Buckinghamshire Green Infrastructure Strategy



April 2009



The Buckinghamshire Green Infrastructure Consortium is a multi-agency forum established to promote the need to plan for and invest in Green Infrastructure at both a strategic and local level.

The partnership consists of the following members:

- Aylesbury Vale Advantage
- Aylesbury Vale District Council
- Berkshire, Buckinghamshire, and Oxon Wildlife Trust
- British Waterways
- Buckinghamshire County Council
- Buckinghamshire Rural Affairs Group
- Campaign to Protect Rural England (Buckinghamshire)
- Chiltern District Council
- Chiltern Society
- Chilterns Conservation Board
- City of London
- English Heritage
- Environment Agency
- Farming and Wildlife Advisory Group
- Forestry Commission
- Milton Keynes Council
- National Trust
- Natural England
- South Bucks District Council
- Sustrans
- Wycombe District Council















































Foreword



Green Infrastructure is a planned network of multi-functional greenspaces and interconnecting links that contribute to high-quality natural and built environments. Helping to provide sustainable 'green access' to the countryside, such networks can help areas to adapt to climate change by reducing flood risk and overheating, and they promote access to open space, nature, culture, heritage and sport, thereby improving the quality of life for all.

In 2003, the Office of the Deputy Prime Minister's Sustainable Communities Plan identified that the supply of new homes had failed to keep pace with demand and described the Government's aim to take radical action to increase housing provision by speeding-up supply, reforming planning processes and raising standards in high-demand areas. Alongside the need for growth, the Government identifies Green Infrastructure as facilitating the delivery of multiple objectives because it can frame and shape the growth of sustainable communities and strengthen their image. In short, it helps define people's quality of life and liveability and underpins the quality, character and distinctiveness of new neighbourhoods.

The Buckinghamshire Green Infrastructure Consortium was established in 2007, providing the County with a lead body for strategic Green Infrastructure planning and delivery.

Consisting of a multi-agency forum, the Consortium comprises key local authorities, non-government agencies, and countryside and community related organisations. It promotes the need to protect, plan for and invest in Green Infrastructure at strategic and local scales. The Consortium focuses its attention on both current and future provision and seeks to ensure that development has a minimum impact on existing green assets and also delivers well designed, well proportioned, well managed, and well resourced 'green growth' which meets the needs of both people and wildlife.

It is the Green Infrastructure Consortium's pleasure to present this Green Infrastructure Strategy. Developed over a three-year period, it is based on Green Infrastructure analysis, and consultation with professionals in Green Infrastructure management. It examines strategic Green Infrastructure assets across the board, incorporating accessible greenspace, biodiversity, heritage, access routes and landscapes on an equal basis and integrating these themes to provide plans for a multi-functional accessible green network. Coordinating with plans and strategies of surrounding authorities, it sets out to ensure a clear vision and direction for Green Infrastructure in Buckinghamshire identifying strategic level opportunities and constraints and establishes priorities for delivery. The Strategy follows a year period of endorsement as a draft version.

The Green Infrastructure Consortium recognise that Green Infrastructure planning is a 'live issue' that needs to keep abreast with change and thus the Strategy will be subject to a process of review and development at five-year intervals. In addition the Strategy is backed by a three-year Action Plan that identifies a range of strategic level projects for partnership support and delivery. To ensure the Action Plan remains updated it will be reviewed annually.

The Buckinghamshire Green Infrastructure Strategy provides a key reference for professionals with an interest in Green Infrastructure management and planning in Buckinghamshire. It provides a strategic level approach to Green Infrastructure that will link, guide and underpin the production of local Green Infrastructure Plans, Greenspace Strategies, and green space that may be required of housing development through local planning policy. Along with a suite of other key documents it will act as part of the evidence base required for planning decisions, for the preparation of the Local Delivery Frameworks, and for the delivery of green growth.

Buckinghamshire Green Infrastructure Consortium 2009

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- Aylesbury Vale Advantage
- Aylesbury Vale District Council
- Berkshire, Buckinghamshire, and Oxon Wildlife Trust
- British Waterways
- Buckinghamshire County Council
- Buckinghamshire Rural Affairs Group
- Campaign to Protect Rural England (Buckinghamshire)
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- English Heritage
- Environment Agency
- Farming and Wildlife Advisory Group
- Forestry Commission
- Milton Keynes Council
- National Trust
- Natural England
- South Bucks District Council
- Sustrans
- Wycombe District Council



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Contents

Executive Summary	1
 Introduction 	1
What is Green Infrastructure?	2
A Definition for Buckinghamshire	2
Why produce a Strategy?	2
Strategic Aims and Requirements for Delivery	3
 Analysing Green Infrastructure Assets using ANGSt 	4
Green Infrastructure in Buckinghamshire: Deficiencies	5
 Green Infrastructure in Buckinghamshire: Opportunities 	6
Priority Action Areas	6
 Action Area Components of Delivery 	6
 Addressing Issues and Delivering Priorities 	7
 Delivery through a 'Live' Action Plan 	7
Summary of Key Recommendations	8
Chapter 1 Introduction	9
Background	9
Purpose of the Strategy	9
The Green Infrastructure Consortium – A Partnership Approach	10
Need for the Strategy	11
What is Green Infrastructure?	12
 A Green Infrastructure definition for Buckinghamshire 	13
 A Vision for Green Infrastructure in Buckinghamshire 	13
Green Infrastructure Functions	15
The Benefits of Green Infrastructure	17
 Economic contribution/encouragement and employment benefits 	17
 Environmental benefits 	17
Climate Change	18
 Physical and psychological health benefits 	18
Social inclusion and equality	18
The Strategy Preparation Process	18
Aims for Green Infrastructure in Buckinghamshire	20
Delivering quality Green Infrastructure in Buckinghamshire	21
A Sustainable Approach to Green Infrastructure	23
Chapter 2 Policy Context	25
National Policy Context	25
Regional Policy Context	28
Draft South East Plan	28
South East Regional Economic Strategy	31
Sub-Regional Policy Context	32
Milton Keynes and Aylesbury Vale Sub-Region	32
Western Corridor and Blackwater Valley Sub-Region	32
Central Oxfordshire Sub-Region	32
Luton/Dunstable/Houghton Regis and Leighton-Linslade Growth	32
Sub-Regional Green Infrastructure Planning	33

 Chilterns AONB Management Plan: The Framework for Action 2002-2007 	33
The Bedfordshire and Luton Strategic Green Infrastructure Plan	33
The Luton and South Bedfordshire Green Space Strategy	33
Strategic Green Infrastructure Framework Study for Northamptonshire	33
Milton Keynes Green Infrastructure Plan (2008)	35
The Buckinghamshire Policy Context	35
Local Development Frameworks	35
Buckinghamshire Community Strategy 2005-2008	35
Buckinghamshire & Milton Keynes Biodiversity Action Plan 2000 –2010	36
Buckinghamshire and Milton Keynes Rural Strategy 2008-2012	36
Buckinghamshire Rights of Way Improvement Plan (ROWIP)	37
Buckinghamshire Local Transport Plan 2006-2011	37
Buckinghamshire Cultural Strategy 2003-2008	38
-	38
Buckinghamshire Infrastructure Study Buckinghamshire County Council Minerals and Wests Lead	30
Buckinghamshire County Council Minerals and Waste Local Parallel mesont France and	20
Development Framework	38
District and Local Green Infrastructure Plans	38
Buckinghamshire Walking Strategy	38
Buckinghamshire County Council Sustainability Strategy	39
Chapter 3 Case Studies	41
The Forest of Marston Vale – Delivering Green Infrastructure in a Growth Area	42
Milton Keynes Parks Trust – A 'Trust' approach to Green Infrastructure Delivery	44
Northamptonshire County Council: Pocket Parks Scheme	46
River Nene Regional Park – Salcey Forest River Nene Regional Park	48
The City of London: Protecting fragile landscapes in South Bucks: Stoke Common	
Chapter 4 Analysis of Green Infrastructure Resources	53
Overview of Resources	53
Methodology	55 55
ANGSt based assessment of Green Infrastructure	55 57
Issues with assessing Green Infrastructure provision Assessible Green Infrastructure and Country side Assess Boutes	57
Accessible Green Infrastructure and Countryside Access Routes Accessible Green Infrastructure and Countryside Access Routes	58
Strategic Audit of Existing Accessible Green Infrastructure	59
Strategic Audit of Existing Countryside Access Routes	59
Strategic Assessment of Accessible Green Infrastructure provision	0.4
and Access Route Network Linkages	61
Need for Enhanced Provision	63
• Summary	65
Environmental Context and Strategic Opportunities	65
Biodiversity and the Natural Environment	65
Existing Biodiversity Resources	67
Strategic Biodiversity Opportunity Mapping	67
• Summary	70
The Historic Environment	70
Existing Historic Environment	70
Historic Landscape Characterisation (HLC)	73
Strategic Historic Environment Opportunities	76
 Summary 	76

Distinctive, High Quality and Diverse Landscapes	77
Existing Landscape Character	77
Strategic Landscape Opportunities	79
 Buckinghamshire Strategic Environmental Character System (BECS) 	80
Buckinghamshire Habitat Mapping Project	80
A Strategic Green Infrastructure Network for Buckinghamshire	82
Chapter 5 Discussion and Recommended Strategic Framework	85
Discussion	85
The Strategic Approach	85
Green Infrastructure Initiatives of Sub-Regional Significance	85
Chilterns AONB	86
North West London Green Arc	86
Colne Valley Regional Park	86
Thames River Corridor	86
Greensand Ridge	87
Grand Union Canal Environmental Enhancement & Restoration	87
Bernwood Royal Forest Project	87
Whaddon Chase Initiative	87
Priority Action Areas for Green Infrastructure Investment	87
Countryside Access Gateways	89
Access links One on lating the attractive Connective its Zanas	89
Green Infrastructure Opportunity Zones Priority Action Area 1: North Avischum Vole	89
Priority Action Area 1: North Aylesbury Vale ■ Overview of the Action Area	91 91
	91
 Strategic Issues in North Aylesbury Vale Strategic Opportunities 	93
Countryside Access Gateways	93
Access Links	95
Green Infrastructure Opportunity Zones	95
Green Infrastructure Project Proposals	96
Priority Action Area 2: Aylesbury Environs	98
Overview of the Action Area	98
Strategic Issues	99
Strategic Opportunities	100
Countryside Access Gateways	101
Access Links	103
Green Infrastructure Opportunity Zones	103
Current Green Infrastructure Project Proposals	106
Priority Action Area 3: Wycombe District South and South Bucks	107
Overview of the Action Area	107
Strategic Issues	109
Strategic Opportunities	109
Countryside Access Gateways	111
Access Links	111
Green Infrastructure Opportunity Zones	112
Green Infrastructure Project Proposals	115

Cha	pter 6 Funding and Delivery	117
•	Establishing Green Infrastructure Partnerships	117
•	Action Plan	118
•	Funding Mechanisms and Sources for Project Delivery	118
•	Prioritising Green Infrastructure Projects for Delivery and Funding	122
•	Developing Local Level/Community Green Infrastructure Plans	123
•	Community Green Infrastructure Planning in Buckinghamshire (Living Networks)	123
•	District Level Green Infrastructure Planning	124
•	Implementing the Buckinghamshire Green Infrastructure Strategy	124
Tab	les	
1.	Percent of households that meet ANGSt requirements in Buckinghamshire	5
1.1	A Vision for Green Infrastructure in Buckinghamshire	14
1.2	Green Infrastructure Functions	15
2.1	Policy CC8: Green Infrastructure	29
2.2	Policies relating to Green Infrastructure from the Draft South East Plan	29
4.1	Percentage of households that meet the ANGSt requirements	
	in Buckinghamshire	62
4.2	Areas of Biodiversity Opportunity	69
4.3	Potential correlations between Historic Themes and Green Infrastructure	
- 1	functions	75
5.1	Existing Strategic assets contributing to Green Infrastructure	00
F 2	in Priority Action Area 1	92
5.2	Existing Strategic assets contributing to Green Infrastructure	98
5.3	in Priority Action Area 2 Existing Strategic assets contributing to Green Infrastructure	90
5.5	in Priority Action Area 3	107
Figu		
1.1	The development process leading to the Process of the Buckinghamshire	
- 4	Green Infrastructure Strategy	20
2.1	How Green Infrastructure feeds into the Statutory Planning System	27
2.2	The Sub-Regional Growth Areas	34
4.1	Overview of Green Infrastructure Resources in Buckinghamshire	56
4.2	Overview of Existing Countryside Access Routes of Strategic Significance	60
4.3	in Buckinghamshire Publicly Accessible Green Infrastructure in Buckinghamshire based on the	60
4.3	ANGSt model	64
4.4	Existing Biodiversity Resources – Designated Sites	66
4.5	Areas of Opportunity for Biodiversity in Buckinghamshire	68
4.6	Historic Landscape Types in Buckinghamshire	71
4.7	Historic Landscape Zones in Buckinghamshire	72
4.8	Historic Landscape Opportunity Areas in Buckinghamshire	74
4.9	Buckinghamshire Landscape Character Zones	78
4.10	Buckinghamshire Environmental Character System	81
4.11	Multifunctional Strategic Green Infrastructure Network for Buckinghamshire	83
5.1	Green Infrastructure Initiatives of Sub-Regional Importance	88
5.2	Green Infrastructure Priority Action Areas	90

5.3	Priority Action Area 1: North Aylesbury Vale	94
5.4	Priority Action Area 2: Aylesbury Environs	102
5.5	Priority Action Area 3: Wycombe District South and South Bucks	110
5.6	Multifunctional Strategic Green Infrastructure Network for Buckinghamshire	
	with Priority Action Areas	114
	pendices	125
Αŗ	ppendix A:	
	Terms of Reference for the Buckinghamshire Green Infrastructure Consortium	127
Αŗ	ppendix B:	
	Detailed Plan Preparation Process of the Buckinghamshire Green Infrastructure	
	Strategy	130
Αŗ	ppendix C:	400
_	Buckinghamshire Strategic Green Infrastructure Plan Project Brief	132
Αŗ	ppendix D:	
_	Sources of Information	141
Αŗ	ppendix E:	
_	Accessible Greenspaces and Countryside Access Routes	144
Αŗ	ppendix F:	
	Topic Paper B: Biodiversity and the Natural Environment – Strategic Opportunities	
_	Analysis	156
Αŗ	ppendix G:	
_	Topic Paper C: Historic Environment – Strategic Opportunities Analysis	181
Αŗ	ppendix H:	
	Landscape – Strategic Opportunities Analysis	232
Αŗ	ppendix I:	
	Action Plans	236

Executive Summary



Introduction

The Buckinghamshire Green Infrastructure Consortium (GIC) was established in 2007, providing the County with a lead body for strategic Green Infrastructure planning and delivery. Consisting of a multi-agency forum, the Consortium comprises key local authorities, non government agencies, and countryside and community related organisations. It promotes the need to protect, plan for and invest in Green Infrastructure at strategic and local scales. The Consortium focuses its attention on both current and future provision and seeks to ensure that development has a minimum impact on existing resources and delivers well designed, well proportioned, well managed, and well resourced 'green growth' which meets the needs of both people and wildlife.

This Strategy is a key Consortium publication and is based on several stages of professional analysis and consultation over a three year period. Key to the document's development has been a technical study of Buckinghamshire's Green Infrastructure, completed by Chris Blandford Associates in 2006,¹ and their subsequent technical report,² completed in 2007. This Strategy follows a draft version from April 2008.

¹CBA, (2006) Towards A Vision for Green Infrastructure in Buckinghamshire: A Prospectus

²CBA (2007) Towards a Strategic Framework for Green Infrastructure in Buckinghamshire: Technical Report

What is Green Infrastructure?

Green Infrastructure is a planned network of multifunctional greenspaces and interconnecting links designed, developed and managed to meet the environmental, social and economic needs of communities. It is set within and contributes to a high quality natural and built environment and is required to enhance the quality of life for both present and future residents and visitors. To be successful Green Infrastructure networks need to incorporate a strategic approach to enhancing wildlife networks and sustaining and improving biodiversity in urban and rural areas, in the face of climate change and development.

Green Infrastructure is now recognised for its wide range of functions and benefits. Not least is its ability to:

- provide opportunities for recreation and enjoyment
- provide important linkages, networks and gateways
- help preserve heritage and culture
- support and enhance habitat and biodiversity
- support economics, food production and green produce
- address both local and national issues relating to sustainable flood risk water management and impacts of climatic change.

A Definition of Green Infrastructure

The following definition has been endorsed by the Buckinghamshire GIC and forms the basis of Green Infrastructure analysis, planning and delivery in the County:

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, acknowledging its multi-functional benefits for economy, wildlife and health and well being of local people and communities.

Why Produce a Strategy?

