatial scales should be evaluated* in designing the best GI network for the needs of wildlife and people.

Our GI is wildlife-rich

The GI network created will be rich in wildlife, demonstrating high standards of protection, enhancement, creation and long-term management of species-rich features. Species-rich wildlife features will be not only within public open spaces and local green spaces, and in Buckinghamshire's "Biodiversity Opportunity Areas", but also *integrated throughout new developments and across the County's ordinary open countryside*. We recognise *that some wildlife habitats that are particularly sensitive to human disturbance may not be suited to multi-functionality including access*. But sites, routes and links *taken together* should seek to create a multi-functional and connected network.

GI is a necessity into the long-term to provide multiple benefits for sustainable growth

The multiple benefits of well-designed GI – from its ecological value to providing the basis for our economic, social and mental net gain and wellbeing – are recognised as required (not just desired) for sustainable long-term growth. The Green Infrastructure approach is regarded as a long-term framework for sustainable development, protecting the County's natural and historic environment and enhancing the qualities that give Buckinghamshire its special character. The long-term management of GI in Buckinghamshire is catered for.

Delivery - through support, commitment and adequate funding

Ensuring additional, bigger, better and more joined up and connected green and blue infrastructure to provide multiple benefits is a priority. *The vision for green infrastructure is understood, developed, accepted and supported by* decision-makers, particularly Local Authority planners (policing adherence at the development scale) and developers.

Each authority (Districts and MK Authority) translates the higher-level principles and the endorsed strategic-level "green network" of GI in Buckinghamshire *to its own area*. *The vision is adhered to at all spatial scales* throughout the growth phase in Buckinghamshire and Milton Keynes.

The Green Infrastructure Vision will be delivered and managed through the commitment and involvement of the public, private and voluntary sectors working in partnership with each other. Funding for GI is provided, for example through mechanisms such as CIL or developer contributions.

4 **Principles for achieving the Vision** *Identifying, extending, improving and protecting*

Buckinghamshire and Milton Keynes are about to experience unprecedented levels of growth. If we are to retain and improve the range of ecosystem services that can be provided by green infrastructure – from environmental benefits to contributions to the economy and our physical and mental health and wellbeing –then planning for the protection, provision and enhancement of GI in the right way is critical.

The NEP advocates the "Green Infrastructure" section of the NEP's standard response to Local Plans, which sets out expectations for Local Plans to include policies relating to Green Infrastructure - with content as set out in the standard response (this is reproduced at Appendix 1).

Local Authorities have a specific role to play to translate the Vision and Principles into reality through Local Planning and development requirements. In addition to specific GI requirements in Local Plans, we set out below the Principles that should be adhered to by *all* stakeholders. This will require action to identify green infrastructure requirements before, as well as during and after, growth and development.

Principles – for translating the vision to reality

All Buckinghamshire Districts along with Milton Keynes Unitary Authority should endorse the vision for GI in Buckinghamshire and Milton Keynes. We have identified the following principles that should be adhered to at all spatial scales of planning and development – before, during and after the Buckinghamshire growth period, so the vision can be put into practice. These are explained in Section 5.

- Green Infrastructure is as important and necessary as grey (man-made, constructed) infrastructure and social infrastructure for the health and wellbeing of Buckinghamshire's economy, environment and society.
- 2) GI, its value and benefits are considered and planned for early and strategically at all spatial scales of development
- 3) Green Infrastructure across Buckinghamshire should be planned to provide a range of benefits, or "ecosystem services"
- 4) (Related to 3, above) GI creation and improvement is planned to contribute to the delivery of objectives and targets, good practice actions and activities for Buckinghamshire's environment, health and economy
- 5) GI is managed into the long-term
- 6) Connected networks of green infrastructure are necessary at both the landscape and local scale to maximise the benefits
- 7) GI creation and improvement is coordinated with activities cross-border
- 8) GI protection, improvement and creation is prioritised in locations where GI can deliver most benefits. Opportunities to maximise the benefits of GI should be explored both strategically, when planning for GI provision ahead of growth and development, and when mitigating the impacts of development
- 9) Linked and relevant to, informed by and co-ordinated with, other policy areas, strategies, activities and reviews.

5 Principles in detail - actions to take and supporting evidence and policy

Actions needed to adhere to principle / explanation	Supporting policy / evidence
 Each District / Authority should endorse the county-wide Vision and Principles and translate them to action at the local level. For example: The authority-scale green infrastructure network should be planned for and protected at all spatial scales, through the planning system, development requirements and through phases of growth and development, including cumulative development. In this way, investment in Green Infrastructure is provided as a priority alongside the provision of other essential infrastructure when planning new developments. Local Plans should endorse the NEP's Green Infrastructure vision and Principles – and actively contribute to providing Gl for local needs and for higher-level, strategic needs. Authorities should identify early and plan for their own green network and Gl for their area, in line with the county-scale vision and principles, and taking into account the county-scale requirements for Gl, as well as the existing and potential location, function and intrinsic value of Gl in the area⁴. For example, at the county-scale, Authorities should aim for all residents in Buckinghamshire to have access to green space at least meeting "ANGSt" criteria by 2030, wherever possible. [The "Accessible Natural England and the Forestry Commission. The standard emphasises the importance of communities having easy access to different sizes of natural and semi-natural green space close to where they live]. Progress towards achieving the county-wide vision should be monitored regularly. 	Position Statement, Landscape Institute 2013 "Green infrastructure is a natural, service-providing infrastructure that is often more cost-effective, more resilient and more capable of meeting social, environmental and economic objectives than 'grey' infrastructure". Protected: National Planning Policy Framework Para 110 "Plans should allocate land with the least environmental or amenity value" Value of GI: Roof gardens on new and existing buildings.

⁴ Existing GI* identified for protection (accounting for its intrinsic value, location and potential function) and looking for opportunities to extend, improve and connect it to meet the vision and adhere to the principles.

^{*} Existing GI will include, for example: BOAs, nationally-designated sites and Local Sites as well as local areas of green space; assessing how best to connect GI taking into account existing and desired intrinsic value, the functions and location of required GI and possible connection routes - such as rivers, canals, cycle-ways, rights of way and the location of new infrastructure projects.

2) GI, its value and benefits are considered and planned for early and strategically at all spatial scales of development

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Actions needed to adhere to principle / explanation	Supporting policy / evidence
Protecting, enhancing and providing green infrastructure should be considerations in all development decisions – from strategic scales (as explored in the 2009 Buckinghamshire Green Infrastructure Strategy ⁵) to local levels; and from new major developments to established neighbourhood areas across the county.	<u>Case study – housing</u> <u>developer working to</u> <u>plan for GI early and</u> <u>strategically</u> Bloor Homes (the UK's
 If not considered for every development, opportunities may be lost to draw multiple benefits from the land; and cumulative impacts may be missed. Authorities should enable GI consideration for every development through the planning system. For example: 	largest privately-owned house-builder) and the Design Network provide a case study of members
 Include in Local Plans the core need to deliver well-designed GI for all new development at all spatial scales; and to support for the vision and Principles set out in this document. 	working together early and strategically, along with Local Authorities, to plan a framework for
 Require that all new development in Buckinghamshire and Milton Keynes should plan for Green Infrastructure provision early and strategically. Prior to all new development, developers should seek opportunities to provide more, or extend, enhance and connect GI to existing networks- and improve the multiple benefits provided. 	development and design objectives on dozens of Bloor Homes developments around England. The memorandum of
All development in Buckinghamshire and Milton Keynes should: – Protect, improve and provide well-designed GI within, and	understanding will see the Network's member organisations providing
surrounding, development sites;	design support at the
 Give due consideration to existing GI assets – including Public Rights of Way, National Trails, Cycleways, etc. 	early stages, to consider, for example, including landscape, green
 Give due consideration to linking and enhancing GI opportunities falling beyond development site boundaries; 	infrastructure, access and sustainable
 Deliver better opportunities for accessible strategic-scale Green Infrastructure in the local proximity. This should be delivered through the enhancement or protection of existing assets in the face of change or growth; or, where resources are limited locally, through new provision, and, Ensure future GI provision is designed to complement and relieve pressure on existing GI assets. 	drainage . Under the memorandum, workshops are also used at the detailed design stage. Further information can
 Provide wildlife habitat and onsite enhancements that link to biodiversity assets in the wider countryside, including on designated sites, priority habitat and Biodiversity Opportunity Areas. 	be found <u>here</u> .
 For public open spaces and local green spaces, development should include the creation and long-term management of species-rich wildlife habitats, as these enhance the enjoyment, health and wellbeing value of GI to communities in Buckinghamshire and Milton Keynes and provide a broader range of ecosystem services. If parks are planned to include natural habitats, this has the added benefit of 	