In 2003, the Sustainable Communities Plan announced the need for a 'step change' in the delivery of housing growth development in England, with a particular emphasis on delivery in London and the wider South East. As part of the Government's requirements, Milton Keynes and the South Midlands (MKSM) has been identified as a key area for growth. The MKSM Sub-Regional Growth Strategy recommends the supply of 44,900 new homes and associated infrastructure within the sub-region by 2026. Whilst growth in Buckinghamshire is focused on delivery around Aylesbury, the County's Green Infrastructure resources will continue to be put under additional increasing pressure from development and growth in areas such as Bicester, Milton Keynes, Dunstable, Luton and Leighton-Linslade.

The planning system identifies Green Infrastructure as facilitating the delivery of multiple objectives because it can frame and shape the growth of sustainable communities and strengthen their image. In short, it helps define people's quality of life and liveability and underpins the quality, character and distinctiveness of new neighbourhoods. Forming an integral part of the planning system it is well defined and adopted in policies at national and regional level.

Clearly it is an important resource that needs to be protected, planned, managed in the long term that is supported through a partnership-derived strategic framework. This Strategy provides that framework - and agrees a twenty-year vision for establishing a strategic Green Infrastructure network. As a response to growth it identifies priorities for Green Infrastructure investment linked to the enhancement of current provision and to the creation of new opportunities.

In order to meet Buckinghamshire's requirements for accessible strategic Green Infrastructure this Strategy:

- provides a vision for strategic Green Infrastructure in Buckinghamshire
- identifies issues for existing Green Infrastructure posed by housing allocations and other policies set out in the South East Plan
- establishes the extent of existing Green Infrastructure provision and assets
- establishes measures to enhance and protect existing Green Infrastructure in the County
- identifies areas that have the potential for delivering new accessible Green Infrastructure provision
- describes potential funding opportunities
- encourages a partnership approach to Green Infrastructure planning
- provides a plan for the ongoing long-term management and maintenance of Green Infrastructure assets
- provides a Strategic multi-functional Green Infrastructure Network map for Buckinghamshire

Strategy Aims and Requirements for Delivery

This Strategy sets out to provide a clear vision and direction for Green Infrastructure in Buckinghamshire. It aims to ensure that pressure on our important natural and historic Green Infrastructure assets are minimised, and that opportunities to enhance these assets for the benefits of people and biodiversity are maximised.

In the context of sub-regional growth, a key requirement of the Strategy is to inform 'Local Development Frameworks'. Thus the document will form part of the suite of policy documents of value to both planners and developers, informing planning and development decisions.

The Strategy aims to guide strategic Green Infrastructure priorities and is 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. Policies recognise the need for development to address and contribute to Green Infrastructure and this approach requires both planners and developers to give due consideration to linking and enhancing Green Infrastructure opportunities falling beyond development site boundaries.

Analysing Green Infrastructure Assets using ANGSt

It is essential that documents which are intended to play a role in informing and guiding planning processes are robust in their methods of analysis. This Strategy uses spatial representations of the County's Green Infrastructure assets based on information derived from Buckinghamshire County Council's Geographical Information System database and consultation with professionals in Green Infrastructure management. Assets have been examined across the board, incorporating accessible greenspace, biodiversity, heritage, access routes and landscapes on an equal basis and integrating these themes in order to assess and identify areas of provision, opportunity and deficiency.

The overall approach used in the identification, analysis and interpretation of Green Infrastructure in this Strategy conforms to a nationally recognised approach and is consistent with that used in neighbouring counties. The assessment of Green Infrastructure provision, opportunity and deficiency in this Strategy is based upon the Accessible Natural Greenspace Standard (ANGSt) by Natural England and the Forestry Commission and supported by the national planning system.³

ANGSt is considered a national benchmark, accepted as:

- forming part of planning guidance on strategic green space provision (PPG17)
- having the 'best fit' to Green Infrastructure planning and assessment
- being important for assessing levels and assisting in the production of standards and targets

The standard emphasises the importance of communities having easy access to different sizes of natural and semi-natural green spaces close to where they live and provides two measures of analysis based on scale (the size of green space provision) and catchment (representing the zone of influence provided by a provision and the distance that people are prepared to travel to it).

The ANGSt model states:

• No person should live more that 300 m from their nearest area of natural greenspace of at least 2 ha in size ('Neighbourhood Scale' provision). Further, there should be at least 2 ha of accessible natural greenspace for every 1000 population

³McKernan and Grose, 2007: 'An analysis of accessible natural greenspace provision in the South East. Forestry Commission and High Weald AONB Unit

- There should be at least one accessible 'District, scale' provision of 20 ha site within 2 km of home
- There should be one accessible 100 ha site within 5 km of home
- There should be one accessible 'Sub-Regional' scale provision of 500 ha site within 10 kilometres of home

Green Infrastructure in Buckinghamshire: Deficiencies

Applying ANGSt to the County's database of Green Infrastructure opportunities identifies a broad range of issues and opportunities. At a strategic level it establishes 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, on the other hand, deficient of provision (Table 1).

Table 1 Percent of households that meet ANGSt requirements in Buckinghamshire

		% of households meeting requirement						
District area	No. of dwellings	Within 300m of 2ha+ site	Within 2km of 20ha+ site	Within 5km of 100 ha+ site	Within 10km of 500ha+ site	Meeting all ANGSt requirements	Meeting none of the ANGSt requirements	Served only by linear greenspaces
Aylesbury Vale	68,248	7	16	27	15	1	69	32
Chiltern	37,514	16	59	70	33	2	0	0
South Bucks	26,727	24	86	100	46	7	0	0
Wycombe	66,689	28	89	96	0	0	2	1
Total County	199,178	18	58	68	18	2	24	11

Forming approximately 50 per cent of the County, Aylesbury Vale is considered of particular importance in relation to this Strategy's priorities for Green Infrastructure development and enhancement. Due to the combination of Green Infrastructure deficits in the Vale, and also increased demands that may impact on this area as a result of development growth proposed around Aylesbury and from outside of the County (Bicester, Milton Keynes, Leighton-Linslade), this strategy identifies the need for two Action Areas (see Addressing Issues and Delivering Priorities section) to focus investment in protecting existing resources and delivering new and enhanced Green Infrastructure opportunities.

For this study, settlements with a population over 3000 (based on 2001 census figures) are considered. This threshold is used as it is considered to encompass all the main settlements in Buckinghamshire (i.e. market towns and larger villages) where demand for access to green space is of greatest significance in a countywide context (Appendix E).

A detailed assessment of provision establishes that only five of the 19 settlements considered in this study meet the minimum ANGSt requirements for provision of larger accessible natural greenspaces of over 100ha:

Aston Clinton,
 Buckingham,
 Wendover,
 Amersham,
 Chesham

The County also fails to have its 'own' 500ha 'strategic facility' – with communities in Buckinghamshire reliant on visiting assets provided across the County's boundaries, particularly the Salcey and Whittlewood Forest complex in Northamptonshire and the Ashridge Estate spanning from Hertfordshire into Buckinghamshire across the Chiltern Hills. Achieving a 500 ha sized provision is a difficult ambition for any area in the South East however this assessment establishes that Buckinghamshire does possess large existing assets that, through the extension to existing boundaries or by improving site linkages (for example the 325ha site of Wendover Woods near Aylesbury), the development of a 500ha resource is achievable.

Green Infrastructure in Buckinghamshire: Opportunities

By modelling proposed development growth over the next twenty years this Strategy identifies the need to enhance current assets to better provide new accessible natural greenspace in appropriate locations to meet the needs of growth communities within and around the County over the next 20 years. This enhanced level of provision would need to be supported by improvements to the public Rights of Way network in line with the Buckinghamshire Rights of Way Improvement Plan.⁴

Priority Action Areas

In order to prioritise attention to Green Infrastructure delivery within the County this Strategy establishes a requirement for 'Green Infrastructure Priority Action Areas'. These identify locations where targeting investment is most likely to deliver multiple benefits across a range of key environmental, social and economic policy areas and where current deficiencies in Green Infrastructure provision needs to be addressed.

Action Area Components of Delivery

Opportunity analysis of Green Infrastructure has identified the following components within each Priority Action Area:

 Countryside Access Gateways - key locations that are best placed to act as Gateways to the wider Green Infrastructure network

⁴Buckinghamshire Rights of Way Improvement Plan (2008-2018) Buckinghamshire County Council

- Access Links existing or proposed new links providing strategic movement corridors between main settlements and Countryside Access Gateways
- Green Infrastructure Opportunity Zones land where there are strategic opportunities, needs or demands to protect and enhance existing assets and create new Green Infrastructure opportunities

Addressing Issues and Delivering Priorities

In response to this research, three Action Areas in Buckinghamshire have been identified:

Priority Action Area 1 – North Aylesbury Vale

This covers the northern part of Aylesbury Vale where deficiency in accessible Green Infrastructure is most prominent and aims to provide for the needs of communities on the west side of Milton Keynes, Leighton-Linslade, Buckingham and Winslow and to help buffer the associated pressures of growth from outside the County.

Priority Action Area 2 – Aylesbury Environs

Action Area 2 considers the urban and peri-urban area of Aylesbury. It also takes into consideration the wider hinterlands that provide the Green Infrastructure opportunities that serve the town and form the landscape backdrop to the town. Of particular importance is the need to address both existing and future community needs - particularly in light of plans for significant growth up to 2026.

Priority Action Area 3 – Wycombe District South and South Bucks

This Action Area aims to provide for the Green Infrastructure needs of communities in the southern part of Wycombe District South and South Bucks within Buckinghamshire, and for Windsor & Maidenhead, Slough and Hillingdon in neighbouring areas. Whilst this area is served by a range of Green Infrastructure assets, much of this is fragmented and under pressure from a large surrounding 'catchment' population.

Delivery through a 'Live' Action Plan

The Buckinghamshire GIC has identified a schedule of Green Infrastructure projects within each Priority Action Area. Produced in the form of an agreed 'Action Plan' this schedule is key to the delivery of strategic Green Infrastructure, it is a response to the needs and opportunities arising from the analysis, and reflects suggestions from the Buckinghamshire GIC for actions to address perceived needs for enhanced Green Infrastructure provision in the County. To ensure that the Action Plan is kept relevant and up-to-date, it comprises of a three-year rolling process that will be reviewed and updated annually.

Summary of Key Recommendations

The following provides a summary of the key recommendations of the Buckinghamshire Green Infrastructure Strategy:

- Secure the adoption of the Buckinghamshire Green Infrastructure Strategy within relevant Local Authority Local Development Frameworks.
- Ensure endorsement of the Buckinghamshire Green Infrastructure Strategy with key partners including Local Authorities and Local Delivery Vehicles.
- Engage local community and professional organisations in the Green Infrastructure Strategy.
- Protect and enhance existing Green Infrastructure and access routes of strategic significance in Buckinghamshire.
- Promote the delivery of new Green Infrastructure of Strategic significance in Buckinghamshire.
- Address the three Priority Action Areas (North Aylesbury Vale, Aylesbury Environs and Wycombe District South and South Bucks) where deficiencies of Green Infrastructure have been identified via the provision of new or enhancement of existing strategic accessible greenspace.
- Give priority to the conservation and enhancement of landscape character, biodiversity and historic environment in the Opportunity Zones.
- Ensure that the Buckinghamshire GIC take on a leading role in supporting and delivering the individual projects identified in the Action Plan. Strong working relationships between partners will be key in delivering this Strategy.
- Continue to engage with special interest groups and the local community.
- Any new development within
 Buckinghamshire should deliver
 better opportunities for accessible
 Green Infrastructure within the local
 proximity. This should be through the
 enhancement or protection of existing
 assets or, where resources are
 limited locally, through the supply of
 new provision.



Chapter 1 Introduction



Background

In October 2006, Buckinghamshire County Council commissioned Chris Blandford Associates (CBA) to undertake a Countywide study of accessible strategic Green Infrastructure provision in Buckinghamshire, encompassing the Districts of Aylesbury Vale, Chiltern, South Bucks and Wycombe. The final report, The Buckinghamshire Green Infrastructure Framework, was completed in May 2007 and provides an important evidence base for the preparation and development of this Buckinghamshire Green Infrastructure Strategy.

Purpose of the Strategy

Developing the original work prepared by CBA, this Green Infrastructure Strategy promotes a vision for establishing a strategic Green Infrastructure Network in Buckinghamshire. It provides a definition of Green Infrastructure and describes its benefits and functions and, through a partnership derived Action Plan, identifies priorities for the creation of new strategic level Green Infrastructure and the enhancement of current provision. It considers the pressures and demands facing Buckinghamshire over the next

^⁵The study was undertaken in accordance with a Project Brief developed by Buckinghamshire County Council, the Project Brief is provided in Appendix C

twenty years and, in-line with identified restraints and opportunities, makes recommendations for Green Infrastructure investment.

It is essential that Buckinghamshire's Green Infrastructure assets are protected and enhanced as part of the implementation of growth and development. Future changes should respect and sustain the environmental qualities that make Buckinghamshire special and developments in all areas should contribute to Green Infrastructure by safeguarding existing assets, enhancing these where appropriate and creating new opportunities to meet identified needs.

In order to meet requirements for Green Infrastructure in Buckinghamshire this strategy:

- provides a vision for Green Infrastructure in Buckinghamshire
- identifies pressures on existing Green Infrastructure posed by the housing allocations and other policies set-out in the South East Plan
- establishes the extent of existing Green Infrastructure provision within Buckinghamshire
- identifies areas that have the potential for new Green Infrastructure provision
- describes potential funding opportunities
- encourages a partnership approach to Green Infrastructure planning
- establishes measures to enhance and protect existing Green Infrastructure
- provides a Strategic Green Infrastructure Network Map for Buckinghamshire

Continued work towards the provision and management of Green Infrastructure is progressing at all levels within the County. However, it is recognised that a mechanism is needed that will bring such processes together in a coherent way. The production of this Countywide Strategy will help to meet this need. It will provide the key means for engaging and informing those who are enabling and facilitating growth in and around Buckinghamshire

Green Infrastructure is a 'live' issue and it is important that the Strategy Action Plan is kept relevant and up-to-date. The Action Plan is therefore a separate and replaceable component of this Strategy that will be maintained as a 3 year rolling plan to be reviewed annually by the GIC.

The Green Infrastructure Consortium - A Partnership Approach

Planning for County level Green Infrastructure protection, acquisition and management is a strategic activity. The value of developing a strategy through partnership is to ensure that Green Infrastructure needs are planned for, delivered and managed in a coordinated and integrated manner.

To meet the needs for a partnership, the Buckinghamshire GIC was established in 2007.

It is a multi-agency forum established to promote the need to plan for and invest in Green Infrastructure at both a strategic and local level.⁶

Need for the Strategy

Green Infrastructure is recognised as a quality-of-life indicator and is considered a key element to delivering sustainable communities. It now forms an integral part the planning system and is well defined and adopted in policies at the national and regional level.

The Strategy has been written in response to the environmental challenges posed by the sub-regional growth areas in and around Buckinghamshire. Of particular note is that the County and adjacent areas have been identified for delivering significant growth within the Government's Sustainable Communities Plan. Growth is further detailed in the Draft South East Plan which includes a long-term spatial vision and development strategy for the region until 2026.

Whilst Buckinghamshire is primarily a rural County, there is population expansion predominately in Aylesbury and High Wycombe. There is also major growth in adjoining administrative areas including Milton Keynes, South Bedfordshire, West London, Oxford, Bicester and Slough with some development beginning to extend into Buckinghamshire, for example on the western flank of Milton Keynes. The projected high levels of growth in and around Buckinghamshire will put increasing pressure on existing Green Infrastructure assets in the County, many of which are already under pressure or deficient.

If poorly managed, the level and speed of growth proposed in the sub-region is likely to have significant implications for biodiversity, landscape and historic environment and may reduce the ability of the natural environment to adapt to climatic change.

This Strategy will need to play a key role in ensuring that growth is delivered in a way that provides new and enhanced Green Infrastructure opportunities for both existing and future communities. It will aim to help reduce pressures on important natural and historic Green Infrastructure assets whilst, at the same time, identifying suitable opportunities to support and enhance existing assets for the benefits of people and the environment are maximised.

Some key areas in Buckinghamshire, including the Chilterns and South Bucks district are relatively well provided for strategic level accessible Green Infrastructure. However, this Green Infrastructure needs to be protected with new opportunities developed to help absorb additional pressures.

⁶See Appendix A for the Buckinghamshire GIC Terms of Reference

⁷Sustainable Communities: Building for the Future (ODPM, 2003)

⁸A Clear Vision for the South East: The South East Plan – Draft Plan for Submission to Government (SEERA, March 2006)

The advantages of producing this Strategy for Buckinghamshire include:

- a published and agreed vision for Buckinghamshire's Green Infrastructure
- ownership of the Green Infrastructure concept
- co-ordination of strategic investment in Green Infrastructure protection and provision
- a partnership approach
- involvement of all key groups and the community in planning and delivery
- shared resources
- clear direction
- a strengthened position for funding applications
- accountability and development of an evidence base
- long-term management and maintenance planning

What is Green Infrastructure?

The concept of Green Infrastructure, as an approach to long-term environmental planning for sustainable development in urban and peri-urban areas, began in the USA. Green Infrastructure has only recently started to gain currency in the UK, initially in the growth areas of the South East and East of England and more latterly in the East Midlands and the North West and North East of England.

As with built (or 'Grey') Infrastructure (e.g roads, sewers, utilities), there is a need to plan for the provision of 'Green' Infrastructure to meet wider existing and future needs of sustainable communities.

This approach is reflected in Planning Sustainable Communities: A Green Infrastructure Guide for Milton Keynes & the South Midlands, which defines Green Infrastructure as:

'A network of multi-functional greenspace that contributes to the high quality natural and built environment required for existing and new communities in the future. It consists of public and private assets, with and without public access, and in urban and rural locations.' ⁹

A more detailed definition of Green Infrastructure is provided by the Draft South East Plan, which states that 'Green Infrastructure includes outdoor recreational and sports facilities, parks, gardens and allotments, tracks and pathways, natural and historic sites, canals and water spaces, as well as accessible countryside. It is a network of multi-functional greenspaces in urban areas, the countryside in and around towns, and the wider countryside.' This definition provides a clearer focus towards assets being more accessible to communities.

⁹Planning Sustainable Communities: A Green Infrastructure Guide for Milton Keynes & the South Midlands (Milton Keynes and South Midlands and Quality of Life Sub Group (2005))

¹⁰A Clear Vision for the South East: The South East Plan Implementation Plan – Draft Plan for Submission to Government (SEERA, March 2006)

A Green Infrastructure definition for Buckinghamshire

The following definition has been endorsed by the GIC and forms the definition for Buckinghamshire:

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, acknowledging its multi-functional benefits for economy, wildlife and health and well being of local people and communities.

Green Infrastructure assets include:

- Accessible greenspace
- Allotments
- Cemeteries
- Children's play space
- Country parks
- Formal sports facilities
- Habitats for wildlife including nature reserves, Sites of Special Scientific Interest and County green corridors
- Historic parks and gardens and historic landscapes
- Public Rights of Way and cycleways
- Scheduled Ancient Monuments
- Urban parks and gardens
- Waterways and water bodies, including flooded quarries
- Wildlife sites

A Vision for Green Infrastructure in Buckinghamshire

A long-term vision for Green Infrastructure in Buckinghamshire (Table 1.1) has emerged from consultations with key stakeholders during the development of the two key Green Infrastructure documents: Towards a Vision for Green Infrastructure in *Buckinghamshire* – *A Prospectus*¹¹ and *Towards A Strategic Framework For Green Infrastructure In Buckinghamshire Technical Report.*¹²

The vision seeks to embrace the multi-functional nature of the Green Infrastructure concept and the range of national, regional and local policy objectives for Green Infrastructure. It also reflects the opportunities and needs arising from the analysis of key assets that contribute to Green Infrastructure resources in Buckinghamshire.

¹¹Towards a Vision for Green Infrastructure in Buckinghamshire – A Prospectus (CBA for Bucks CC, November 2006)

¹²Towards a Strategic Framework for Green Infrastructure In Buckinghamshire Technical report (CBA May 2007)

Table 1.1 A Vision for Green Infrastructure in Buckinghamshire

The vision is based on a multi-functional network of natural, semi-natural and man-made greenspaces and green links that provide an environmental support system for communities and wildlife.

The network should be high quality, bio-diverse and accessible and be widely valued by all those who visit, live, work and play in Buckinghamshire. Opportunities to inspire local communities and businesses to adopt low carbon and healthy lifestyles based on a greater awareness of their 'environmental footprints' should be encouraged.

The network will further connect urban areas with the surrounding countryside via Rights of Way and access routes; providing opportunities for communities in towns and villages to access, enjoy and appreciate a variety of greenspaces on their doorstep and in the wider countryside. The network should connect a diverse range of wildlife habitats and provide important corridors for species dispersal and migration.

The Green Infrastructure approach will be 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.

Green Infrastructure will be delivered, protected and managed through the commitment and involvement of the public, private and voluntary sectors working in partnership with each other.



Green Infrastructure Functions

Green Infrastructure is linked to a wide range of functions and these need to be considered in relation to the provision and management of Green Infrastructure across the County (Table 1.2).

Table 1.2
Green Infrastructure Functions

Function	Aim
Active Recreation	Accessible Green Infrastructure and access routes have a role in the provision of outdoor sports facilities – both formal sports provision and recreation.
Passive recreation and quiet enjoyment	Well-designed, interesting and safe accessible Green Infrastructure of the natural environment and meet the demands for urban communities for tranquil spaces for relaxation and stress relief.
Sustainable transport and public Rights of Way	A network of Green Infrastructure connected by green, attractive, sheltered and safe footpaths, bridleways, towpaths and cycleways can encourage increased levels of walking and cycling. Connecting public transport routes with Green Infrastructure will benefit the wider access network. The use of rivers and canals as sustainable transport corridors can provide attractive linkages between rural and urban places.
Networks, links and gateways	Green Infrastructure networks can provide the framework for the built environment and the rural-urban fringe by facilitating continuous and attractive walking and cycling routes from and out to the surrounding countryside, thereby acting as a 'bridge to the country' and providing an attractive 'gateway to the neighbourhood'.
Social venue/ meeting place	Accessible Green Infrastructure can provide an excellent focus for establishing a sense of place and community ownership.
Education and training	Green Infrastructure can provide outdoor classrooms for school education and life-long learning and formal educational and training facilities where appropriate.
Heritage preservation	The provision of new accessible Green Infrastructure and/or the enhancement of existing spaces offer opportunities for the conservation or restoration of historic assets.
Landscape and townscape structure	The design and characteristics of Green Infrastructure assets can enhance the structure of the local landscape and townscape context, providing a distinctive setting for development.

Function

Aim

Wildlife habitat and biodiversity

Green Infrastructure can incorporate existing wildlife habitats such as designated sites, forestry and woodlands, nature reserves and Biodiversity Action Plan habitats. The creation or restoration of wildlife habitats can link, buffer and extend existing wildlife sites, contributing to an ecological network which is more resilient to the pressures of growth and climate change. This network can also provide opportunities for greater access to nature for local people.

Sustainable water and flood risk management

Well-planned Green Infrastructure can provide water storage capacity and can help reduce flood risk. Water storage areas offer great potential for biodiversity and for recreation if designed appropriately.

Sustainable energy use and production

Green Infrastructure can contribute to low-carbon energy production (e.g. 'green' developments incorporating solar roofs, biomass and wood heat schemes, farm waste schemes and wind turbines).

Sustainable waste management

Green waste produced as a result of management and use of Green Infrastructure can be composted and reused within the space, or can provide a renewable energy source.

Green produce and food production

Allotments or community gardens can be regarded as forms of Green Infrastructure and provision for these areas should be considered in relevant development plans.

Adaptation to a changing climate

Green Infrastructure provides temperature regulation and shaded spaces.

Integration of new and existing communities

Green Infrastructure can provide a sustainable setting for development and attractive surroundings for new and existing residents.

Shared experience of greenspace creation

Green Infrastructure can offer opportunities for social cohesion and for bringing new and existing communities together.

The Benefits of Green Infrastructure

Green Infrastructure is now recognised as having a wide range of environmental, social and economic benefits. Alongside the need for growth, planning policy identifies Green Infrastructure as facilitating the delivery of multiple objectives because it can frame and shape the growth of sustainable communities and strengthen their image. In short, it helps define people's quality of life and liveability and underpins the quality, character and distinctiveness of new neighbourhoods. This section describes some of the key benefits associated with Green Infrastructure provision:¹³

Economic contribution/encouragement and employment benefits – Infrastructure is considered important in its ability to:

- provide attractive places to live, work and visit
- deliver resources and processes that are supplied by natural ecosystems
- develop enhanced environmental backdrops that can help to encourage new businesses and inward investment
- promote inward investment, regeneration and tourism through a high quality environment
- create real opportunities for new commercial activity, for instance in conservation, agriculture and the renewable energy sectors, creating new employment in and around towns and cities
- provide employment opportunities linked to outdoor environmental education and leisure enterprises
- promote a working landscape approach to Green Infrastructure. Working landscapes help to sustain local employment and Green Infrastructure functions including; biodiversity, recreation, renewable energy and landscape distinctiveness. Working landscapes promote locally sourced materials and support environmentally sensitive development. A working landscape can encourage and enable landowners to maximise recreational use of their land, thus relieving pressure on protected landscapes within the County

Environmental benefits – Green Infrastructure can assist in:

- strengthening of image and visual amenity through high quality design; recognition of historic character/sense of place and enhanced management of heritage assets
- enhancing biodiversity through habitat restoration and creation
- increasing community awareness of environmental issues
- helping reverse habitat fragmentation by improving the links between sites and habitat areas
- contributing to the management and protection of historic and natural sites

¹³Based on the guidance provided by the 'Thames Gateway Green Infrastructure Guidance' (Greening the Gateway Partnership), which reflects the approach promoted in 'The Countryside in and Around Towns: a vision for connecting town and country in pursuit of sustainable development', Countryside Agency and Groundwork Trust.

- aiding natural processes of filtration, sedimentation and biodegradation
- improving local air quality through pollution filtering by vegetation

Climate change – Green Infrastructure can mitigate the effects of climate change by:14

- reducing impacts of traffic by creating new functional cycle routes and access networks encouraging a move from cars to other sustainable modes of transport
- reducing the heat island effect of urban areas
- · adjusting micro-climate
- managing floodplains and water meadows in order to help protect urban areas from the risk of flooding
- increasing tree and woodland cover to meet needs for shade during warmer summers
- reducing the impact of climate change on biodiversity by offering 'green corridors' which plants and animals can migrate
- improving carbon storage and sequestration

Physical and psychological health benefits – Green Infrastructure can help:

- facilitate physically active lifestyles
- promote mental well-being/stress reduction through provision of quiet green refuges
- improve 'quality of life'
- provide exercise opportunities that can help reduce coronary heart disease and obesity levels

Social inclusion and equality – Green Infrastructure can provide accessible, safe and welcoming open spaces and links that:

- promote community safety
- provide opportunities for people to get closer to and learn about history, nature and culture and provide a focus for community activities that promote community capacity building and a shared sense of cohesion/civic pride
 - incorporate access provision for less mobile users
 - provide stimulating natural environments for the sensory impaired
 - offer greater integration between existing and new communities
 - impact positively on areas of economic and social deprivation through an enhanced environment, containing green and open spaces

The Strategy Preparation Process

In 2006, Buckinghamshire County Council commissioned Chris Blandford Associates (CBA) to undertake an initial consultation and assessment of Green Infrastructure for the County. The findings, used in the publication Towards a Vision for Green Infrastructure in Buckinghamshire: A Prospectus (2006) provides an important overview of current and projected needs for accessible Green Infrastructure.

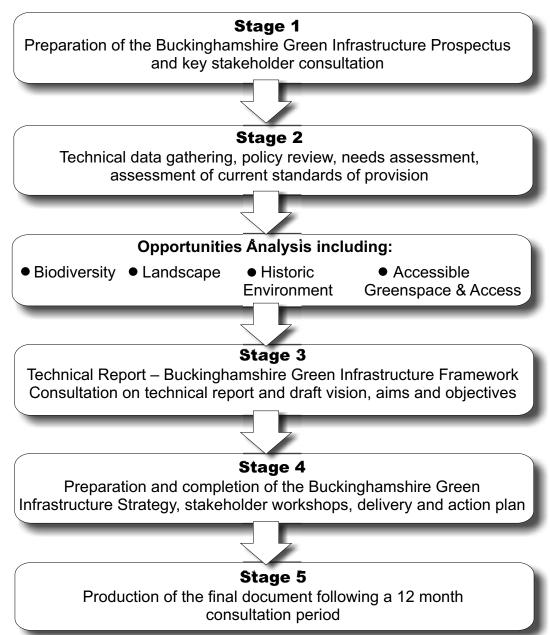
¹⁴For more information on Climate change see http://www.sustainablecities.org.uk/greeninfrastructure/benefits

The County Council re-appointed CBA in 2007 to undertake a second phase of consultation and analysis. Its findings, published in Towards a Strategic Framework for Green Infrastructure in Buckinghamshire - Technical Report (2007), were used to identify Countywide restraints and opportunities for Green Infrastructure and identified 'Action Areas for Investment' as a means to address deficiencies and priorities for Green Infrastructure within Buckinghamshire.

Through the latter part of 2008, the preparation of this Strategy further developed the work undertaken in the above documents. Guided and developed by the Buckinghamshire GIC, the new Strategy for Buckinghamshire will underpin the development of local Green Space plans that meet District and Parish requirements.

The various stages of delivery of this Green Infrastructure Strategy are summarised in Figure 1.1.

Figure 1.1 The development process leading to the Process of the Buckinghamshire Green Infrastructure Strategy¹⁵



Aims for Green Infrastructure in Buckinghamshire

The Buckinghamshire Green Infrastructure Strategy aims to ensure that pressures on natural and historic Green Infrastructure assets are minimised, and opportunities to enhance these assets for the benefits of people and biodiversity are maximised. Where appropriate, measures will be required to manage effects on these resources arising from the social and economic development of the County and the wider sub-region.

 $^{^{15}\}mathrm{A}$ more detailed description of each of the stages can be found in Appendix B

This Strategy promotes:

- understanding of the concept of Green Infrastructure and its place and value in contributing tot the environmental, social and economic well being of the County
- the protection and conservation of Green Infrastructure assets
- the enhancement of Green Infrastructure assets where these are of low quality, in decline or require investment to realise their potential to meet future demands
- the mitigation of and response to the effects of development, new land uses and climate change
- the creation of new Green Infrastructure assets where there is an identified deficit, or growth is planned and additional provision or compensatory measures are needed
- the promotion of a "Working Landscapes" approach to Green Infrastructure with opportunities to enhance or diversify
- a strategic approach that will lead to the preparation of local Green Infrastructure plans described as 'Living Networks'.

Delivering quality Green Infrastructure in Buckinghamshire

The provision of high quality Green Infrastructure can be an important factor which influences people's decision to live, work and invest in an area. In 2003, the Sustainable Communities Plan identified that the supply of new homes had failed to keep pace with demand and described the Government's aim to take radical action to increase housing provision by speeding-up supply, reforming planning processes and raising standards in high-demand areas.¹⁶

Alongside the need for growth, planning policy identifies Green Infrastructure as facilitating the delivery of multiple objectives because it can frame and shape the growth of sustainable communities and strengthen their image. In short, it helps define people's quality of life and liveability and underpins the quality, character and distinctiveness of new neighbourhoods.

Green Infrastructure provision is now a key component of design, development, master planning and growth decisions and provides an important spatial framework for guiding sustainable development. In-line with such decisions, this document assists in providing an evidence-base and long term spatial vision consistent with the objectives in Planning Policy Statement 12 'Local Development Frameworks' and will assist Local Authorities when producing Local Development Frameworks.

The GIC's vision for Green Infrastructure can be linked closely to a range of related factors that need to be considered important for encouraging a consistent approach to delivering Green Infrastructure provision and management:

Multi-functionality – Provision of a multi-functional network of high quality Green Infrastructure, providing access for all users to green spaces that deliver multiple

¹⁶The Sustainable Communities Plan, Building for the Future (OPDM, 2003)

environmental, social and economic benefits. Such opportunities need to be developed in conjunction with the needs of the landscape and landowners, whilst considering that not all individual assets should or can be treated as multi-functional.

Meeting needs – Current and projected deficiencies in the quality and quantity of Green Infrastructure provision in Buckinghamshire must be addressed in order to meet local and strategic needs. Such an approach can only be met by needs assessment and by then planning for and delivering Green Infrastructure at all spatial scales.

Integrated approach to provision – That investment in Green Infrastructure is provided as a priority alongside the provision of other essential infrastructure when planning new developments.

Sense of place – The distinctive historic, cultural and natural qualities that make Buckinghamshire special need to be protected and reinforced, and the effects of development need to be managed to sustain the rural character of the County.

Access for All – Access to the countryside and a diversity of Green Infrastructure should be provided via 'gateways' providing access opportunities connecting urban and rural areas with high quality visitor facilities and information centres linked to public transport and, the wider access network.

Sustainable movement – A properly planned network of Green Infrastructure provides a key sustainable means for access and movement within and outside urban areas. The future development of this network must be complimented by enhanced public transport links to this network.