⁵ See <u>Buckinghamshire Green Infrastructure Strategy 2009</u>, Buckinghamshire Green Infrastructure Consortium

relieving pressure on more sensitive nature conservation areas as Buckinghamshire and Milton Keynes grow.	
 Certain sites, as well as providing important GI, also have a particularly high value for biodiversity. 	
Include a long-term management plan [see Principles 5] for all green space within or connecting to / surrounding the development wherever possible.	

 Multi-functionality is central to the green infrastructure approach, which recognises the many benefits, or ecosystem "services", that GI provides. This does not mean that every site or feature has to be multi-functional, but that sites, routes and links <u>taken</u> <u>together</u> should seek to create a multi-functional and connected network – or "green web". Some of the main benefits, or ecosystem services, of GI provision / enhancement are: 	Cosystem services" Supporting policy / evidence National Planning Policy Framework Para 109 "The planning system should contribute to and enhance the natural and local environment byrecognising the wider benefits of ecosystem services"
 Multi-functionality is central to the green infrastructure approach, which recognises the many benefits, or ecosystem "services", that GI provides. This does not mean that every site or feature has to be multi-functional, but that sites, routes and links <u>taken</u> <u>together</u> should seek to create a multi-functional and connected network – or "green web". Some of the main benefits, or ecosystem services, of GI provision / enhancement are: 	National Planning Policy Framework Para 109 "The planning system should contribute to and enhance the natural and local environment byrecognising the wider
 infrastructure approach, which recognises the many benefits, or ecosystem "services", that GI provides. This does not mean that every site or feature has to be multi-functional, but that sites, routes and links <u>taken</u> <u>together</u> should seek to create a multi-functional and connected network – or "green web". Some of the main benefits, or ecosystem services, of GI provision / enhancement are: 	Para 109 "The planning system should contribute to and enhance the natural and local environment byrecognising the wider
	 There are a number of examples of the value of GI in the working environment – e.g. Vodafone campus near Newbury. Although built on a green belt site, the 30 acre Newbury campus, which includes a "calming" on-site lake, was said by the Property Director at the time of opening to provide "our staff with a sharp, exciting environment and one that is relaxing to work in". Network Rail "Quadrant" site in Milton Keynes - with associated GI including an outside seating area. In London, central London Business Improvement Districts, working with the Mayor of London, the Cross River Partnership and Natural England have recognised the increasing importance of GI for future-proofing the city – and have installed 117 projects with £500k public funding. Examples of projects include: living walls to improve local air quality, appearance, wellbeing, etc. joining up new and existing GI around new development creation of pocket parks to improve drainage alongside the appearance of buildings rain gardens urban greening as part of regeneration

Buckinghamshire's and Milton Keynes' environmen	it, health and economy
Actions needed to adhere to principle / explanation	Supporting policy / evidence
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 ⁶ See the <u>National Planning Policies Framework (DCLG, Mar 2012)</u> Paras 7,9 and 152.
 ⁷ <u>Adult Mental Health Commissioning Strategy for Buckinghamshire 2015-18</u>

Actions needed to adhere to principle / explanation	Supporting policy / evidence
Long-term management plans should be required for all types of	Long-term management - example
green space (existing, improved, and particularly new or improved GI - via requirements of the planning system) to provide as broad a	The NEP supports the case for a
range of ecosystem services as possible.	system akin to that operated by
range of ecosystem services as possible.	The Parks Trust in Milton Keynes
This protects against cumulative impacts on loss of GI –	for the management of green
particularly low-level, incremental changes.	spaces. This endowment fund
	model, with contributions from
The management of Buckinghamshire's and Milton Keynes' GI	developers would allow funding for
assets - new, existing and improved – should be set out and	the ongoing management of the
adhered to into the long term. This should be into perpetuity	green spaces for wildlife to
wherever possible.	continue for the lifetime of the
•	development.
In the interim, while developing a system for management into	
perpetuity, developers should consider for each new site how to	- The Parks Trust in Milton
meet this goal.	Keynes uses an endowment
-	fund model - the Trust was se
Methods to achieve this may include, for example, LPAs requiring:	up with an endowment of £20
	in 1992. The interest on this
 Developers to secure a management plan for around 25-30 	pays for most of the work.
years after completion – during which they should seek to	Other funding comes from
secure longer-term management of the site.	letting a portfolio of properties
 Developers could contribute to an endowment fund 	 Milton Keynes Council along
dedicated to the management of the green space in the	with several parish and town
development. The annual dividends from the investment of	councils are also responsible for
the fund then fund the work whilst the capital remains intact.	a large amount of open space
the fund their fund the work whilst the cupital remains intact.	Milton Keynes.
 A commitment from / requirement for the developer to fund 	
the management for 25-30 years may be by direct use of a	- For new developments in
management company, or by supporting a Trust or similar	Thames Basin heaths, where
set-up to manage the key elements, including working with	suitable alternative natural
the local community – such as Parish or Town Councils. A	greenspace (SANGs) is provide
further endowment may be appropriate / required beyond	the in-perpetuity managemer
this, but the appropriate management infrastructure and	funding is provided through a
technical expertise would need to be in place (e.g. embedded	commuted sum being
in the local community).	contributed by the developer
··	once the management princip
- Close working with Local Parish and Town Councils and local	has been identified, or throug
community groups to explore their role in:	one-off householder
i) getting local residents to take a stronger interest in their	contributions, which is more
local green space;	common. Often the SANG is
ii) providing green space; and	handed over to the LPA for
iii) encouraging use of green space.	long-term management, which
	will collect the relevant fundin
	– e.g. via a s106 agreement.

Actions needed to adhere to principle / explanation	Supporting policy / evidence
<u>At the landscape scale</u> , Green Infrastructure should provide a network of interconnected habitats to enable dispersal of species across the wider environment. In this way wildlife can move if it needs to – so will become more resilient to pressures such as climate change and development.	Connected: <u>National Planning Policy Framework Para 109</u> "The planning system should contribute to and enhance the natural and local environment byminimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in
Connected GI also can provide better <u>access to</u> <u>the countryside and can connect urban and</u> <u>rural areas</u> . A properly planned network of	biodiversity, including by establishing coheren ecological networks that are more resilient to current and future pressures"
Green Infrastructure provides a key sustainable means for access and movement within and outside urban areas. The future development of this network <u>must be complimented by</u> <u>enhanced public transport links</u> to this network.	Lawton Review, Defra 2010 "There is compelling evidence that England's collection of wildlife sites are generally too small and too isolated, leading to declines in many of England's characteristic speciesWe need more space for nature. Our 24
Decision-makers at the local level who recognise the intrinsic value of providing a joined-up green infrastructure network across Buckinghamshire, can replicate this at the local scale wherever possible and achieve similar benefits.	recommendations in this report call for action which will benefit wildlife and people. They provide a repair manual to help re-build nature".
A <u>connected network of green infrastructure</u> adheres to the Government's commitment to halt biodiversity loss, and to the Lawton Review, which called for more, bigger, better and more joined up green spaces for wildlife. Sufficient buffers to protect the wildlife value of green infrastructure and blue infrastructure	"A carefully planned Green Infrastructure network in Buckinghamshire will allow connections to neighbouring assets at sub- regional and local scales. Opportunities for enhancing and delivering better-connected walking and cycling provision opportunities wi also need to be complimented by enhanced public transport connections to this network". (Page 22, <u>Buckinghamshire Green Infrastructu</u> Strategy 2009)
	Para 10 in the <u>Wycombe District Council Gre</u> <u>Networks and Infrastructure Background Pape</u> <u>2011</u> describes how Wycombe identifies Green Infrastructure Network by identifyi areas that provide two or more elements multi-functionality based on underlyi mapping of five key themes.