Biodiversity – The condition, extent and connectivity of wildlife habitats are improved through appropriate land management and landscape-scale restoration and creation schemes. Where appropriate, suitable management and provisions must increase existing biodiversity resources, reverse the effects of habitat fragmentation and create conditions to allow habitats and species to adapt to the effects of climate change.

Heritage enhancement – Historic environment assets form a key component of Green Infrastructure. Where applicable, the management, presentation, accessibility and interpretation of historic environment assets need to be enhanced as an integral part of Green Infrastructure provision.

Connectivity – 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 will also need to be complimented by enhanced public transport connections to this network.

Respecting environmental capacities – The capacity of natural processes, systems and resources must be taken into account in responding to the challenges of adapting to and mitigating the effects of climate change.

Healthy lifestyles – 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.

Employment benefits – New employment opportunities are created throughout Green Infrastructure networks through the incorporation of sustainable low carbon energy production over the long term, such as waste wood and energy crops.

Community benefits – Community engagement in Green Infrastructure is able to provide a strong focus for social inclusion, community development and 'lifelong learning' leading to greater public awareness of, and respect for, the environment.

Sustainable financial management of Green Infrastructure resources – Through economic leverage, supporting strategies and partnership working.

Working Landscapes – The landscape is a working environment and it is a key requirement to sustain local employment and Green Infrastructure functions including: tourism, farming, leisure, recreation, renewable energy, rural business and enterprise, skills and training and employment. Engaging these functions within Green Infrastructure will decrease costs and create more successful opportunities for delivery. This Strategy values the existing delivery made by working landscapes and seeks to further enhance the opportunity to deliver via existing and emerging markets.

A Sustainable Approach to Green Infrastructure

Green Infrastructure can help support reduced energy consumption and meet renewable energy production objectives. Thus, a modern approach to green space management can ensure that sites can be designed and managed to allow them to be more sustainable, energy efficient and have minimal energy requirements. Within this context there are three main areas for consideration:

Waste handling –The management and use of green spaces produces waste. Green waste produced as a result of management should be composted and reused within the space, or can provide a renewable energy source. Litter resulting from the public use of spaces should be reduced wherever possible and managed in a sustainable manner.

Supporting renewable energy and sustainable approaches – Wood products and green waste can provide energy sources for renewable energy projects. Green Infrastructure management should encourage appropriate economic activity, which supports the management of woodlands in the long term and promotes a sustainable woodland economy.

Green spaces, as well as providing sustainable energy materials (e.g. wood for heating), should be considered as suitable sites for renewable energy schemes in themselves. Many good examples exist where site visitor centres employ sustainable approaches to heating, cooling and water use as well as incorporating sustainable build and design if new building opportunities arise.

Championing the principles of Green Infrastructure can help promote and support developments that are environmentally sensitive; e.g. solar roofs; biomass and wood heat schemes; farm waste schemes; small, medium, and in some instances, large wind turbines.

Appropriate material use – Direct site management provides a good opportunity to develop a sustainable approach. Imported materials for use on sites (e.g. fencing materials, path surfacing) should be appropriate to the site and locality of a site and should, where possible, use locally sourced materials or materials sourced from responsible managed sustainable resources (for example Forest Stewardship Council certified (FSC)).



Chapter 2 Policy Context



National Policy Context

The Sustainable Communities Plan sets out a long-term national programme for delivering sustainable communities in urban and rural areas throughout England.¹⁷ It aims to address housing supply issues in the South East and East of England regions and low demand in other parts of the country to deliver a better quality of life for all. The Plan contains two key elements that are of direct relevance to Green Infrastructure:

- Liveability How the Government plans to improve local environments by providing cleaner streets, improved parks and better public spaces etc
- Protecting the countryside How land will be used more effectively

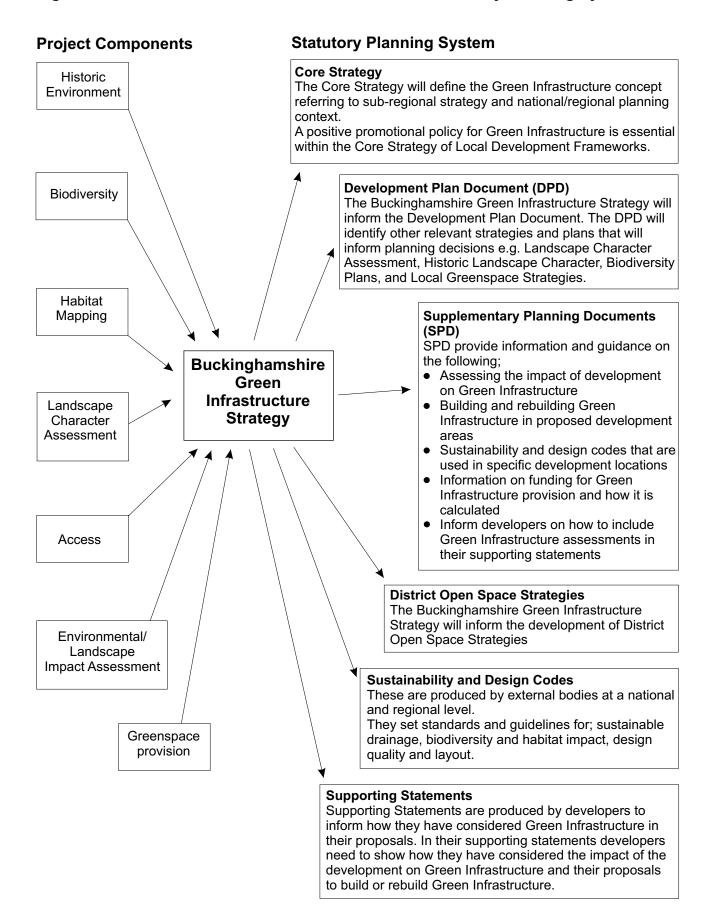
The sustainable communities approach focuses on improving community 'liveability', supports the principles underpinning Green Infrastructure and reinforces its importance in creating a healthy and enhanced environment. This Strategy supports the recognition of the values of Green Infrastructure through the planning system and for building sustainable communities in the County and the wider growth areas. Figure 2.1 illustrates the project components that have informed the Buckinghamshire Green Infrastructure Strategy and shows how the Strategy feeds into the Statutory Planning System.

¹⁷The Sustainable Communities Plan, Building for the Future (OPDM, 2003)

The national planning policy framework includes a number of statements and guidance notes that demonstrate the Government's commitment to meeting sustainable development objectives related to the protection, enhancement and use of Green Infrastructure assets. Of particular significance are the following:

- Planning Policy Statement (PPS) 1: Delivering Sustainable Development Requires development plans and planning decisions to have due regard to environmental issues in meeting sustainable development objectives.
- Supplement to PPS 1: Planning and Climate Change Sets out how planning, in providing for new homes, jobs and infrastructure needed by communities, should help shape places with lower carbon emissions and be resilient to the climate change now accepted as inevitable. The direction and purpose of this Strategy embraces the need to mitigate the effects of climate change.
- PPS3: Housing Mentions how new housing developments need to involve the creation of a quality setting for the new communities. A Strategic Green Infrastructure Plan will address these issues and help ensure that development occurs in the correct locations with the appropriate level of access to community facilities and Green Infrastructure.
- PPG 4: Industrial, Commercial Development and Small Firms Encourages economic diversity and business within rural areas.
- PPS 7: Sustainable Development in Rural Areas Planning policies for rural areas, including County towns and villages and the wider, largely undeveloped.
- PPS9: Biological and Geological Conservation Requires Local Authorities to maintain functioning ecological networks of natural habitats. This is to be achieved by avoiding and then repairing existing fragmentation and isolation of habitats, undertaken as part of a wider strategy for the protection and extension of open spaces and access routes.
- Planning Policy Guidance (PPG) 15: Planning and the Historic Environment –
 Environmental stewardship should effectively protect for all aspects of the historic environment and acknowledges its importance to quality of life, local distinctiveness, leisure and recreation.
- PPG 17: Planning for Open Space, Sport and Recreation Requires Local
 Authorities to undertake open space audits and strategies, which can inform Green
 Infrastructure plans at both the strategic and local level. PPG17 also requires the
 development of policies based on standards for provision of public open spaces, including
 greenspaces.

Figure 2.1: How Green Infrastructure feeds into the Statutory Planning System



The Green Infrastructure approach is also increasingly reflected in the work of many Government agencies. ¹⁸ Natural England, for example, has confirmed its commitment towards helping to deliver high quality, locally distinctive and environmentally sustainable development, including the provision of multi-functional Green Infrastructure and set a target to establish Green Infrastructure Strategies in all of England's Growth Areas by 2007. Its 'Breathing Places' Campaign further supports Green Infrastructure by addressing the proximity of natural green spaces to home. ¹⁹

The Environment Agency has highlighted opportunities through the integration of Green Infrastructure "creative solutions" (arising from flood risk assessment and management schemes), and water resource planning and conservation, which could provide new Green Infrastructure links and wider benefits.

The Commission for Architecture and the Built Environment (CABE) and CABE Space (the Government's advisor on parks and green space) see the establishment of Green Infrastructure as an integral process that supports many of their aims and aspirations for securing quality in the design of parks, public spaces and the built environment through the planning system.

Regional Policy Context

Draft South East Plan

Aylesbury Vale and adjacent areas in authorities adjoining the County are allocated for significant growth within the Government's Sustainable Communities Plan. This is reflected in the Draft South East Plan submitted to Government in March 2006 by the South East England Regional Assembly (SEERA).²⁰ The Draft Plan sets out a long-term spatial vision and development strategy for the region up to 2026, and provides the regional and sub-regional development context for Buckinghamshire.

Over the period 2006-2026, the Draft Plan proposes major growth for Buckinghamshire within the Aylesbury Vale and Milton Keynes sub-region. The Draft Plan allocates proposed growth in Wycombe District as part of the Western Corridor and Blackwater Valley Sub- region. Outside of these sub-regions, lower levels of growth are envisaged. Whilst the southern parts of the County are significantly constrained by the Chilterns AONB and Metropolitan Green Belt designations, there will be increasing growth pressures from neighbouring areas. The emerging growth proposals for these sub-regions are outlined in this section.

¹⁸See statements of commitment set out in 'Green Infrastructure: Making the Connection – Strategic Framework Study for Northamptonshire' (River Nene Regional Park, November 2006)

¹⁹Natural England Breathing Places Campaign (2005-2009) http://www.naturalengland.org.uk/campaigns/breathingplaces/default.htm

²⁰A Clear Vision for the South East: The South East Plan – Draft Plan for Submission to Government (SEERA, March 2006)

Table 2.1 Policy CC8: Green Infrastructure

Local Authorities and partners should work together to plan, provide and manage connected and substantial networks of accessible multi-functional green space. Networks should be planned to include both existing and new green infrastructure. They should be managed with the primary aim of maintaining and improving biodiversity, but should also deliver recreational and cultural benefits and ensure that an improved and healthy environment is available for the benefit of present and future communities.

The provisions of this policy apply nation-wide. However, the successful designation and management of Green Infrastructure will be particularly important in areas designated as regional hubs, in areas close to sites of international ecological importance and in areas identified for significant growth (Strategic Development Areas).

The Green Infrastructure concept is bound within SEERA's recognition that provision of all types of infrastructure and services is a critical requirement to support future growth. Of particular importance to this Strategy is policy CC8, which focuses specifically upon the issues of Green Infrastructure.

This commitment to delivering Green Infrastructure is further embedded in the Interim Implementation Plan²¹ the central message of the Draft South East Plan is that it aims to nurture and enhance existing assets throughout the region, maintaining quality of life and increasing prosperity while meeting needs through a sustainable management programme embracing enhanced adaptation and mitigation and better resource use. This approach will provide the best context for a timely delivery of an impressive programme of growth throughout the region.

The Draft South East Plan contains a range of both cross-cutting and specific policies which are relevant to the continued provision and enhancement of Strategic Green Infrastructure assets throughout Buckinghamshire. These policies are listed and briefly described in Table 2.2.



²¹A Clear Vision for the South East: The South East Plan – Draft Plan for Submission to Government (SEERA, March 2006)

Table 2.2 Policies relating to Green Infrastructure from the Draft South East Plan

Policy	Title	Brief Description				
SP3	Urban Focus and Urban Renaissance	Requires new development to be well designed and adhere to urban renaissance and sustainable development principles				
SP4	Regeneration and Social Inclusion	Encourages community involvement in the design and implementation of regeneration schemes				
SP5	Greenbelts	Seeks opportunities to improve land-use management and access to Greenbelts				
Cc2	Climate Change	Supports opportunities and options for sustainable flood management that are compatible with biodiversity objectives				
CC3	Resource Use	Encourages more prudent use of natural resources and reduced waste generation				
CC6	Sustainable Communities and Character of the Environment	Seeks to enhance the character and distinctiveness of settlements and landscapes				
T1	Manage and Invest	Seeks an improved and integrated network of public transport services in and between urban and rural areas				
Т7	Rural Transport	Opportunities should be sought to improve facilities for cyclists and pedestrians between towns and their nearest villages				
NRM5	Conservation and Improvement of Biodiversity	Promotes habitat restoration and the protection of biodiversity and wildlife				
NRM7	Woodlands	Woodland should be protected and promoted				
C3	Areas of Outstanding Natural Beauty	Gives high priority to the conservation and enhancement of AONBs within the region				
C4	Landscape and Countryside Management	Encourages positive and high quality management of the open countryside				
C5	Managing the Urban Rural Fringe	Local Development Documents should address urban-rural fringe issues				
C6	Countryside Access and Rights of Way Management	Actively encourages access to the countryside via Public Rights of Way				
C7	The River Thames Corridor	Promotes joint working and sustainable management to protect and enhance its environmental, heritage and recreational values				
BE1	Management for an Urban Renaissance	Requires that Green Infrastructure accompany new development				
BE6	Management of the Historic Environment	Supports the conservation and enhancement of the historic environment				

Policy	Title	Encourages the identification of opportunities for tourism, sport and recreation during the development plan process Recognises the role of parks, open spaces, physical recreation and cultural facilities in shaping healthy communities				
TSR7	Priority Areas for Tourism					
S1	Supporting Healthy Communities					
S5	Cultural and Sporting Activity	Encourages increased and substantial participation in sport, recreation and cultural activities				
WCBV5	The Colne Valley	Supports joint working to conserve the habitats, geological features and animal/plant species of the park through G.I networks				
MKAV3	Spatial Framework for Aylesbury Growth Area	Recognises the strong amenity need for large scale informal recreational facilities				

As a result of the Examination in Public held throughout 2007, a number of recommendations for revisions to the Draft Plan were detailed in the Report to the Panel. The Secretary of State has since published its Proposed Changes for the Draft Plan.²² This companion document, detailing a number of changes to the previous policies listed in the Plan, was used to create the above table. Therefore, the policy numbers and titles may not match the original document.

South East Regional Economic Strategy

The South East Regional Economic Strategy (2002-12) sets out the overall framework for a sustainable approach to economic development. It identifies five objectives, recognising that infrastructure issues are central to economic success:

- Encouraging competitive business
- Developing successful people
- Developing vibrant communities
- Effective infrastructure
- Sustainable use of natural resources

The protection and provision of Green Infrastructure can deliver significant benefits in relation to economic contribution/encouragement and employment. As such, the Green Infrastructure Strategy will help support the Buckinghamshire Economic Learning Partnership in delivering the Regional Economic Strategy at a County level.

²²GOSE (2008) The South East Plan: The Secretary of State's Proposed Changes to the draft Regional Spatial Strategy for the South East of England. Companion Document. GOSE

Sub-Regional Policy Context

The Draft South East Plan proposes nine sub-regions with distinctive issues that need to be addressed, and sets out strategies that provide the planning frameworks for each sub-region. Four of these sub-regions have a high relevance to Buckinghamshire (Figure 2.2):

Milton Keynes and Aylesbury Vale Sub-Region

Milton Keynes, to the north of the County boundary, and Aylesbury Vale in Buckinghamshire form part of the wider Milton Keynes and South Midlands Growth Area defined in the Government's Sustainable Communities Plan. The Draft Plan seeks to accommodate development in key urban centres within this sub-region throughout the Plan period. Within Buckinghamshire, the Milton Keynes and South Midlands Sub-Regional Strategy will have most impact on Aylesbury where proposals state that 16,800 new homes will be built by 2026. In addition, a further 5,930 homes are planned in North East Aylesbury Vale and 4,700 in the rest of the District. It is clear that an important objective will be to deliver the Green Infrastructure necessary to support the proposed growth and potential increase in demand for accessible greenspace generated by new development in the sub-region.