7) GI creation and improvement is coordinated with	activities cross-border
Actions needed to adhere to principle / explanation	Supporting policy / evidence
 Wildlife and Green Infrastructure and the way people use and experience it does not align to county boundaries or development site boundaries. Therefore, neither should the planning for, protection of, or management of, Green Infrastructure. Local authorities and others will have to work across administrative boundaries if we are to focus on the NPPF's <u>"coherent ecological networks that are more resilient to current</u>" 	<i>Connected:</i> <u>National Planning Policy</u> <u>Framework Para 109</u> <i>"The planning system should</i> <i>contribute to and enhance the</i> <i>natural and local environment</i> <i>byminimising impacts on</i> <i>biodiversity and providing net</i>
and future pressures" At all scales, identifying, planning for, protecting and improving green infrastructure must therefore be carried out through sufficient joint-working beyond the administrative border:	gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including by establishing coherent
 At the county-scale, this means working with both neighbouring local authorities, Districts and counties. Districts and Authorities should work jointly with each other to identify, protect, extend, enhance and manage GI 	ecological networks that are more resilient to current and future pressures"
 Authorities should require a similar, "beyond immediate boundaries" approach from all development - administered through the planning system. For example, at any single development scale, GI improvement, connections and opportunities should be considered in relation to the site's surroundings, not just within the site boundaries. 	Lawton Review, Defra 2010 "There is compelling evidence that England's collection of wildlife sites are generally too small and too isolated, leading to declines in many of England's characteristic speciesWe need more space for nature. Our 24 recommendations in this report call for action which will benefit wildlife and people. They provide a repair manual to help re-build nature".

8) GI protection, improvement and creation is prioritised in locations where GI can deliver most benefits. Opportunities to maximise the benefits of GI should be explored both strategically (when planning for GI provision ahead of growth and development) and when mitigating the impacts of development.

Actions needed to adhere to principle / explanation	Supporting policy / evidence
To deliver our vision and the multiple benefits of improved GI, we recognise the need to prioritise delivery and enhancement of GI in certain locations in Buckinghamshire and Milton Keynes where it can deliver most benefits - notably:	Connectivity - as for Principle 6
 In areas to improve GI connectivity – i.e. to connect GI with other GI assets. In particular: Within and through urban areas and developments (to maintain connectivity, create attractive areas for active travel, provide green recreation and community space for 	Sustainable Drainage Systems (SuDS): Developer pack provided by the SuDS team at BCC and <u>CIRIA SuDs design manual</u> . This

residents, street trees / plants to improve local air quality, etc.);

- Built design to include biodiversity enhancements e.g. green roofs, walls, rain gardens and broader "Sustainable Drainage Systems (or "SuDS"). Also to provide for climate change adaptation - flood attenuation, wildlife movement corridors, air quality etc. (See Appendix 2 for more detail)
- To link urban to rural GI (e.g. the Bucks GI Strategy recognised the need for Countryside "Access gateways" (key locations to act as Gateways to the wider GI network); and "Access links" – existing or proposed new links to provide strategic movement corridors between main settlements and countryside access gateways);
- To provide easy access to the "countryside on your doorstep" for peaceful recreation and other wellbeing benefits.
- Accessible Green Infrastructure needs to be provided in and around areas close to where people live and work to accommodate healthy lifestyles and provide opportunities for active and passive recreation. This means better-connected cycleways and footpaths to enable healthy exercise and environmentally sound travel; opportunities to connect with nature, as well as more facilities for informal sport, leisure and exercise and more and better green spaces to promote general wellbeing.
- Where Green Infrastructure provision is deficient and needs to be addressed, based on the needs for growth communities to have adequate, accessible large-scale green space, to meet the minimum ANGSt standards⁸ wherever possible (or equivalent, robust assessment method); and to provide easy access to the "countryside on the doorstep".
- In areas with high indices of multiple deprivation improving access to high quality, attractive green space; greening within developments; better engagement to encourage the use of local green spaces to reduce health inequalities and to provide health and wellbeing benefits.
- While endeavouring to provide GI where it is most needed and where it can deliver most benefits, all opportunities to protect, enhance or create GI – through development and growth, or otherwise – should be explored with a view to maximising the benefits provided.

focuses on the cost-effective planning, design, construction, operation and maintenance of SuDS.

Urban-rural links

The Bucks GI Strategy recognised the need for Countryside "Access gateways" (key locations to act as Gateways to the wider GI network); and "Access links" – existing or proposed new links to provide strategic movement corridors between main settlements and countryside access gateways.

Access to green space (ANGSt)

"Accessible Natural Greenspace Standard" (ANGSt) developed by Natural England and the Forestry Commission. This is a nationallyrecognised approach and is consistent with that used in neighbouring counties, although concentrates on the benefits of GI for human need.

The standard emphasises the importance of communities having easy access to different sizes of natural and semi-natural green space close to where they live.

⁸ The "Accessible Natural Greenspace Standard" was developed by Natural England and the Forestry Commission. The standard emphasises the importance of communities having easy access to different sizes of natural and semi-natural green space close to where they live.

9) GI is linked and relevant to, informed by and co-ordinated with, other policy areas, strategies, activities and reviews

...that could affect GI provision and quality in Buckinghamshire. For example:

- Major new or improved transport infrastructure e.g. east-west expressway
- High Speed 2
- Housing growth plans and associated infrastructure requirements
- The Green Belt Review
- Good practice in access to green space
- Health & Wellbeing Board / health targets / activity targets for Buckinghamshire and Milton Keynes (e.g. Joint Strategic Needs Assessments)
- LEP targets for economic growth and jobs
- Objectives for the Chilterns Area of Outstanding Natural Beauty (AONB)
- Creation of public realm and "sense of place" improvements
- Bucks CC Local Transport Plan 4 (and associated are-based strategies)
- <u>Buckinghamshire Physical Activity Strategy</u>;
- Local Flood Risk Management Strategies
- Objectives of the River Thames Alliance and Thames Waterway Plan
- River Basin Management Plans (e.g. Thames River Basin Management Plan 2016 2021
- Lawton Review 2010: aiming to improve and reconnect England's wildlife sites and habitats to make them more connected and boost resilience to change.).
- "<u>State of Nature" report for the UK</u> (2010) which exposed the extent of species decline and habitat loss.
- Vision and objectives for the Colne Valley Regional Park

6 Achieving the vision:

i) Alignment of the GI vision with provision across Buckinghamshire and Milton Keynes.