Western Corridor and Blackwater Valley Sub-Region

South Bucks District and the southern part of Wycombe District, including High Wycombe and Marlow, fall within the Western Corridor and Blackwater Valley Sub-Region. Whilst it is not defined as a growth area in the Government's Sustainable Communities Plan in the same way as the Milton Keynes and South Midlands areas, its continued prosperity is seen as crucial to the continued buoyancy of the South East Region. The Draft South East Plan recognises the need to provide more affordable housing and ensure that economic growth continues without unreasonably increasing the pressure on resources and the natural environment. In this context, 7,800 houses in Wycombe District and 1,890 houses in South Bucks are proposed between 2006 and 2026.

Central Oxfordshire Sub-Region

This sub-region lies immediately to the west of Buckinghamshire. There are opportunities for expansion of the towns close to the Buckinghamshire border, such as Bicester where 4,300 new dwellings have been proposed over the Plan period. This may have implications for Buckinghamshire and give rise to additional need and demand for Green Infrastructure resources in the area. The proposed ecotown at Bicester could also impact upon Green Infrastructure capacity in Buckinghamshire.

Luton/Dunstable/ Houghton Regis and Leighton-Linslade growth

MKSMSRS proposes a considerable level of development in this part of the wider growth area in the period up to 2031. During the period 2001 to 2021, 26,300 new homes are to be provided within Luton and South Bedfordshire, and as part of a review of the South Bedfordshire Green Belt boundary sufficient 'headroom' must be provided for a further 15,400 proposed new homes between 2021 and 2031. The cross-boundary nature of the

growth in this area means that some development could spread into neighbouring authority areas, including the potential for growth to the west of Linslade, into Buckinghamshire. Laying close the eastern edge of Aylesbury Vale, 4000 homes have already been delivered or have permission to the south of the Leighton-Linslade, with a further 4000 proposed by developers in the east of the town.

The creation of the Buckinghamshire Green Infrastructure Strategy is largely a response to the environmental challenges posed by these sub-regional growth areas in and around Buckinghamshire, particularly in relation to the Milton Keynes and Aylesbury Vale sub-region.

Sub-Regional Green Infrastructure Planning

Several Green Infrastructure studies, strategies and plans are being produced for areas in and surrounding the County. Those that present major opportunities for connectivity with the Green Infrastructure network in Buckinghamshire include:

Chilterns AONB Management Plan: The Framework for Action 2002-2007

A significant area of green space under consideration within this Strategy falls within the sensitive habitats and landscapes of the AONB. The Chilterns Conservation Board has a statutory duty to prepare a management plan for the Chilterns AONB. The plan is for the period 2008 to 2013. The Management Plan covers a wide range of issues including nature conservation, land and water management, recreation and access, planning and development and the rural economy and transport. The Plan is complemented by a 3 year Action Plan detailing activities, outputs and timescales.

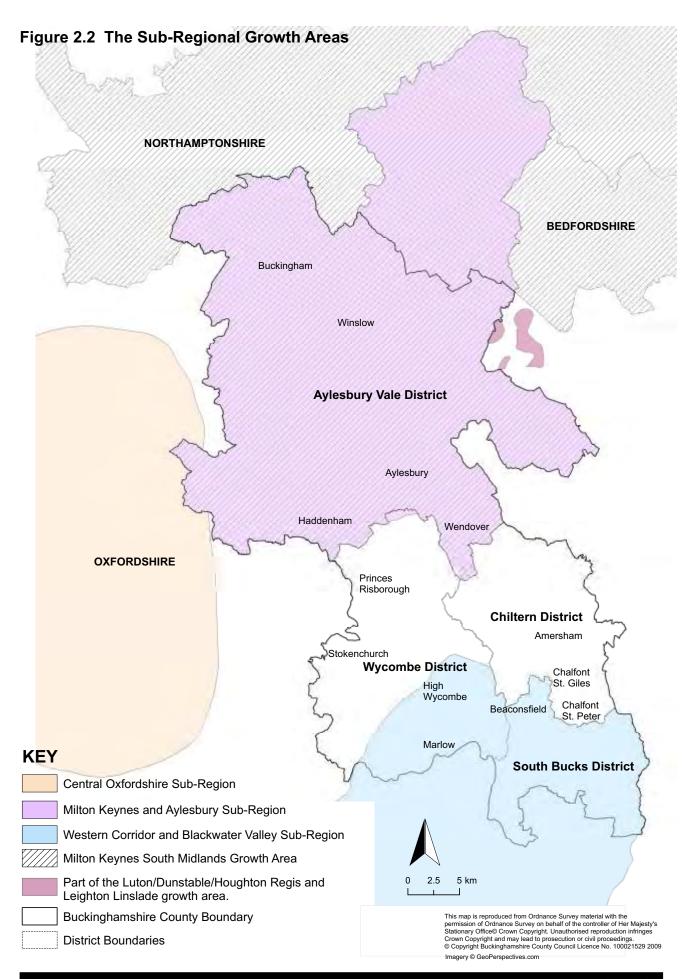
The Bedfordshire and Luton Strategic Green Infrastructure Plan

The Bedfordshire Green Infrastructure Consortium has been established in response to the MKSM growth proposals and has completed its Strategic Green Infrastructure Plan in 2009 in order to address the needs of Bedfordshire's existing and expanded communities. The Plan seeks to create a coherent linked network of multi-functional greenspace, consisting of public and private assets in urban and rural locations.

The Luton and South Bedfordshire Green Space Strategy

The Luton and South Bedfordshire GSS has been funded by the Department for Communities and Local Government and forms a key planning based document. It assesses current provision levels and determining future needs for green space and Green Infrastructure in southern Bedfordshire. Of particular relevance to Buckinghamshire are the possible additional demands that may impact on the County as a result of the housing growth proposed for the Leighton-Linslade area.

Strategic Green Infrastructure Framework Study for Northamptonshire This Study was commissioned by the River Nene Regional Park, and forms part of an ongoing commitment to Green Infrastructure development and delivery across the MKSM Sub



Region and the wider East Midlands Region. The Study seeks to take a proactive approach to environmental protection and enhancement whilst embracing economic regeneration and growth and was developed in partnership with Interreg/ SPARC, English Nature, the Countryside Agency, English Heritage, the Environment Agency, Sport England, Northamptonshire County Council and the other Local Authorities within Northamptonshire.

Milton Keynes Green Infrastructure Plan (2008)

The Milton Keynes Green Infrastructure Plan was commissioned by Milton Keynes Council and was produced by the Landscape Partnership. The purpose of the study is to set out a clear vision for Green Infrastructure within the Borough of Milton Keynes.

The Buckinghamshire Policy Context

Local Development Frameworks

Local Development Frameworks (LDFs) will provide the planning framework in Buckinghamshire to 2026 and are written by the District Councils. These comprise a suite of development plan documents that will determine the precise location of growth and associated infrastructure for the plan period. They also set out the core planning and development control policies that will guide decisions in the plan area.

The LDFs will be required to conform to both the Spatial Strategy and the range of polices set out in the South East Plan, including the requirement for Green Infrastructure to accompany new development to deliver social, economic and environmental benefits in areas subject to growth proposals.

Buckinghamshire Community Strategy 2005-2008

The Buckinghamshire Community Strategy provides the framework for joint action by public, private and voluntary organisations in the County. It seeks to promote the development of sustainable communities within Buckinghamshire as places where people want to live and work, now and in the future. Key themes that can be supported by the Green Infrastructure Strategy include:

Cohesive Communities - Supporting the development of strong and cohesive communities throughout Buckinghamshire, empowering them to deliver solutions to local issues

Healthy Communities - Promoting the physical and mental health and wellbeing of people in Buckinghamshire and tackling health inequalities through partnership working

Accessible Communities and Transport - Ensuring ease and safety of movement for both people and goods, supporting sustainable growth and economic development, and enhancing and protecting the environment (e.g. through improved air quality)

Superb Environments - Securing a safe, prosperous and high quality environment in both rural and urban areas in Buckinghamshire. Many of the outcomes for Superb Environments can be delivered through Green Infrastructure initiatives, including:

- providing sustainable new developments which conserve natural resources and enhance the character of both the towns and the countryside
- providing better and easier access to the countryside for all
- using good quality urban design and construction methods
- ensuring protection of the built and historic environment
- increasing energy conservation and reducing air pollution
- protecting biodiversity
- minimising waste
- increasing personal responsibility for the environment amongst Buckinghamshire residents.

The Community Strategies for each of the District authorities within Buckinghamshire closely reflect these aspects of the County-level vision and are supported by the proposals for Green Infrastructure provision set out in this Strategy.

Buckinghamshire & Milton Keynes Biodiversity Action Plan 2000 – 2010

The Biodiversity Action Plan (BAP) for Buckinghamshire and Milton Keynes was produced by the Buckinghamshire Nature Conservation Forum in 2000 and proposes a framework for action to conserve the County's wildlife. Responding to the UK BAP, the local BAP seeks to target resources for appropriate habitat management and for large-scale habitat restoration and creation to increase the existing biodiversity resource and reverse the effects of habitat fragmentation.

The Plan has recently been reviewed under the direction of a partnership steering group comprising key members of the Buckinghamshire and Milton Keynes Biodiversity Partnership and operating under a Memorandum of Agreement established in 2006. The review has allowed a more specific and spatially defined set of targets to be met by the Partnership, including the identification of Biodiversity Opportunity Areas.

Buckinghamshire and Milton Keynes Rural Strategy 2008-2012

The Rural Strategy provides the first independent multi-agency action plan for Buckinghamshire and Milton Keynes' rural areas. The Strategy has been developed and delivered by Buckinghamshire Rural Affairs Group (BRAG) in partnership with Milton Keynes and reflects the needs and concerns as well as the opportunities presented to the County's rural communities. Utilising partnership working, it seeks to address the key issues impacting upon rural life in Buckinghamshire, including those impacting on its economy, communities and the environment. Through its adoption by rural stakeholders and bodies, service delivery organisations and through integration into Local Government processes the Rural Strategy acts as a key driver for change initiating a process of positive action in rural areas.

Buckinghamshire Rights of Way Improvement Plan (ROWIP)

The Countryside and Rights of Way (CRoW) Act 2000 required every Local Highway Authority to publish a Rights of Way Improvement Plan (ROWIP) within five years of its implementation. The Act specifically requires all ROWIPs to assess:

- The extent to which local Rights of Way meet the present and likely future needs of the public
- The opportunities provided by Rights of Way for exercise and other forms of open-air recreation and the enjoyment of the area
- The accessibility of Rights of Way to the blind or partially sighted and those with mobility problems

As the Local Highway Authority for Buckinghamshire, the County Council has published its ROWIP for the ten year period 2008-2018. This forms part of the Council's Local Transport Plan and sets out the Council's objectives for Rights of Way and access provision in a statement of action to:

- deliver an accurate and fully up to date Definitive Map and Statement (DMS)
- provide and protect a well maintained Rights of Way network
- publicise public Rights of Way and access information and the DMS
- deliver a better integrated and more accessible Rights of Way network
- improve the use and enjoyment of the Rights of Way network
- improve the asset management of the Rights of Way network
- provide an efficient, value for money service supported by high customer satisfaction
- support safe, strong and cohesive communities
- protect and assert the County's National Trails and Chiltern's AONB
- improve access to 'Open Access' sites
- deliver economic benefits to local communities and businesses
- generate positive historical, environmental and biodiversity benefits
- deliver health benefits for users and residents

Buckinghamshire Local Transport Plan 2006-2011

The draft Buckinghamshire Local Transport Plan (LTP) 2006-2011 is based on a twenty-year transport vision, aiming to 'secure the strategic and local transport infrastructure and services to sustainably develop the economy; to facilitate growth; and improve accessibility; whilst balancing free, safe and efficient movement of people and goods with protection of the environment.'

The LTP contains a number of issues and policy objectives that are of particular relevance to Green Infrastructure, including:

The countryside will be actively promoted for leisure & recreation

 Maintenance of footways & Rights of Way in rural areas will aim to improve access to specific facilities

Buckinghamshire Cultural Strategy 2003-2008

The Strategy sets out a range of actions to enhance the cultural opportunities throughout Buckinghamshire and addresses local issues by widening access to culture, celebrating diversity and value, fostering community pride and supporting creativity in the built and green environments throughout the County.

Buckinghamshire Infrastructure Study

Buckinghamshire County Council, Aylesbury Vale Advantage and the four districts in Buckinghamshire commissioned Colin Buchanan consultants to undertake a Buckinghamshire Infrastructure Study in 2007. The Infrastructure Study has been carried out in two phases. Phase 1 is focused on Aylesbury Vale District and Phase 2 is focused on the rest of Buckinghamshire. The study will form part of the evidence base for statutory planning and Local Development Framework preparation within the County.

Buckinghamshire County Council Minerals and Waste Local Development Framework

Buckinghamshire County Council is responsible for preparing a County wide Minerals and Waste Local Development Framework (MWLDF). The MWLDF sets out the spatial strategies and detailed land use policies and proposals for the extraction of minerals and management of waste in the County. An Annual Monitoring Report is submitted to the Government as part of the MWLDF.

District and Local Green Infrastructure Plans

In accordance with Government guidance the District authorities in Buckinghamshire (Aylesbury Vale, Chiltern, South Bucks and Wycombe) are undertaking audits and strategies for public open greenspaces in their urban areas.²³ This work should inform the recommended Local Green Infrastructure Plans at the District level, developed in-line with the agreed County-wide Strategy and Action Plan, and underpinned by standards for the provision of public open green space and the formulation of policies in Local Delivery Frameworks (LDFs).

Buckinghamshire Walking Strategy

The key drivers for the production of the Buckinghamshire Walking Strategy have been to meet the requirements of Central Government to produce a walking strategy as set out in Buckinghamshire County Council's Local Transport Plan 2.

The benefits of having a Walking Strategy are to help promote sustainable transport, improve peoples' health and encourage social inclusion. This can be achieved through

²³Planning Policy Guidance (PPG) 17 – Planning for Open Space, Sport and Recreation (ODPM, 2004)

joint working between partner organisations, better management of the walking asset, and a more consistent promotional message of walking as a mode of transport and a recreational activity. The Walking Strategy has one key aim: To get more people walking, more often, by delivering work more efficiently through improved partnership working.

A number of objectives have been agreed between the partnering organisations to deliver this key aim. They are as follows:

- 1. Creating a joint strategy
- 2a. Mapping the network; and
- 2b. Creating a route mapping system
- 3a. Managing the walking asset;
- 3b. Ensuring walking is considered at all stages in the land use planning process;
- 3c. Managing and mitigating the barriers to walking
- 4. Promoting walking consistently through key message(s)
- 5. Ensuring work is coordinated and joint efforts are made for seeking and maximizing impact of funding streams

Buckinghamshire County Council Sustainability Strategy

This is a high level internal policy document that encompasses and embeds sustainability into the heart of all Buckinghamshire County Council operations. The document has an action plan that incorporates all service areas that will be reviewed and updated annually.

The Buckinghamshire Sustainability Partnership Environment Task Group has been working on a Countywide climate change Action Plan. The Local Area Agreement (LAA) and the Comprehensive Area Agreement (CAA) include climate change and natural resource indicators.

NI185 (Percentage CO2 reduction from Local Authority Operations) is in the LAA. NI186 (Per Capita CO2 emissions in the Local Authority Area) and NI188 (Planning to adapt to climate change) are currently not in the core set of indicators but Buckinghamshire County Council is working on delivering these.

Chapter 3 Case Studies



Case Studies

When planning for Green Infrastructure enhancement or creation it is important to learn from previous examples of good practice. This Chapter focuses on five case studies that have provided high quality Green Infrastructure projects:

The Forest of Marston Vale - Delivering Green Infrastructure in a Growth Area

Milton Keynes Parks Trust - A 'Trust' approach to Green Infrastructure delivery

Northamptonshire County Council - Pocket Parks Scheme

River Nene Regional Park - Salcey Forest River Nene Regional Park

The City of London - Protecting fragile landscapes in South Bucks: Stoke Common



Delivering Green Infrastructure in a Growth Area



A corporate planting event in Bedford's Green Gateway - Photo by Tony Talbot

Introduction

The Forest of Marston Vale is one of 12 Community Forests in England. It was established in 1991 to use trees and woodlands to transform 61 square miles between Bedford and Milton Keynes, repairing a degraded landscape scarred by decades of clay extraction, brick making and landfill. Working with local communities, Government and businesses, the 40-year vision is to deliver environmentally led regeneration of the area, whilst providing major recreation, biodiversity, and quality of life benefits.

The Forest of Marston Vale was established by a partnership between the local councils, the Forestry Commission, the Countryside Agency and other local and national organisations. In 1997, the partners created the Marston Vale Trust, an independent registered charity, to take forward the creation of the Forest of Marston Vale.