To support putting the strategic vision into practice, **the Group agrees to work together in three** related ways:

- <u>Strategically:</u>
 - Identify, recognise and positively work with, the range of GI initiatives already in operation across Buckinghamshire and Milton Keynes (for example, adding links to existing public rights of way).
 - Be responsive to emerging Local Plans. Broad locations of development will come from Local Plans and each council's evidence base.
 - Monitor and articulate the ongoing strategic aims for GI in Buckinghamshire and Milton Keynes.
 - Influence work with others to ensure provision and enhancement of GI develops in accordance with intentions in a coordinated way.
 - Aim to provide for GI consistent with the principles and proposals of the Buckinghamshire GI Strategy (2009) and Delivery Plan (2013), and subsequent updates, including this Principles document.
- <u>Project-level / individual developments</u>
 - Recognise that the size and location of GI must be suitable for the function it is intended to fulfil. For example, for habitats and biodiversity, where required, GI should ensure permeability for wildlife through development and provide sufficient beneficial habitat to support target species, independent of its connective function.
 - Promote good and best practice (see below)
- Identify and develop good practice.

For example, the Group will explore how best to encourage developers and new developments, and infrastructure planning activities, to consider and deliver appropriate GI. This will include advancing the following:

- Demonstration through case studies;
- Assess GI on-site and its functional importance;
- Ensure development proposals identifies and protects important GI and provide appropriate buffers; and seeks opportunities to connect and improve GI
- Design new GI that complements existing GI and provides multiple functions (e.g. landscaping for SuDS, recreation, community gardening, wildlife benefits);
- Secure the provision of long term maintenance of GI linked to planning approval;
- Mechanism to monitor the aims of GI to ensure it develops in accordance with its stated intentions;
- Funding possibilities e.g. developer-contributions via s106 or through CIL. If existing GI is part of a development site, it could be included in planning conditions. If CIL was used it could be used across GI needs in the District concerns.

ii) Action Plan – priorities

What needs to start changing now to	Action needed	Who can help and how?	By when?
achieve the vision?			
Strategic level Refresh the GI Strategy	 Map, strategically, a future 	BCC Environment Team and	
and Delivery Plan – into a workable, practical, up-to-date document. Local Plans to recognise and plan for the	vision for GI in Buckinghamshire and Milton Keynes, taking into account the existing GI Strategy, and the principles set out in this document.	 Growth and Strategy team to produce initial map of map of the GI future "vision" across Bucks at the strategic level. 	Jun - Sep
strategic benefits of GI. Also to encourage protection of existing GI, as well as improve and create GI to provide a broad range of ecosystem services –	 Review status of current projects in place to improve GI provision in Bucks. Identify broad areas of the County where GI is needed. 	BCC Planning & Environment Portfolio committee - comment on development of map and vision NEP Task Group	Jun onwards
which can be harnessed to provide benefits to the environment, society and the economy.	 Advocacy – Discuss Principles with each District, MK Authority, and coordinating planning groups including the BPG and BPOG. 	 comment on development of strategic-scale map and vision for GI; 	Jun onwards
	 Aim for all Buckinghamshire District Councils and Milton Keynes Council to have GI 	 Finalise GI and Health "Principles" document Influence – send / seek 	Sep
	strategies in place to reflect the 2009 Bucks CC GI Strategy, the 2016 Vision and Principles document and related updates.	meetings with BPG group; individual authorities.	Jul – Dec
Project level			
Liaise with developers and businesses: All new development should include enhanced GI – permeability through development for wildlife and habitats for target species.	 Agree project selection / priority criteria / targets based on i) the Principles document and ii) input from Districts, and iii) others. 	NEP PM – collate good practice suggestions (see below)	Sep onwards
Good practice			
Work with BTVLEP and aim to influence developers in their thinking prior to the pre-app stage	 Collate good practice and case studies Compile and present to BTVLEP particularly with a view to influence Enterprise Zone developments. 	 NEP PM – collate good practice and case studies NEP Task Group Provide, comment on and assist with finalising good practice; Seek to influence – work with the LEP (Longer-term: review how principles are being 	Sep onwards

iii) LOCAL PLANS

Local Plans done poorly, without due consideration of how green infrastructure can be protected and enhanced to provide a range of benefits, will lead to accelerated loss of wildlife and ecosystem services without compensation.

Done well, Local Plans can lead to development that is located where it has least environmental impact, can require genuine mitigation and compensation for all habitat and species losses, realising opportunities for the creation of wildlife-rich habitats, and the provision of a broad range of benefits for people, communities and the economy.

At a high level, we expect Local Plans to have due regard to the NEP's Standard Response to Local Plan consultations, which included a section on Green Infrastructure (Appendix 1) – and to explicitly state support for the NEP's Vision and Principles for GI in Buckinghamshire and Milton Keynes as set out in this document when planning locally.

In particular Local Plans should require all development to:

- Contribute to translating the future vision of GI in Buckinghamshire and Milton Keynes and the Principles for GI advocated by the NEP, to meaningful development and GI projects locally.
 Focusing on protecting, improving and providing GI in line with the Principles will turn the vision into reality and create a multi-functional GI network in Bucks and MK that improves economic, environmental and quality of life benefits.
- Seek opportunities to protect, enhance, extend, create and connect GI for all its benefits (including landscape-scale connectivity of habitats for biodiversity outcomes) including surrounding the site or area. This requires cooperation with broader policy objectives, and at a practical level, with neighbouring land-owners;
- Place emphasis on **adequate access** to high quality green recreation and productive space for community health and wellbeing (at least conforming to ANGSt standards at the strategic scale), and other services as outlined at principle 4, above).
- Ensure the size and location of GI is suitable for the function it is intended to fulfil.
- **Require GI management into the long-term**, to ensure that it develops in accordance with its stated intention. Mechanisms to achieve this must be outlined in development proposals.
- **Require the monitoring of GI improvement**, and remedial measures if not achieving satisfactory GI condition within stipulated timeframes.
- Allocate and develop **sufficient funding mechanisms** to improve the quality, location and functions provided by GI. This could include developer contributions, biodiversity offsetting, CIL payments.

This approach would require identifying (mapping) where current GI is, the functions it serves (to understand its potential importance), gaps in provision, and opportunities for how and where it should be improved.

For example, Para 10 in the <u>Wycombe District Council Green Networks and Infrastructure Background</u> <u>Paper, 2011</u> describes how Wycombe identifies a **Green Infrastructure Network** by identifying areas that provide two or more elements of multi-functionality based on underlying mapping of five key themes.

Strategic GI Infrastructure

The <u>Buckinghamshire Green Infrastructure Strategy 2009</u> sets out in map-form at a county-level, strategic green infrastructure assets that could feed into this process. Although the maps in the 2009 Strategy exclude Milton Keynes, they could be taken account of in translating the county-wide Vision for GI into reality at Local Authority level. See, for example:

- Figure 4.1: Overview of Green Infrastructure Resources in Buckinghamshire (page 56)
- Figure 4.2: Overview of Existing Countryside Access Routes of Strategic Significance in Buckinghamshire (page 60)
- Figure 4.3: Publicly Accessible Green Infrastructure in Buckinghamshire based on the ANGSt model (Page 64)
- Figure 4.4: Existing Biodiversity Resources: Designated Sites (page 66)
- Figure 4.5: **Biodiversity Opportunity Areas** in Buckinghamshire and the South East (page 68)
- Figure 4.8: Historic Landscape Opportunities in Buckinghamshire (page 74)

7 Key documents and information – include:

National

<u>Planning for a Healthy Environment – Good practice guidance for green infrastructure and biodiversity</u> (TCPA, The Wildlife Trusts, July 2012)

National Planning Policy Framework, 2012

County / regional

Buckinghamshire Green Infrastructure Strategy 2009 Buckinghamshire Green Infrastructure Strategy 2009 (Appendices) Buckinghamshire Green Infrastructure Delivery Plan 2013

Chilterns AONB Management Plan 2014-19: A Framework for Action

All London Green Grid River Colne and Crane Area Framework – which takes the landscape vision for London across into Bucks and other counties: the <u>Area Frameworks</u> provide a detailed assessment of the opportunities for green infrastructure delivery at the sub-regional level

Environment Agency River Basin Management Plans:

Thames:	https://www.gov.uk/government/publications/thames-river-basin-district-river-basin- management-plan
Anglian:	https://www.gov.uk/government/publications/anglian-river-basin-district-river-basin- management-plan

Authority-level

Aylesbury Vale Green Infrastructure Strategy 2011-2016

Milton Keynes Green Infrastructure Plan, 2008

Wycombe District Council Green Networks and Infrastructure Background Paper, 2011

Further details on biodiversity and planning across Buckinghamshire and Milton Keynes is provided in <u>Biodiversity and Planning in Buckinghamshire (revised 2014)</u>.⁹

⁹This was produced jointly by Buckinghamshire County Council, Milton Keynes Council, the Buckinghamshire and Milton Keynes Environmental Records Centre (BMERC), the Berks Bucks and Oxon Wildlife Trust (BBOWT) and Natural England.