Key Factors

The Trust is a social enterprise that owns and operates the Forest Centre, a purpose-built visitor centre and

conferencing facility set in the 225 ha Millennium Country Park. The Forest Centre generates revenue for the charity, both to manage the Millennium Country Park and to secure the Forest Team that is delivering the Forest of Marston Vale. The Forest of Marston Vale lies at the heart of the Milton Keynes and South Midlands Growth Area and the pressing need for new Green Infrastructure to meet the needs of growth in the Vale has brought even stronger relevance to the aims of the Forest, demonstrating the synergy between regeneration and growth.

Funding and Outcomes

Important components of the Green Infrastructure delivered by the Forest have been secured through Growth Area Funding from the Department of Communities and Local Government (CLG) and through section106 agreements as well as through grants, donations and corporate partnerships.

The Team has secured investments of over £8m in environmental infrastructure in the last 5 years. An example of the Forest's approach to targeted Green

Infrastructure provision is Bedford's Green Gateway, an area that lies between the village of Wootton and the Bedford suburb of Kempston which is accommodating a duelled and realigned trunk road, a new by pass to the West of Bedford and approximately 2,500 new houses.

The Trust has acquired over 100 acres of land through section 106 agreements, Growth Area Funding, grants and corporate donations, to create a contiguous area of community woodland that is preventing coalescence of the two settlements, linking to the existing rights of way network and National Cycle Network Route 51 and which will help to screen growing communities from new roads. Local people were actively involved in designing the new woodlands and over 1,000 people from local communities and supporting organisations have been directly involved in planting trees in the Gateway. The young woodland is already well used by local people and the Forest plans to continue to extend the community woodland over the coming years.

Tony Talbot
Managing Director, Forest of Marston Vale



A 'Trust' approach to Green Infrastructure delivery

Introduction

The Parks Trust is an independent charity that cares for Milton Keynes' parks and green spaces. It was established in 1992 as a registered Charity and a Company Limited by Guarantee with the primary objective to "provide, maintain and equip parks, gardens, landscaped areas woodlands, open spaces, playing fields, playgrounds

and recreational amenity space within Milton Keynes and the environs thereof". Two secondary objectives are public education and provision for recreation related to the green spaces.

The Trust cares for a total of around 1800 hectares of multi-functional strategic green space in Milton Keynes, including river valleys, woodlands, lakesides, parks and wide landscaped areas alongside the City's main 'grid' roads, for which the Trust holds 999-year leases from the local authority. To cover the costs of protecting, managing, and promoting these areas, the Trust was endowed with an income generating commercial property portfolio, including local shopping centres and office developments, by the Milton Keynes Development Corporation. These assets were calculated to be of sufficient value to generate the income required to maintain the open space in perpetuity.



©Milton Keynes Parks Trust

Key factors and benefits

The plan for the new city of Milton Keynes included the extensive network of strategic Green Infrastructure. This covers about 20% of the city's area and means no one in Milton Keynes is ever more than half a mile from a significant area of green space.

The structure of the Trust combines a voluntary Board of Trustees, made up of local people and responsible for setting the strategic direction of the Trust, with an executive team of professional staff responsible for the operational management of the green estate, running community activities in the parks and managing the Trust's commercial estate and other income generating assets.

The income generating portfolio/assets and the Trust's ability to manage these independently (within the requirements of the Charities Act) has addressed the challenge of generating sufficient income for the Trust to meet its Green Infrastructure obligations and objectives.

The Trust is an independent, single-purpose organisation focused on delivering

Green Infrastructure to a high standard. It is a key stakeholder in Milton Keynes and is well respected professionally and by local people for the work it does. As well as managing a diverse network of green spaces and running a popular range of community activities based on the parks, the Trust is able to apply its knowledge and expertise in planning for and delivering new Green Infrastructure as the city expands.



©Milton Keynes Parks Trust

Philip Bowsher
Landscape Planning & Development
Manager
The Parks Trust, Milton Keynes

For more information see www.theparkstrust.com



Northamptonshire County Council: Pocket Parks Scheme

Introduction

TThe scheme was introduced in the early 1980's following identification of a community need to provide access to the countryside close to where people live and work. The scheme has gone from strength to strength and there are now over 85 Pocket Parks across the County. All unique and varying in size from 0.04ha to 35ha and they are now to be found in all types of locations from busy town centres to quiet villages. Suitable sites vary from disused railways lines to old orchards and council land to old paddocks.

Key Factors

Pocket Parks are open areas of land: owned and managed by local people, providing free, open access for all at all times and helping to protect and conserve local wildlife, heritage and landscape.

The scheme is delivered by one full-time officer who supports the existing pocket parks. They also manage the pocket parks scheme grant which support the initial establishment of new parks. The officer's role assists and supports the communities desire to create new pocket parks and as a result approximately 2 to 3 new parks are established each year.



Photo by Ruth Douglas

Benefits & Outcomes

This national awarded scheme has provided over 160ha of community managed greenspace – the equivalent of around 260 football pitches. The entire cost of the Pocket Parks Scheme to the County Council is less than the cost of one Pelican Crossing.

Environmental, culturally & socially, pocket parks:

- Raise environmental awareness through education and practical conservation
- Ensure sustainable management of greenspace
- Promote biodiversity
- Provide venues for community events
- Raise awareness of local heritage

- Leave a lasting legacy to future generations
- Empower local people to make decisions about their environment
- Improve health, fitness and wellbeing
- Help to make communities safer and more cohesive, as skills and confidence to tackle new challenges develop.

Funding

The Scheme is funded by Northamptonshire County Council. The scheme funds new parks with a start-up grant of maximum £5,333, supported by the local borough/district council. After their first year, Pocket Parks are generally independent and source their own funding. The project helps establish new parks so that they can attract external funding and are sustainable in the long term.

Ruth Douglas
Pocket Parks Officer
Northamptonshire County Council



Salcey Forest River Nene Regional Park



©River Nene Regional Park

Introduction

Salcey Forest is ancient woodland, owned and managed by the Forestry Commission, situated on the clay plateau between Northampton and Milton Keynes. As a woodland site, it has always been an important public recreation area, and is hugely important for nature conservation. However, before the project to improve the woodland, visitor numbers were declining (fewer than 100,000 per year), facilities were tired, and the public perception of the site was often negative.

Key Factors

Initially, trails for walking and cycling were created, bridges were built to protect important archaeological features remaining from the medieval hunting forest, and a woodland cafe was built. Building on these initial successes, further funding was secured for the development of the River Nene Regional Park's first 'signature project', a tree top trail. This 300m aerial walkway, made from sustainable and locally sourced timber gives people a 'squirrel's eye' view of the forest as they ascend a gentle slope from the ground level to the forest canopy. This gently sloping gradient, along with specially designed flat stopping areas,

means that the trail is easy to use by those in wheelchairs or with pushchairs. The opening of the tree top trail has attracted thousands of visitors to Salcey Forest.

Funding

As the site is within the Milton Keynes and South Midlands growth area, funding to support Green Infrastructure projects was available through the Government's Growth Area Fund.

The success of the project has been demonstrated by the British Construction Industry Environment award, and the 250,000 visitors that use the site every year, with over 1,000 a day during busy periods. Capital funding was provided by the River Nene Regional Park through the Growth Area Fund and the Forestry Commission is responsible for the long term management and funding of the site.

Laura Kitson, Project Officer, River Nene Regional Park



©River Nene Regional Park



Protecting fragile landscapes in South Bucks: Stoke Common

Introduction

The City of London has a long track record of managing top class open spaces and has owned Burnham Beeches National Nature Reserve in South Buckinghamshire for 127 years. The City recognises that such fragile landscapes are ultimately unsustainable unless they can be reconnected to the wider countryside and valued

by people for their contribution to biodiversity and access. Stoke Common Site of Special Scientific Interest (SSSI) is 1.5 miles from Burnham Beeches and once formed part of a much larger, ancient landscape that included both sites.



South Bucks District Council (SBDC) had owned Stoke Common since 1993 and recognised that they had neither the resources nor the expertise to restore this rare and fragile heathland habitat. This was made particularly evident when the SSSI was assessed as being in 'unfavourable and declining condition'. SBDC recognised the City of London's reputation at Burnham Beeches for habitat and access management and that the City



Photo by: A Barnard

had staff and other resources locally available. Both organisations recognised that these benefits could be used to the advantage of Stoke Common and on that basis ownership of the land was transferred to the City of London in 2007.

Benefits

Biodiversity - The SSSI has immediately benefited from the change of ownership. A new site specific management plan is currently being written by the Burnham Beeches team who have a strong track record of land/habitat restoration, links to recognised experts and the resources (or the means to create resources) to target and meet the specific needs of the site.

Access for all - Access and protection of the site are now assured 'in perpetuity' via the City of London's Open Spaces Act of 1878.

Sense of Place - The support of the local community is key to the successful management of the site. The City of London is already forging new links and encouraging local stakeholder involvement.

Healthy lifestyles The protection of the site for recreation ensures that the local population have permanent access to high quality open space on their doorstep. Low key improvements to the access network will enhance opportunities to use the site for fresh air, exercise and tranquillity.

Connectivity - The management plan reintegrates Stoke Common with the wider landscape and recognises the importance of further enhancing these links.

An integrated approach to provision -The City of London has gained a larger platform from which to influence local planning decisions to the benefit of the

countryside in the area.

Outcomes so far

- Targeted action plan to achieve sustainable conservation aims.
- Partnership working with local graziers, local authorities, businesses, and contractors.

- Income generation to the area via grant applications including the employment of local people.
- The formation of a local volunteers group managed jointly by the City of London and the British Trust for Conservation Volunteers. This has already provided a 3 year, full time post.
- Enhanced local stakeholder involvement.
- Enhanced access and information provision for visitors.
- Potential use of an adjacent brown field site to directly support the management of the SSSI

Funding

Long term funding has been sourced from the City of London and South Bucks District Council. The Heritage Lottery Fund is supporting the formation of the volunteer scheme. An application under the Higher Level Stewardship scheme will be submitted in 2008 to help meet the 10 year cost of achieving favourable condition for the SSSI. The grazing scheme may be able to use 'Leader' funding to enhance provision of high quality beef to a local audience.

Andy Barnard
Superintendent of Burnham Beeches and
Stoke Common
City of London

Chapter 4 Analysis of Green Infrastructure Resources



Overview of Resources

Buckinghamshire has a wealth of Green Infrastructure resources that provide benefits to both people and wildlife. This section provides an overview of these resources concentrating on access, biodiversity, landscape and historic environments.

The major Green Infrastructure resources of strategic significance in Buckinghamshire are illustrated in Figure 4.1. These include:²⁴

Accessible Green Infrastructure

This resource is highly varied and includes land which is normally available for open access on foot such as:

- Country Parks, for example Black Park, Langley Park, Denham and Thorney
- 43ha of Open Access land provided under the provisions of the Countryside and Rights of Way Act 2000 which includes commons, heaths and downs.
- Forestry Commission land; National Trust land; Woodland Trust land

²⁴It should be noted that individual sites or areas can fall within several of the other resources.

 Nature Reserves managed by the Royal Society for the Protection of Birds and the Berkshire, Buckinghamshire, and Oxfordshire Wildlife Trust (BBOWT).

Countryside Access Routes

The County has a 3324km Rights of Way network, which is predominantly a 'walking' network with c. 2600km of footpaths of which c. 1270km are promoted recreational routes (including sections of The Ridgeway and Thames Path National Trails).

The Rights of Way network also includes c. 580km of bridleways. Buckinghamshire also benefits from c.80km of navigable waterways and towpaths including the River Thames and the Grand Union Canal.

Biodiversity and the Natural Environment

The County contains a diverse but highly fragmented range of semi-natural habitats - including woodland; heathland; rivers, canals, streams, lakes and other water bodies; wetlands; and grasslands.

Whilst over 80 percent of Buckinghamshire is rural in nature, only 4 percent of the County's biodiversity resources are currently protected by nature conservation designations.

Designated sites include 3 Special Areas for Conservation, 2 National Nature Reserves, 60 Sites of Special Scientific Interest, 342 Local Wildlife Sites (formerly County Wildlife Sites), 15 Local Nature Reserves and over 1000 Biological Notification Sites.

Historic Environment

The County contains a wealth of historical landscapes and features including:

- Ancient hunting forests and ancient woodland
- 34 registered historic parks and gardens
- 141 scheduled ancient monuments
- Over 6,000 listed buildings and numerous villages of special historic and architectural conservation interest. Many of these heritage sites are accessible to the public such as the 17 National Trust properties within the County
- Over 16,000 archaeological sites or features are recorded on the County Sites and Monuments Record. The County also has a rich, diverse and generally well-preserved historic landscape.

Distinctive, High Quality and Diverse Landscapes

The character of the County's landscapes is one of diversity and contrasts. It is primarily a rural County, and has a clear separation between town and countryside.

The clay vales in the north are predominantly rural with small market towns and villages, whilst the wooded heaths and commons in the south are juxtaposed with a number of urban areas.

Over a quarter of Buckinghamshire is included within the Chilterns Area of Outstanding Natural Beauty where the wooded chalk hills, escarpment and villages and towns are particularly distinctive.

A third of Buckinghamshire is protected as Metropolitan Green Belt, mostly in the south of the County where it meets the Colne Valley Regional Park and the outer London boroughs. The southern extent of the County is marked by the distinctive landscape of the Thames Valley shared with Berkshire.

Methodology

It is essential that documents that are intended to have a role in informing and guiding planning processes are robust in their methods of analysis. This Strategy uses spatial representations of the County's Green Infrastructure assets based on information derived from Buckinghamshire County Council's Geographical Information System database and consultation with professionals in Green Infrastructure management. Assets have been examined across the board, incorporating accessible greenspace, biodiversity, heritage, access routes and landscapes on an equal basis and integrating these themes in order to assess and identify areas of provision, opportunity and deficiency.

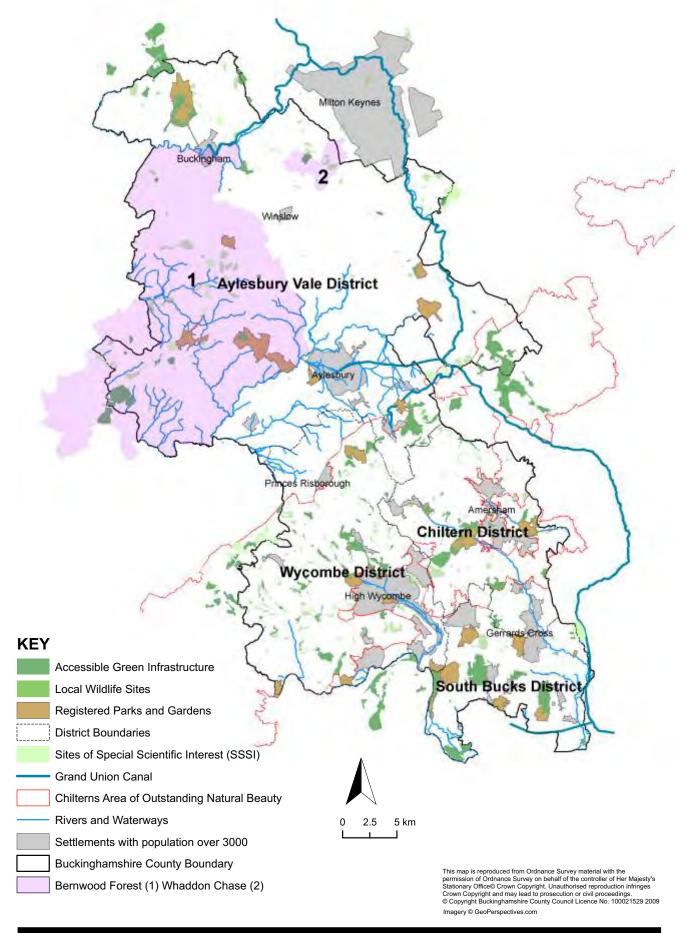
ANGSt Based Assessment of Green Infrastructure

The overall approach used in the identification, analysis and interpretation of Green Infrastructure in this Strategy conforms to a nationally recognised approach and is consistent with that used in neighbouring counties. The assessment of Green Infrastructure provision, opportunity and deficiency in this Strategy is based upon the Accessible Natural Greenspace Standard (ANGSt) by Natural England and the Forestry Commission and supported by national Government.²⁵

ANGSt is considered a national benchmark, and is accepted as: forming part of Government guidance on strategic green space provision having the best fit to Green Infrastructure planning and assessment being important for assessing levels and assisting in the production of standards and targets.

²⁵McKernan and Grose, 2007: 'An analysis of accessible natural greenspace provision in the South East. Forestry Commission and High Weald AONB Unit

Figure 4.1 Overview of Green Infrastructure Resources in Buckinghamshire



The Standard emphasises the importance of communities having easy access to different sizes of natural and semi-natural green spaces close to where they live and provides two measures of analysis based on scale (sizes of green space provision) and catchment (representing the zone of influence provided by a provision and the distance that people are prepared to travel).