8 Role of the NEP's Green Infrastructure and Health Group

The main roles of the NEP's Green Infrastructure and Health Group are to:

- Coordinate action to encourage provision / enhancement of GI in line with the agreed principles of the group set out in this document.
- Identify, share and encourage good practice
- Provide a coordinated, collective voice for the NEP on GI, the principles for its design and links to health and wellbeing – through producing a refreshed GI strategy, delivery plan and a long-term vision for GI in Buckinghamshire and Milton Keynes;
- Act as an **advisory group** on strategic GI provision and its links to health in Buckinghamshire and Milton Keynes

(Further details are included in the Groups Terms of Reference).

Appendix 1:

Standard Response to Local Plans of The Buckinghamshire and Milton Keynes Natural Environment Partnership

The Buckinghamshire and Milton Keynes Natural Environment Partnership (NEP) is grateful for the opportunity to comment on the proposed plan. We would like to offer some standard advice and information from the main strategies, policies and principles that need to be taken into account during assessment. An essential underlying goal of a Local Plan should be to support, manage and protect natural capital to allow it to provide the broadest spectrum of ecosystem services. In this way, the environment is an economic asset and driver of growth to the Buckinghamshire economy; and it contributes to physical health and mental wellbeing of our Buckinghamshire societies.

<u>The Tables in this Section act as check-lists for compliance.</u> They list the questions that need to be addressed and answered in order to assess whether the objectives of the NEP, as well as the requirements of the NPPF, are delivered through your Local Plan.

Contents

Tables – check lists for compliance:	Page
1) Landscape-scale biodiversity, protected sites and ecological networks	2
2) Green Infrastructure – connecting people and nature	12
3) Energy and Resources Management	17
4) The Environment and the Buckinghamshire Economy	19

1) LANDSCAPE-SCALE BIODIVERSITY, PROTECTED SITES AND ECOLOGICAL NETWORKS

Key documents

The main NEP-related document on biodiversity is: Buckinghamshire and Milton Keynes Biodiversity Action Plan "Forward to 2020"

Further details on biodiversity and planning across Buckinghamshire and Milton Keynes is provided in <u>Biodiversity and Planning in Buckinghamshire</u> (revised 2014). This was produced jointly by Buckinghamshire County Council, Milton Keynes Council, the Buckinghamshire and Milton Keynes Environmental Records Centre (BMERC), the Berks Bucks and Oxon Wildlife Trust (BBOWT) and Natural England.

These documents should be referenced in the Local Plan, aligned with, and included in any Bibliography of relevant documents.

Policy area and questions to check compliance	NPPF reference (where applicable)	(NPPG reference / other refs)
 <i>Landscape-scale understanding and planning</i> Our society and economy needs the land resource of Buckinghamshire to provide a diver production, space for recreation as well as our entire, commercial and public infrastructure. 	se range of utility,	including food
 Has the Plan collated sufficient ecological information in order to have adequately characterised the area under consideration and on which to base any further decisions? Does the Local Plan include a map(s) showing the location of the following types of designated sites and habitat? SACs SSSIs Local Wildlife Sites Biological Notification Sites Ancient woodlands Priority habitats Does the Plan recognise the need to integrate biodiversity into land management beyond protected sites and sites managed for wildlife? For example, does the Plan identify and map 	117, 118, 157, 158, 165, 166, 181, 192	Biodiversity, ecosystems and green infrastructure (Para 009; 21, 22) The NEP's BAP Biodiversity and Planning in

Policy area and questions to check compliance	NPPF reference (where applicable)	(NPPG reference / other refs)
wildlife corridors and stepping stones that connect the designated sites and habitats?	109, 117	Buckinghamshi
 Does the Plan protect and enhance valued landscapes and irreplaceable habitats? 	109, 110, 113, 118	re See also GI section below.
ii) <u>Achieving a net gain in biodiversity</u>		
To enable compliance with the NPPF, the Local Plan must be able to demonstrate that a net gai To achieve this, all developments must deliver a net gain in biodiversity where possible. In additional Plan to maximise biodiversity and ecosystems services benefits, provide net gains for biodiversity networks.	on, the NEP encou	rages the Local
What biodiversity will be lost as a result of the Local Plan and what will be gained?		
 Will the net gain (conserve / enhance) more than compensate for any loss? ¹⁰ 	7, 9, 109, 113, 114, 115, 117, 118, 119, 157	<u>Net gains in</u> <u>biodiversity</u>
 Does the Local Plan result in net gain to biodiversity, by expecting all developments where possible to deliver a net gain in biodiversity? 	110, 110, 107	
• Does the Local Plan include a means of assessing whether a net gain in biodiversity is proposed? (e.g. for Major and Minor applications, through the use of a Biodiversity Impact Assessment calculator - e.g. based on that described in the DEFRA Biodiversity Offsetting guidance, or a suitably amended version?		
 Does the Local Plan include a means of assessing whether a net gain in biodiversity has been achieved? For example - through using a Biodiversity Impact Calculator to monitor ecological works (e.g. habitat creation, and/or restoration)? 		
 Does the Policy text: include reference to the need to provide a net gain for biodiversity? 		

¹⁰ NERC Act 2006

Policy area and questions to check compliance	NPPF reference (where applicable)	(NPPG reference / other refs)
 include reference to the mitigation hierarchy? (avoidance, mitigation, compensation) <i>"if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused…"</i> allow for possible compensation for residual adverse impacts on other land? 	118, 152	<u>Para 018; Para</u> <u>020</u>
<i>iii) <u>Protected sites, priority habitats and protected and priority species</u> Districts in Buckinghamshire contain numerous areas of high ecological value, including those of ir</i>	iternational (SAC), r	national (SSSIs)
and local (Local Wildlife Sites and Biological Notification Sites) importance. In addition there a principal importance under the NERC Act 2006 (also known as priority habitats), which are high quartered with the second		
 Has the plan identified and presented policies on how it will protect, enhance and expand sites of international, national and local ecological importance? 	109, 113, 115, 117, 157, 166	
 Is there detailed, robust Policy text included to ensure appropriate protection for high quality habitats for biodiversity? (i.e. protected sites, irreplaceable habitats, priority habitats, protected species and priority species?) i.e.: 	7, 118	<u>Local Sites -</u> <u>Para 012</u>
SACs SSSIs Local Wildlife Sites Biological Notification Sites		<u>Biodiversity</u> <u>and Planning</u> <u>in</u> Buckinghamshi
Irreplaceable habitat Priority habitat (or habitat of principal importance under the NERC Act 2006) – including Ancient Woodland? Protected species	109,113,115,117, 157	<u>re</u>
Priority species (or species of principal importance under the NERC Act 2006)		<u>Priority</u> <u>Habitats</u>
 Is the Plan adequate in its protection of Local Wildlife Sites and Biological Notification Sites, which support locally and nationally threatened wildlife, and priority habitats and species? 		<u>The NEP's BAP</u>

NPPF reference (where applicable)	(NPPG reference / other refs)
109, 115, 117	Protected Species
109, 115, 117	Priority Species
117	
	(where applicable) 109, 115, 117 109, 115, 117 Dasis and are of a sole monitoring regime

v) Ecological networks

Based on a review of biodiversity in Buckinghamshire, the <u>Buckinghamshire and Milton Keynes Biodiversity Action Plan "Forward to 2020"</u> ("the NEP's BAP") identifies key principles and goals that planning decisions must take into account. The BAP's aim is to retain, protect, and, where possible, enhance biodiversity now and in the future – as our health and prosperity depend on looking after the environment. The NEP's BAP goal to restore and connect habitats across Buckinghamshire aligns with local aspirations and national targets – including the *Defra 2011 strategy Biodiversity 2020: A Strategy for England's wildlife and ecosystem services.*

For a sustainable economy, the Buckinghamshire land resource needs to be more ecologically robust on a landscape scale, and one that can provide the fullest spectrum of ecosystem services. These provide the needs of life, and underpin economic and social necessities – such as clean water, productive soil, pollination, flood defence, control of disease, clean air, etc.