The ANGSt model states:

- No person should live more that 300 m from their nearest area of natural greenspace of at least 2 ha in size (and at least 2ha of accessible natural greenspace per 1000 population).
- There should be at least one accessible 20 ha site within 2 km of home.
- There should be one accessible 100 ha site within 5 km of home.
- There should be one accessible 500 ha site within 10 km of home.

ANGSt emphasises the importance of communities having easy access to natural (and semi-natural) Green Infrastructure close to where they live. In-line with the Sustainable Communities agenda, such spaces provide important opportunities for people to experience biodiversity and 'natural' areas as part of their everyday lives, and provide recognised benefits for health and wellbeing. As such, the use of ANGSt to enable comparative measures of provision and quality of life opportunities between communities is recommended.

Issues with Assessing Green Infrastructure Provision

For the purpose of analysing and assessing the provision of Green Infrastructure at a strategic level, this Green Infrastructure Strategy employs the ANGSt model. Key to the decision to use ANGSt is the need to use an approach supported at a national policy level (e.g. Planning Policy Guidance through PPG17). The standard is generally accepted as the most appropriate measure by professionals working in planning and development.

It must be pointed out however that ANGSt is a quantitative measure that does not take into consideration:

Site quality – measurement does not assess the level of quality of a site nor whether it has visitor facilities.

Site capacity – although assessment can show that an urban area is well provided for in terms of Green Infrastructure provision, it is not indicative of whether a particular site has the capacity to receive any more visitors not whether it is underused.

Site sensitivity – a site of high sensitivity (e.g. SSSI) may not be able to support a proposed increased use or visitation due to the nature of its sensitivity.

Linear access (RoW) – ANGSt is not a sufficient measurement of public Rights of Way (which are themselves able to contribute greatly to Green Infrastructure provision).

At a local/ District level the ANGSt measure, on its own, is not sufficient for greenspace analysis and must be used along with other measures of assessment useful and appropriate to local provision and needs. This Strategy supports the guidance provided in PPG17 that suitable means of assessment of local green space and Green Infrastructure provision should be developed and measured at the local level. The use of the National Playing Fields Association (NPFA) 6 Acre Standard (6 acres/1000 people) is not considered to be a relevant measurement in this respect. This strategy however supports the use of the 6 Acre Standard for the assessment of sport pitches and play area provision in urban areas.

Accessible Green Infrastructure and Countryside Access Routes

This section provides a strategic overview of the quantity, quality and accessibility of Green Infrastructure resources in Buckinghamshire. Green Infrastructure current and projected deficits across the County are also examined in this section.

Over 80 percent of Buckinghamshire is rural, with landscapes made up primarily of privately owned farmland and woodlands. Within rural areas there are many sites accessible to the public, either as managed public sites, such as country parks, or as statutory open access land, although the spread and distribution of these sites is uneven. Much of Buckinghamshire is accessible via the Rights of Way network, which together with access sites provides valuable opportunities for countryside recreation for urban-based populations within and around the County. This County-level strategy focuses on defining this strategic network of accessible Green Infrastructure and access links that connect town and country.

A strategic audit of the existing supply of accessible Green Infrastructure in Buckinghamshire (provided in Appendix E) provides a strategic assessment of future needs for accessible Green Infrastructure provision in response to the demands of expanding communities within Buckinghamshire, and around the County's boundaries. The assessment also considered the existing network of countryside access routes that link Green Infrastructure sites to settlements and the wider countryside.

In accordance with Planning Policy Guidance 17 (PPG17) requirements, the District authorities in Buckinghamshire have, or are currently undertaking, assessments of accessible greenspaces within their areas. Underpinned by this Green Infrastructure Strategy, this work will help identify and assess the variety of open spaces with public

access in urban areas such as grass verges along roads, allotments, school playing fields and sports pitches, local nature reserves and gardens that provide greenspaces of amenity and ecological value.

Strategic Audit of Existing Accessible Green Infrastructure

For the purposes of this audit accessible strategic Green Infrastructure is defined as land largely outside of urban areas that is normally available for public access on foot, providing opportunities for open access for informal recreational activities. In many urban areas there are important areas of greenspace, however most of these sites are less than 2 ha in size and are not fully considered in this Strategy. The extent and distribution of the different categories of land that meet this definition of accessible Green Infrastructure is shown on Figure 4.2 and includes:

- Countryside Rights of Way (CROW) Act 2000 Open Access Land (commons, heaths and downs)
- Country Parks²⁶
- Woodland Trust Land with Open Access
- Forestry Commission Land
- National Trust Land with Open Access²⁷
- Buckinghamshire County Council Land with Open Access²⁸
- Nature Reserves²⁹

Buckinghamshire's accessible Green Infrastructure of significance (defined on size criteria) is listed in the classification provided in Appendix E. In line with PPG17 recommendations, and to conform to a strategic approach to analysis, a minimum size threshold of 2 ha has been applied.

It is recommended that local or District level Green Infrastructure Studies and Green Space Plans should go beyond the 2 ha threshold used in this Strategy. Excellent guidance on how to approach the assessment and analysis of green spaces and provision is provided in PPG17 and in a range of documents published by organisations such as CABE Space.³⁰

Strategic Audit of Existing Countryside Access Routes

Buckinghamshire is endowed with an intricate network of countryside access routes, linking communities and providing access in and out of the main settlements, and enables access to accessible Green Infrastructure sites and landscapes in the wider countryside.

Page 59

²⁶Urban parks and other major open spaces in urban areas owned/managed by District Councils are not included in this assessment.

²⁷Urban parks and other major open spaces in urban areas owned/managed by District Councils are not included in this assessment.

²⁸Other than Country Parks owned by Buckinghamshire County Council

²⁹Includes the County's 2 NNRs, 15 LNRs and other land managed as nature reserves by the Wildlife Trusts

³⁰Available via CABE SPACE website http://www.cabe.org.uk/

in Buckinghamshire Milton Keyne Buckingham Winslow Aylesbury Vale District Aylesbury Chiltern Distric **Vycombe District** High Wycombe Key Accessible Green Infrastructure over 2ha **Grand Union Canal** South Bucks Distric **River Thames** National and County Promoted Recreational Routes Settlements with population over 3000 Public Rights of Way This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationary Office® Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. © Copyright Buckinghamshire County Council Licence No. 100021529 2009 **Buckinghamshire County Boundary District Boundaries**

The existing network of countryside access routes considered to be of greatest strategic significance in Buckinghamshire is presented in Figure 4.2 and listed in Appendix E. These routes include:

- Promotional Recreational Routes the network of routes for walkers, horse riders and cyclists actively promoted by Natural England (National Trails) and Buckinghamshire County Council. The Chilterns Conservation Board also promotes recreation routes including the Chilterns County series. The Chiltern Society has developed the Chiltern Way, a long distance route circumnavigating the Chiltern Hills.
- The Public Rights of Way network the network of bridleways (access on foot, horseback or pedal cycle), byways (access on foot, horseback, pedal cycles and wheeled vehicles of all kinds) and footpaths (access on foot only).
- Strategic waterways and towpaths the network of navigable river/canal routes for watercraft that provides access for walking and cycling.

Strategic Assessment of Accessible Green Infrastructure Provision and Access Route Network Linkages

The Public Rights of Way network provides important linkages between settlements and the wider countryside (Figure 4.2). Research illustrates that, whilst there is an extensive network of promoted routes in north Buckinghamshire, many of these have poor direct links to centres of population. Many routes provide important opportunities for informal recreation and allow exploration of otherwise 'underused' area of the County and would provide many benefits if they could be better linked to urban areas.

Figure 4.3 identifies the location and distribution of accessible Green Infrastructure in each of the above size categories in relation to the main settlements to establish areas of deficiency measured against the ANGSt requirements. Based on this data, an assessment of accessible greenspace provision by settlement is set out in Appendix E.

Table 4.1 shows the percentage of households in each District and the Buckinghamshire that meet ANGSt.³¹ It illustrates that Aylesbury Vale is the most deficient in accessible greenspace. The relative under provision of greenspace will be exacerbated by new urban growth unless: new accessible green space is provided; links to existing sites are improved; and current suitable sites receive investment to enable them to withstand increased use from the increase in population.

For this study settlements with a population over 3000 (based on 2001 census figures) are considered. This threshold is used as it is considered to encompass all the main settlements in Buckinghamshire (i.e. market towns and larger villages) where demand for

Page 61

³¹From: Kernan and Grose, 2007(Forestry Commission and High Weald AONB Unit) 'An analysis of accessible natural greenspace provision in the South East'

Table 4.1 Table showing percentage of households that meet the ANGSt Requirements in Buckinghamshire

		% of households meeting requirement					t	
District area	No. of dwellings	Within 300m of 2ha+ site	Within 2km of 20ha+ site	Within 5km of 100 ha+ site	Within 10km of 500ha+ site	Meeting all ANGSt requirements	Meeting none of the ANGSt requirements	Served only by linear greenspaces
Aylesbury Vale	68,248	7	16	27	15	1	69	32
Chiltern	37,514	16	59	70	33	2	0	0
South Bucks	26,727	24	86	100	46	7	0	0
Wycombe	66,689	28	89	96	0	0	2	1
Total County	199,178	18	58	68	18	2	24	11

access to greenspace is of greatest significance in a County-wide context. There are 19 settlements in Buckinghamshire with a population over 3000. Assessment reveals that only five of the settlements considered in this study met the minimum ANGSt requirements for provision of larger accessible natural greenspace. These are:

◆ Aston Clinton
 ◆ Amersham
 ◆ Buckingham
 ◆ Chesham
 ◆ Wendover

The assessment found that all 19 settlements are well subscribed in relation to the minimum ANGSt requirements of 2ha of accessible greenspace per 1000 population.

However, none of the other 19 settlements currently meet the minimum requirements with respect to the provision of accessible greenspace combination of 20ha, 100ha and 500ha. Significantly, Aylesbury Vale does not meet the Standard in respect of providing at least one 20ha site within 2km and one 500ha site within 10km. There is also seen to be a general deficiency of accessible Green Infrastructure over 100ha in Aylesbury Vale District.

An assessment of accessible greenspace provision by District is provided in Table 4.1 (existing situation) and Table 2 (projected situation for 2026) in Appendix E. This analysis

shows that, at the District level, current provision of accessible greenspace exceeds the ANGSt requirement of 2ha per 1000 population – both now and in 2026 (Draft South East Plan looks at spatial vision for the region up to 2026). However, analysis shows that provision at all tiers in the hierarchy is poorly distributed in relation to the main settlements, particularly those in Aylesbury Vale District. Other issues need also to be addressed, particularly those in relation to how the availability of current provision may be affected by growth related requirements of communities beyond the County boundary.

Need for Enhanced Provision

Based on ANGSt, this assessment has identified the need to provide new accessible natural greenspace in appropriate locations in order to meet the needs of growth communities within and around the County over the next twenty years. An enhanced level of provision would need to be supported by improvements to the public rights of way network in-line with the Buckinghamshire Rights of Way Improvement Plan. It is recommended that new provision of accessible greenspace sites and linkages are undertaken in order to:

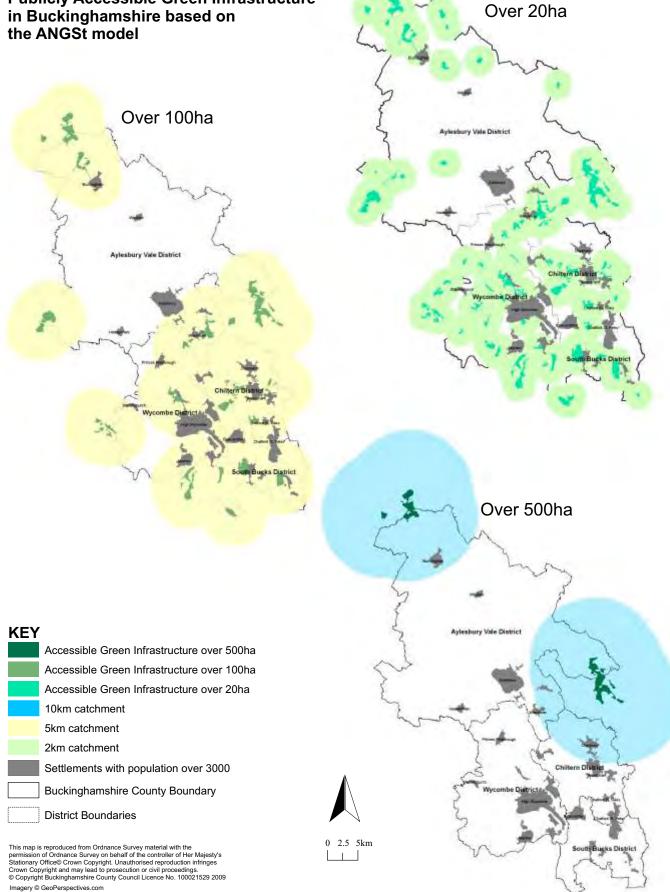
- Address the spatial deficiencies in provision identified by this study for specific settlements.
- Link into the strategic access route network.
- Take into account the opportunities for enhancement of Green Infrastructure assets such as natural habitats, historic environment assets and landscapes identified elsewhere in this Strategy.

The quality of accessible Green Infrastructure within the County is of key importance. 'Quality' in this context includes the range, condition and adequacy of facilities available within accessible sites and whether these are sufficient to meet the needs of the surrounding population. For example, larger areas of accessible Green Infrastructure may need public toilets, play areas, other recreational facilities as well as improved access facilities and opportunities that accommodate special needs. The design and positioning of such facilities can help focus visitor pressures into areas of a site where pressure is best absorbed. A quality audit would require more detailed, site based assessment of Green Infrastructure areas identified to assess the overall quality of provision. Although this work is outside of the scope of this Strategy, initial work to audit the quality of selected Green Infrastructure in the south of the County has been commissioned by the North West London Green Arc Partnership using Green Flag Standards³² as a benchmark.³³ This work is recommended as a useful model for auditing local Green Infrastructure provision in the County to inform priorities for management and future investment.

³²Green Flag Standards http://www.greenflagaward.org.uk

³³South Bucks Heaths and Commons and the Colne Valley Regional Park Greenspace Site Audits (CBA for the North West London Green Arc Partnership, March 2007)

Figure 4.3 **Publicly Accessible Green Infrastructure**



Summary

Areas of the County, such as the Chilterns, South Bucks and the Thames Valley are relatively well provided for in terms of their accessible Green Infrastructure networks. Elsewhere, such as the north and around Aylesbury have comparatively less provision and do not meet ANGSt requirements. It is recommended that measures be put in place to address this deficiency.

Much of the Green Infrastructure especially in the south of the County serves large population centres in neighbouring areas. As described in ANGSt, most people need accessible Green Infrastructure close to where they live so that they can gain access directly from their homes without the need to travel. A high quality experience for all users is also a primary consideration.

Whilst there is a high value for spaces on people's doorsteps it is also most important to realise that people will always be drawn to key existing Green Infrastructure assets within the County. Priorities need to be put in place to address how these sites can be better supported in order to meet these demands and how new opportunities can be created in order to reduce the increasing pressures put on sites that are already at capacity or have high sensitivity.

This Strategy recommends that local or District level Green Infrastructure studies and greenspace plans should be undertaken in accordance with PPG17 that 'drill-down' beyond the thresholds levels used in the strategic approach used to prepare this Strategy and assess elements such as carrying capacity, use, sensitivity and quality.

The Buckinghamshire GIC provides a guideline methodology for the assessment of Green Infrastructure at local levels and the engagement of communities in this process.