Policy area and questions to check compliance	NPPF reference (where applicable)	(NPPG reference / other refs)
For biodiversity in Buckinghamshire to be supported sustainably, its needs must be meaningfully interport beyond protected sites and sites managed for wildlife. It is no longer sufficient to rely upon small, free wildlife-rich sites such as protected sites and nature reserves.		
 Does the Plan align with: The need to retain, restore, and, where possible, enhance priority habitats and biodiversity across Buckinghamshire in line with the objectives in the NEP's BAP? The priority habitat creation and restoration targets for Buckinghamshire and Milton Keynes from 2010-20 (pg 19 of the NEP's BAP)? Opportunities to protect, manage, and enhance the county's Biodiversity Opportunity Areas (the "BOAs", see below)? 	76, 77, 99, 109, 114, 117, 157, 165, 181	[Biodiversity, ecosystems and green infrastructure Para 017The NEP's BAP
 Does Local Plan include Policy requiring planning proposals to: include features to encourage biodiversity and priority habitats? identify and retain existing ecological networks? identify opportunities for new priority habitat creation? identify opportunities to retain, or enhance, ecological networks? identify cross-site boundary opportunities to retain or enhance ecological networks? recognise the importance of protecting the county's BOAs (see below) and Local Wildlife Sites? 	165 117, 165, 181	<u>The NEP's BAP</u> <u>Biodiversity,</u> <u>ecosystems</u> <u>and green</u> <u>infrastructure</u> Para 12

vi) Biodiversity Opportunity Areas

Biodiversity Opportunity Areas are key landscape-scale areas in Buckinghamshire and Milton Keynes for the restoration and creation of priority habitat. They are the most important areas for biodiversity in the County and represent a targeted landscape-scale approach to conserving biodiversity, and the basis for an ecological network.

Biodiversity Opportunity Areas are critical to the functioning of biodiversity in Buckinghamshire - and also to the many "ecosystem services" that are essential for human survival and well-being and which are derived from nature.

 Does the Plan include provision for enhancing the area's ecological network? By identifying and targeting action on Biodiversity Opportunity Areas (BOAs). 	21, 117,	109, 165	113,	Habitats of principal importance
 By identifying and targeting action on biodiversity opportunity Areas (boxs). By preparing Green Infrastructure strategies including the identification and enhancement of multi-functional green space in and around urban areas. (see GI section, below, for further details) 				under the <u>NERC</u> <u>Act 2006</u> <u>The NEP's BAP</u> <u>Biodiversity</u> and Planning
 Does the Plan include a map of Biodiversity Opportunity Areas in the Local Authority Area / District? 				in Buckinghamshi re
Given the importance of BOAs to biodiversity functioning in the County, and their high profile in the NPPF,Is there a specific Policy on BOAs?	21, 117,	109, 165	113,	The NEP's BAP
 Does this include requirements that: Where development is proposed within or adjacent to a BOA, is a biodiversity survey and a report required to identify both constraints and opportunities for biodiversity enhancement? Development that would prevent the aims of a BOA being achieved will not be permitted? Where there is potential for development in a BOA, the design and layout of the development, planning conditions or obligations would be used to secure biodiversity Enhancement to help achieve the aims of the BOA? 				<u>Biodiversity</u> and Planning in Buckinghamshi re

vii) Biodiversity in the built environment

About 20% of Buckinghamshire is classified as urban. Urban environments have a disproportionately important role in providing benefits for physical health and mental wellbeing. Open Mosaic Habitats, identified in the UK BAP as a Priority Habitat in 2007, can have a high biodiversity value, and are found mainly in urban and formerly industrial areas. Public land (road verges, school grounds, parks, cemeteries, etc.) and corporate estates all have the potential to provide for wildlife if managed sensitively.

Wildlife in urban areas can also have significant benefits to humans. For example, wildlife habitat can reduce:

- The urban-heat island effect (which is exacerbated by artificial surfaces as opposed to green space);
- Air pollution (by removing gaseous pollutants and particulates from vehicle exhausts);
- Flood risk by slowing run-off.

Wildlife also provides opportunities for the enjoyment of nature and open spaces, with physical health and mental wellbeing effects.

The NEP encourages actions that will maximise biodiversity and ecosystems services benefits.

 Does the Plan include policy on the incorporation of biodiversity in and around developments? 	109, 118, 125	Local Sites The NEP's BAP
 Are details provided (in the Plan or a separate design guide) on how this can be achieved? Does the Plan encourage actions to maximise biodiversity and ecosystem services benefits? (i.e. does the text emphasise that biodiversity in built developments is about creating a better environment for the benefit of people and the economy as well as wildlife?) 		<u>Biodiversity</u> and Planning in Buckinghamshi re
		Ecosystem services Para 013

viii) Strategic Development Sites

Strategic development sites may come forward in future stages of the Local Plan process. Prior to adoption, a full initial assessment of the ecological value of the sites should be undertaken. This would inform the allocation of the sites in the Local Plan, and help determine whether allocation of the site is appropriate in terms of biodiversity impacts.

- Is a full assessment undertaken of the ecological value of any strategic development site coming forward in future stages of the Local Plan, *prior to adoption of any site*?
 Does this assessment inform the allocation of sites in the Local plan and whether the site is appropriate in its biodiversity impacts? *ix*) <u>Protection and enhancement of river and stream corridors</u>
 - Does the Policy include content to ensure that, for proposals adjacent or close to watercourses:
 - Planning permission would only be granted for development proposals which would not have an adverse impact on the functions and setting of any watercourse and its associated corridor. (For example, watercourse bank "buffer" habitats should be retained and managed into the long-term to create a natural flood defence).
 - Planning permission would only be granted for proposals which do not involve the culverting of watercourses and which do not prejudice future opportunities for de-culverting.
 - Does the Policy conserve and enhance the biodiversity, landscape and recreational value of the watercourse and its corridor through good design?

x) Environmentally-sustainable development		
 Does the Local Plan include the following Policies? Mitigating and Adapting to Climate Change? Sustainable Construction Renewable energy (see Section below) Sustainable Flood Risk Management Sustainable Drainage Systems (SuDS) 	17, 93, 94, 95, 96, 97, 99, 100	<u>The NEP's BAP</u>
 Does the Local Plan include the following content of the suggested policies? <u>Mitigating and adapting to climate change Policy.</u> Distributing growth to the most sustainable locations as defined in the Plan? Development to reduce the need to travel and encourage sustainable travel options Designing developments to reduce carbon emissions and use resources more effectively, including water. Encouraging the creation of priority wildlife habitats (Habitats of Principle Importance under the NERC Act 2006) – such as wetland, species-rich permanent grassland and deciduous woodland – which can play an important role as a carbon stores and in 	17, 93, 94, 95, 96, 97, 99, 100	<u>The NEP's BAP</u>
 adapting to the impacts of climate change. Encouraging the restoration and creation of habitat in ecological networks – to reduce habitat fragmentation and allow species to move and adapt as their climate space changes. Encouraging measures to adapt to climate change – e.g. planting, use of green / brown roofs and green walls, sustainable drainage systems and flood risk management. Reducing the effects of development on the microclimate (through the provision of green infrastructure including open space and water, planting and green roofs) – see below for Green Infrastructure section. Promote the use of decentralised and renewable or low carbon energy where appropriate – see below for Energy and Resources Management section. Consider in detail adaptation through design approaches. 		

Sustainable construction - All residential development to incorporate sustainable design and construction technology, aiming towards zero carbon development through energy efficiency, carbon compliance and allowable solutions in line with Government policy.		
Renewable Energy: See Energy section, below, pg 13.		
Sustainable Flood Risk Management	94, 99, 100, 103.	
 Policy to safeguard floodplains (and floodplain habitats). Seek opportunities to create wetlands, wet grass- and woodlands and restore natural river flows and floodplains, increasing amenity and biodiversity value. Avoid building over or culverting of watercourses; encourage removal of existing culverts. 		
 <u>Sustainable Drainage Systems (SuDS)</u> Requirements for all development to use sustainable drainage systems (SuDS) for the management of surface-water runoff. Requirement to ensure SuDs are designed to maximise the opportunity to benefit biodiversity (e.g. green and brown roofs; plant wildflower rich grassland at detention basins and for reinforced permeable surface for car parks and drives). 		

.2 GREEN INFRASTRUCTURE

Local Plans should include policies on Green infrastructure and recognise that it is an important resource that needs to be planned for, protected and managed into the long term. Green Infrastructure provides benefits for the environment, the economy and society. Access to green space is vital to the health and wellbeing of our communities. The protection and enhancement of biodiversity assets on a landscape scale is dependent on robust networks of Green Infrastructure which facilitate movement and genetic exchange.

Key documents

A guide to strategic Green Infrastructure Priorities in Buckinghamshire (i.e. beyond, and not to be confused with other "green space" requirements that may be required at a local level to meet planning requirements of new housing developments) are set out in the following documents:

Milton Keynes Green Infrastructure Plan, 2008 Buckinghamshire Green Infrastructure Strategy 2009 Buckinghamshire Green Infrastructure Strategy 2009 (Appendices) Buckinghamshire Green Infrastructure Delivery Plan 2013

Some individual Buckinghamshire Districts also have their own GI strategies and / or delivery plans.

These documents should be referenced in the Local Plan, aligned with, and included in any Bibliography of relevant documents.

Questions	NPPF	NPPG reference /
	reference	other
i) Crean Infractivity and an articities		

i) Green Infrastructure opportunities

Green Infrastructure (GI) consists of links, hubs and features that have environmental, social and economic qualities associated with them. GI and the associated qualities are delivered through protecting, enhancing and installing GI.

The NEP endorses the definition of Green Infrastructure identified in the Green Infrastructure Strategy (2009), as was agreed by the Buckinghamshire Green Infrastructure Consortium, as follows:

"Green Infrastructure provides a vital life-support system, encompassing a network of green spaces, access routes, landscapes and natural and historic elements that intersperse and connect Buckinghamshire's urban and rural settlements with each other and the surrounding countryside. Operating at all spatial scales, it enables a holistic overview of the natural and historic environment,

Questions	NPPF	NPPG re	eference /
	reference	other	
acknowledging its multi-functional benefits for economy, wildlife and health and wellbeing of local μ	people and co	ommunitie	s".
The Buckinghamshire Green Infrastructure Delivery Plan also noted the NPPF (March 2012) definition (in "a network of multi-functional green space, urban and rural, which is capable of delivering a quality of life benefits for local communities".			
The Buckinghamshire GI Strategy identified three "Priority Action Areas" based on GI deficits compared access as a result of growth, as assessed for the 2009 Buckinghamshire GI Strategy. The Areas were protecting existing resources and in delivering new and enhanced GI opportunities, and may be updated to of the latest HEDNA.	e identified to	focus inv	estment in
The assessment of strategic-level Green Infrastructure provision, opportunity and deficiency in the Bubased on the "Accessible Natural Greenspace Standard" (ANGSt) developed by Natural England and the nationally-recognised approach and is consistent with that used in neighbouring counties, although conclusion need. The standard emphasises the importance of communities having easy access to different green space close to where they live.	e Forestry Co centrates on t	ommission the benefi	ts of GI for
At a strategic level, applying ANGSt to the County's database of GI opportunities established that, whilst areas such as the Chilterns, South Bucks and the Thames Valley are well provided for in terms of strategic level accessible Green Infrastructure, much of Aylesbury Vale is deficient of provision (based on the assessments of growth applied for the 2009 strategy – which have since changed, and in some areas drastically).			Aylesbury
The GI Strategy identified two Priority Action Areas around Aylesbury to provide for future growth cor District South and South Bucks – as a result of the range of GI assets being fragmented and under pres populations.			
 <u>Strategic planning of GI</u> Does the Local Plan define "Green Infrastructure" in a way that aligns with the Buckinghamshire Green Infrastructure Strategy and Delivery Plan definitions, and national GI policies? 		<u>Green</u> infrastru (Para 019	
 Does the Policy include the need to plan GI effectively at an early stage? New development in Buckinghamshire should deliver better opportunities for accessible strategic Green Infrastructure in the local proximity. This should be through the enhancement or protection of existing assets in the face of change or growth, and for future GI provision to complement and relive pressure on existing GI assets. 		Buckingh Green Infrastru Strategy	<u>amshire</u> cture

Questions	NPPF reference	NPPG reference / other
 Does the Plan recognise, and seek to positively work with, the range of GI initiatives already in operation across Buckinghamshire (for example, adding links to existing public rights of way). 		Buckinghamshire Green
Is there a map of GI included in the Plan to identify what is important?		Infrastructure Delivery Plan 2013
Importance of GI consideration in development and linking beyond site boundaries		<u>Buckinghamshire</u> <u>Green</u>
• Is there a Policy on Green Infrastructure in the Local Plan that recognises the need for development to address and contribute to GI?		Infrastructure Strategy 2009
• Does the Policy explore opportunities posed by new development to create, protect and enhance GI on, and surrounding, development sites?	114	<u>Buckinghamshire</u> <u>Green</u>
• Does the Policy give due consideration to linking and enhancing GI opportunities falling beyond development site boundaries?		Infrastructure Delivery Plan 2013
Alignment of provision of GI Strategy with County and District GI Strategies		Buckinghamshire
 Does the Plan provide for GI consistent with the principles and proposals of the Buckinghamshire GI Strategy (2009) and Delivery Plan (2013)? 		Green Infrastructure Strategy 2009
 Does the Policy, for the three Priority Action Areas where deficiencies of GI have been identified (or for approved, updated Priority Action Areas): Address deficiencies in green space via the provision of new or enhancement of existing, 		Buckinghamshire
 strategic accessible greenspace. Give priority to the conservation and enhancement of landscape character, biodiversity and historic environment. 		<u>Green</u> Infrastructure Delivery Plan 2013
Opportunities for GI for multiple benefits		Buckinghamshire
 Does the Policy explore opportunities for GI to contribute to, where possible: Countryside access "gateways" (key locations to act as Gateways to the wider GI network); "Access links" – existing or proposed new links to provide strategic movement corridors between main settlements and countryside access gateways; and 		<u>Green</u> Infrastructure Strategy 2009
 GI "Opportunity Zones" – where there are strategic opportunities, needs or demands to protect 		Buckinghamshire

Questions	NPPF	NPPG reference /
 and enhance existing assets and create new GI opportunities Does the Local Plan identify where target GI investment is most likely to deliver benefits? Does this take account of the Priority Action Areas identified in the Buckinghamshire Green Infrastructure Strategy (or for approved, updated Priority Action Areas) and specific project proposals identified in the Buckinghamshire GI Delivery Plan? 	reference	other Green Infrastructure Delivery Plan 2013
 <u>Target aims for the provision of green infrastructure</u> Does the policy set out the target aims for the provision of GI? E.g. part of the target aim should be for all new communities to have adequate accessible green space to meet the minimum ANGSt standards. Other possible targets could include benefits of GI for: air quality / microclimate climate change mitigation and adaptation; community and culture benefits; drainage and flood relief; water quality and supply; economic opportunities and benefits; education; habitats (type, connectivity) and biodiversity; health and wellbeing; recreation and leisure; travel and transport. 		Buckinghamshire Green Infrastructure Strategy 2009
 <u>GI as a means to provide access to green space</u> Does the Local Plan provide for adequate access to green space, essential for community health and wellbeing? Does the Plan set out how this is robustly assessed? Does the Local Plan identify where Green Infrastructure provision is deficient and needs to be 		<u>Buckinghamshire</u> <u>Green</u> <u>Infrastructure</u> <u>Strategy 2009</u>

Questions	NPPF reference	NPPG reference / other
addressed, based on the needs for access to natural green space of growth communities?		
Green Infrastructure for conservation, biodiversity and habitat (including connectivity) purposes		
 Does the Policy ensure that Green Infrastructure contributes positively to the conservation, restoration, re-creation and enhancement of networks of biodiversity on a landscape scale? 		
 Does this include, in GI provision, ecological corridors to ensure habitat connectivity, including considering the surrounding context of a site or area? 		<u>Buckinghamshire</u> <u>Green</u>
• Does the Policy ensure that the size and location of GI is suitable for the function it is intended to fulfil? (For example, for habitats and biodiversity, where required, GI should ensure permeability for wildlife through development and provide sufficient beneficial habitat to support target species, independent of its connective function).		Infrastructure Strategy 2009
Delivery of GI and ongoing monitoring		
 Does the Policy include an informed approach to delivery of GI in new development processes? For example, by requiring developers to: 		
 Assess GI on and around a site, both quantitatively and qualitatively and looking at their functional importance. 		
ii. Ensure that development proposals protect important existing GI and its functionality (including giving it appropriate buffers and buffer edge treatment)		
 iii. Design in new GI which complements existing GI. iv. Where possible, design new green infrastructure to take multifunctional GI approach (e.g. SuDS providing wildlife and landscaping or roofs being green for SuDS, insulation and wildlife benefits) v. Secure the provision of long term maintenance of GI - linked to planning approval. 		
• Does the Policy include provision to monitor the aims of GI to ensure it develops in accordance with its stated intentions? For example, if not achieving satisfactory habitat creation, are mechanisms to achieve this must be outlined in development proposals?		

3) ENERGY RESOURCE MANAGEMENT

Key documents

In 2015, the Buckinghamshire and Milton Keynes Natural Environment Partnership published an Energy Strategy for Buckinghamshire and an associated first 5-year Action Plan ("Action Plan One") aiming to deliver social, economic and environmental benefits.

Buckinghamshire Energy Strategy (2015) Buckinghamshire Energy Strategy - Action Plan One (2015)

Milton Keynes has a long-term strategy set out in its Roadmap to 2050 available here.

These documents should be referenced in the Local Plan, aligned with, and included in any Bibliography of relevant documents.

Questions	NPPF	NPPG reference /			
	reference	other			
Policies required in the Local Plan To comply with the NPPF, the NEP recommends content in the Local Plan as follows, either as new policies or within the existing policy structure.					
 In line with the NEP's Energy Strategy and Action Plan One (2015), does the Local Plan recognise the need to: Increase the amount of energy generated in Buckinghamshire, including through community projects; and encouraging or requiring the inclusion of solar panels in both residential and commercial developments. Improve energy efficiency across the county, particularly by addressing buildings in four sectors: residential, public sector, business and communities - creating a thriving network of community groups with the capacity, scale and influence to deliver significant benefits from energy generation schemes. Increase the demand for energy-related goods and services, with local businesses able to meet the demand. 	93, 94, 95, 96, 97	Buckinghamshire Energy Strategy (2015) Buckinghamshire Energy Strategy - Action Plan One (2015)			

Questions	NPPF reference	NPPG reference / other
i) <u>Renewable energy</u>		
 Does the Policy promote renewable energy, where appropriate, in new and existing developments? 	93, 97	
Does the Policy support renewable and low carbon energy provision wherever any adverse impacts can be addressed satisfactorily? (The potential local environmental, economic and community benefits of renewable energy schemes will be a material consideration in determining planning applications).	93, 98	
 Does the Plan encourage applications involving renewable energy development, provided that there is no unacceptable adverse impact, including cumulative impact, on the following issues, which are considered to be of particular local significance: Landscape and biodiversity including designations, protected habitats and species, and Biodiversity Opportunity Areas; Visual impacts on local landscapes; Openness of the Green Belt; The historic environment, including designated and non-designated assets and their settings; Aviation activities; Highways and access issues, and; Residential amenity. 		

4) THE ENVIRONMENT AND THE BUCKINGHAMSHIRE ECONOMY

The NEP recognises the importance of the environment and the benefits and services it provides to the Buckinghamshire economy. Our society and economy need the land resource of Buckinghamshire to provide a diverse range of utility, including food production space for recreation and private, commercial and public infrastructure.

A sustainable Buckinghamshire economy will require our land resource to be more ecologically robust on a landscape-scale and be one which can provide the fullest spectrum of ecosystem services, which provide the needs of life and economic necessities such as pollination, flood defence, control of diseases and productive soil.

Key documents

The Local Enterprise Partnerships across Buckinghamshire and Milton Keynes have produced the following key documents regarding the relationship between the Buckinghamshire environment and economic growth:

- The <u>Buckinghamshire Thames Valley LEP's Strategic Economic Plan</u> recognises that "an outstanding natural environment" is one of the strengths of the Buckinghamshire economy, and that there are a number of environmental risks linked to business growth and infrastructure issues.
- The South East Midlands Local Enterprise Partnership ("SEMLEP") publication, <u>It's the economy, naturally</u> identifies the relationship between the environment and the economy in the South East Midlands. SEMLEP's Strategic Economic Plan (available <u>here</u>) aims to deliver jobs and homes growth through planned targeted interventions that have been rigorously appraised and prioritised using Treasury Green Book criteria.

These documents should be referenced in the Local Plan and included in any Bibliography of relevant documents.

Appendix 2 – Measures to enhance biodiversity in built environments

Houses and Gardens:

Gardens: Fruit trees in each back garden; Wildflower turf making up part of lawn in each garden; Log piles; plants in front garden where possible.

Hedgerows making up at least one boundary; Garden walls with overwintering shelter for insects

Green roofs on garages and public buildings

Green walls

Built in bird boxes including swift bricks, swallow and house martin and garden birds.

Built in bat boxes, bricks and lofts – suitable for crevice dwellers and roof void dwellers.

Street network and small green spaces:

Street trees - tree lined streets; woodland copses.

Wildflower rich road verges and green corners etc. with loggeries, hibernacula, bug hotels;

Less frequency mowing regime in pollinator season

Climbing plants on fences and walls

Any shrubs chosen to maximise: berries for winter bird food; flowers for pollen and nectar.

SuDS schemes including biodiversity

Green Spaces:

Wildflower meadows with scattered scrub

Wildflower edging / shrubs around sports pitches, play equipment, kick-about areas.

Hedgerows and buffers: management for wildlife

Long grass / bare ground / rockeries / hibernacula for reptiles

Clean-water wetlands / ponds / ditches with surrounding wildlife grass habitat for amphibians – can be part of SuDS and independent of SuDS.

Woodland

Network of green and blue corridors without lighting

Allotments