Environmental Context and Strategic Opportunities

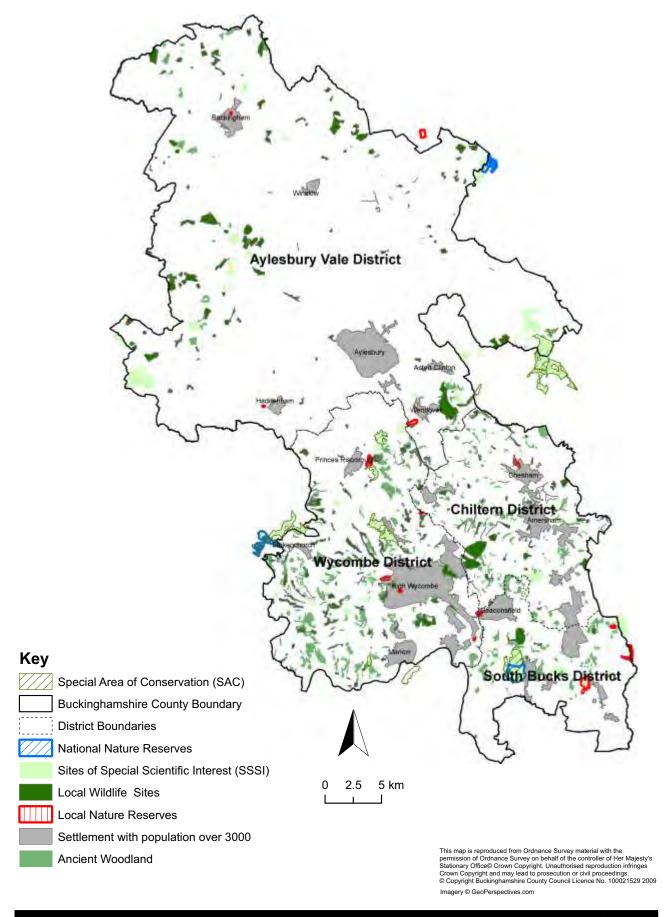
This section outlines the existing Green Infrastructure assets in urban and rural Buckinghamshire and provides a Geographical Information System (GIS) analysis of the strategic opportunities for Green Infrastructure. The assets are considered in relation to the following key themes:

- Biodiversity and the Natural Environment
- Historic Environment
- Landscape Character
- Accessible Green Infrastructure (See Analysis section)
- Access Routes (See Analysis section)

Biodiversity and the Natural Environment

Buckinghamshire's varied geology and topography gives rise to a County rich in landscape and wildlife. There are many rare species of plants and animals in

Figure 4.4 Existing Biodiversity Resources – Designated Sites



Buckinghamshire that are among the rarest in the UK.³⁴ It is essential that our existing biodiversity resources are conserved and this is an important focus of this Strategy. This sub section examines existing biodiversity resources in Buckinghamshire and concentrates on the Buckinghamshire & Milton Keynes Biodiversity Action Plan (BAP).

Existing Biodiversity Resources

Buckinghamshire has a wealth of existing Biodiversity resources including Sites of Special Scientific Interest, special areas of conservation, local nature reserves, local wildlife sites and ancient woodland. (see Figure 4.4).

The Buckinghamshire & Milton Keynes Biodiversity Action Plan (BAP), established by The Buckinghamshire and Milton Keynes Biodiversity Partnership (BMKBP), identifies the following key wildlife habitats in the County as a priority for conservation, based on the UK BAP habitats of Arable and Horticulture; Earth Heritage Sites; and Urban Habitats:³⁵

- Acid Grassland
- Calcareous Grassland
- Eutrophic Standing Water
- Hedgerows
- Lowland Meadows
- Reedbeds
- Rivers and Streams
- Woodlands (including Lowland Mixed Deciduous Woodlands, Lowland Beech and Yew Woodland and Wet Woodland)

- Arable Field Margins
- Chalk Rivers
- Fens
- Lowland Heathland
- Open Mosaic Habitats on Previously Developed Land Ponds
- Traditional Orchards
- Wood Pasture and Parkland

Strategic Biodiversity Opportunity Mapping

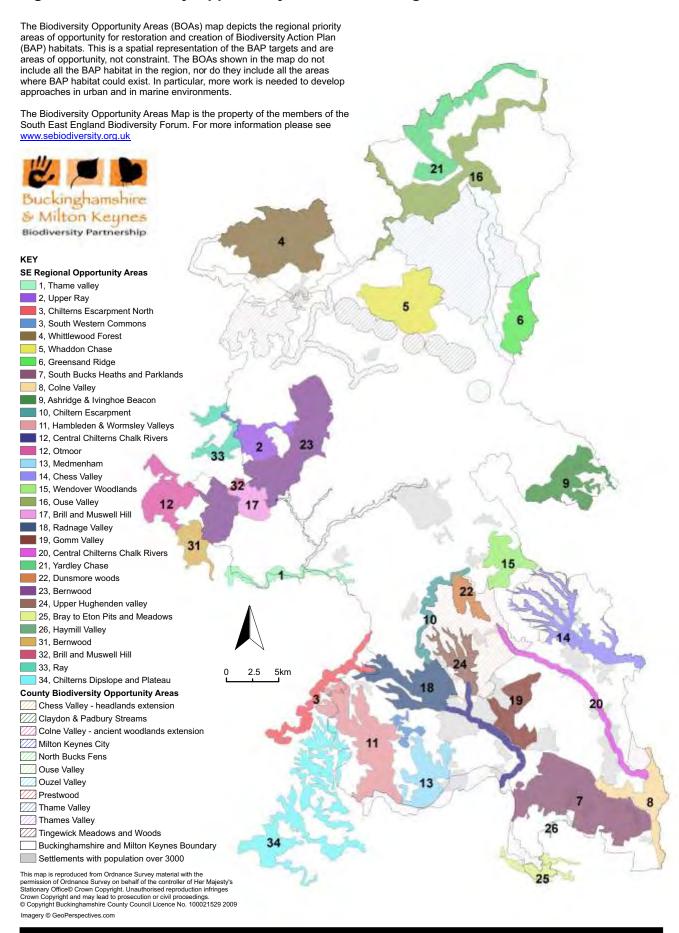
The BAP notes that 'only 4% of the County is protected by designation as National Nature Reserves (NNR), Special Area of Conservation (SAC), Site of Special Scientific Interest (SSSI) or Wildlife Sites but 82% of Buckinghamshire is rural in nature. Due to the small size of the protected biodiversity resources and its highly fragmented nature, sustainable biodiversity can only come about through the targeting of resources for appropriate habitat management and for large scale habitat restoration and creations to increase the existing resource and reverse the effects of fragmentation.'

In response, the BMKBP has recently undertaken preliminary work to identify 27 'Areas of Biodiversity Opportunity' in Buckinghamshire and Milton Keynes. These areas, shown in Figure 4.5 indicate at a strategic level, where habitat management, restoration and creations would be most beneficial in Buckinghamshire. Biodiversity Opportunity Areas (BOA) are indicative, thus their boundaries may be subject to change as more detailed

³⁴For a list of protected species and BAP species please refer to: Biodiversity reporting and Information Group. Report on the Species and Habitat Review. Report to the UK Biodiversity Partnership. June 2007.

³⁵For information on specific BAP species and protected species please refer to the Bucks & MK BAP (2000-10) or visit www.buckscc.gov.uk/bcc/content/index.jsp?contentid=978055313

Figure 4.5 Biodiversity Opportunity Areas in Buckinghamshire and the South East



information becomes available and it is not intended that they are used at a local scale for site planning purposes.

BOAs include areas where there are concentrations of designated sites and priority habitats and/or natural linking features such as river corridors, valleys and escarpments. This approach allows biodiversity conservation action to be targeted at a landscape scale. Buckinghamshire and Miltom Keyney Biodiversity Opportunity Areas are described in Table 4.2

Bernwood

Table 4.2 Areas of Biodiversity Opportunity

N.B. (*) - Areas shared between the administrative areas of Buckinghamshire and Milton Keynes.

(**) - Areas exclusive to Milton Keynes.

Biodiversity Opportunity Areas

Ashridge & Ivinghoe Beacon

Brill & Muswell Hill Central Chilterns Chalk Rivers

Chess Valley
Colne Valley
Comm Valley
Comm Valley
Chiltern Escarpment
Dunsmore Woods
Greensand Ridge (*)

Hambleden & Wormsley Valleys

Ouse Valley (**)

Radnage Valley

South Bucks Heaths & Parklands
Thame Valley
Upper Ray
Upper Ray
Wendover Woodlands
Whaddon Chase
Yardley Chase (**)

South Western Commons
Upper Hughenden Valley
Wendover Woodlands
Whittlewood Forest

BOAs identified by neighbouring counties

Bray to Eton Pits & Meadows
Chilterns Dipslope and Plateau
Haymill Valley

Otmoor

County Biodiversity Opportunity Areas

Tingewick Meadows & Woodlands

Chess Valley - Headlands extension Claydon & Padbury Streams
Colne Valley - Ancient Woodlands extension Milton Keynes City (**)

North Bucks Fens
Ouse Valley in Aylesbury Vale
Ouzel Valley (*)
Prestwood

Ouzel Valley (*) Prestwood
Thame Valley - extension Thames Valley

The primary function of Areas of Biodiversity Opportunity is to allow the BMKBP to focus the delivery of the BAP to 2010 and beyond. Of the 27 areas, the Partnership has prioritised the following for the initial delivery of the BAP, with the other areas to be brought forwards as and when opportunities or needs arise:

- Bernwood and Brill
- Chiltern Escarpment
- Greensand Ridge
- Ouse Valley
- South Bucks Heaths and Parklands
- Chess Valley
- Colne Valley
- Ludgershall and the Claydons
- Radnage Valley
- Upper Ray

Appendix F provides a brief outline of each Biodiversity Opportunity Area, detailing BAP habitat and species targets and delivering these in conjunction with existing projects. It is intended that the Biodiversity Opportunity Areas will be integrated with opportunities for enhancing access, historic environment assets and landscapes throughout the County. This process will need to ensure that priorities for biodiversity management, restoration and creation, endorsed by BMKBP, are fully incorporated as a fundamental element of this Strategy allowing for the planning and management of Green Infrastructure across Buckinghamshire.

Summary

Buckinghamshire contains a biologically diverse range of semi-natural habitats – from woodland, heath land, and grasslands to rivers, streams and wetlands – that support a diversity of wildlife species. As identified by the Buckinghamshire and Milton Keynes BAP (2000-2010), these habitats are under considerable pressure yet only 4% of the County's biodiversity resources (by land area) are currently protected by nature conservation designations. Much of the resource is also isolated and highly fragmented.

There are significant opportunities, through Green Infrastructure provision and the appropriate targeting and application of agri-environment schemes, to enhance the connectivity of the biodiversity network by linking, buffering and enhancing existing habitats, and through the (re)creation of habitats on a landscape-scale.

The Historic Environment

Existing Historic Environment

Conserving and realising the potential of Buckinghamshire's historic environment, including archaeological earthworks and ruins, standing historic buildings and surviving historic landscapes as part of the wider Green Infrastructure network is a key focus for this Strategy.

Buckinghamshire's historic environment is distinctive and diverse. It has developed through a history of human activity, and people have left behind a unique physical record of their lives and stories that spans over 450,000 years. The historic environment of Buckinghamshire comprises landscapes, towns, villages and buildings, and archaeological sites and features. Characteristic features of this predominantly rural County include: prehistoric and Roman settlements; medieval earthworks of deserted villages, moats and ridge and historic towns and villages with a rich vernacular architecture; large country houses set within historic parks and gardens; historic field patterns and ancient woodlands; railways; and canal networks. Buckinghamshire is particularly renowned for its fine rural landscapes containing many historic parks and gardens including the internationally significant 'English Versailles' at Stowe.

Buckinghamshire's historic environment also makes a valuable contribution to recreation and tourism through visitor attractions. The following existing heritage-related attractions within Buckinghamshire have been identified as having a strategic level interest:

- Chiltern's Open Air Museum
- Chenies
- Cliveden House
- Langley Park
- Stowe Landscape Park
- Waddesdon House
- West Wycombe Landscape Park
- Quainton Railway Centre
- Buckinghamshire County Museum
- Bletchley Park Museum

The historic environment is a combined description of an area's built heritage, archaeology and historic landscape. Some of the resource lies hidden beneath the ground in the form of archaeological deposits; these assets cannot normally be directly perceived by local people and visitors but can indirectly contribute to Green Infrastructure through museums, interpretation boards, local history and sense of place. They can sometimes provide a focus for community-based archaeological projects. Other elements, such as the area's historic buildings and landscape, supply a highly visible record of agriculture, industry and commerce over the millennia and now form an integral aspect of peoples' daily lives.

Figure 4.6 Historic Landscape Types in Buckinghamshire

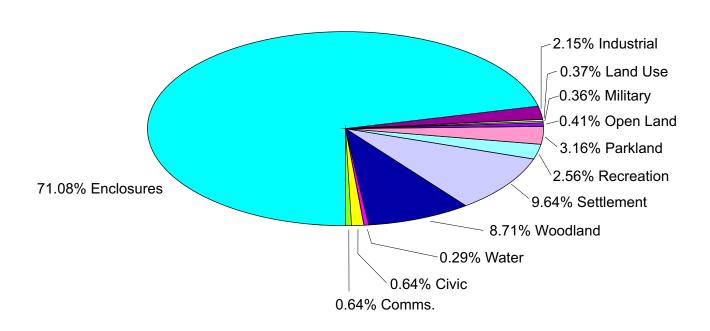
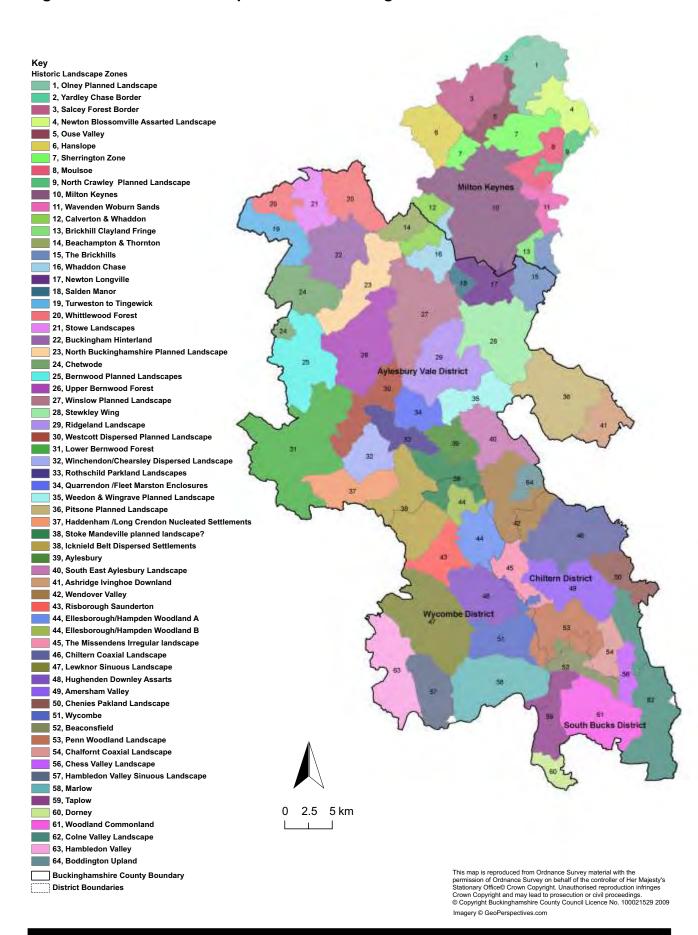


Figure 4.7 Historic Landscape Zones in Buckinghamshire



Many historic landscape features are also important elements of the natural environment, such as commons, down-land and ancient woodlands. The built part of the historic environment is equally rich, with towns, villages and hamlets spanning 1000 or more years of history, supplying vibrant environments for modern communities. It is important therefore to place weight on conserving and realizing the potential of the visible components of the historic environment, archaeological earthworks and ruins, standing historic buildings and surviving historic landscapes. In some cases restoration or even recreation of past structures and landscapes may be desirable. Other assets can provide opportunities; for example a canal towpath or railway might be re-invigorated as a cycling route.

The historic environment is sensitive to change. It needs to be properly understood before change is planned so that it retains enough historic character and can make its full contribution to shaping future communities. The historic environment can provide a range of public benefits as many of the historic landscapes and protected monuments are a visitor focus and already provide areas of accessible greenspace. The implementation of this Green Infrastructure Strategy could assist in the restoration and enhancement of the historic environment.

Historic Landscape Characterisation

The aim of the Historic Landscape Characterisation is to create a clear and consistent model of the historic landscape, which could be used to plan for a future that retains the distinctive historic characteristics of Buckinghamshire's landscape. As part of the project a list of Historic Landscape Types (HLTs) found throughout Buckinghamshire has been compiled. Landscapes were then assigned to a type and mapped accordingly.

The proportional distribution of HLTs throughout Buckinghamshire is indicated illustratively in Figure 4.6. Analysis illustrates enclosed fields as forming the dominant landscape character of Buckinghamshire, accounting for over 71% of the County:

Buckinghamshire County Council has also defined 64 draft Historic Landscape Zones for the entire County (see Figure 4.7). These Zones reflect distinct patterns of landscape character that illustrate a broadly common history and visible heritage. The defining of the Historic Landscape Zones in the County has been strongly influenced by the Buckinghamshire Historic Landscape Characterisation Study, but also takes into account other aspects of the historic environment - including archaeological sites, historic buildings and documented historic land units such as Parishes, townships, forests and major estates. Buckinghamshire's Historic Landscape Zones aim to provide an integrated spatial framework for understanding and managing the County's historic environment assets – including the built heritage, archaeology and historic landscape.

Figure 4.8 Historic Landscape Opportunities in Buckinghamshire

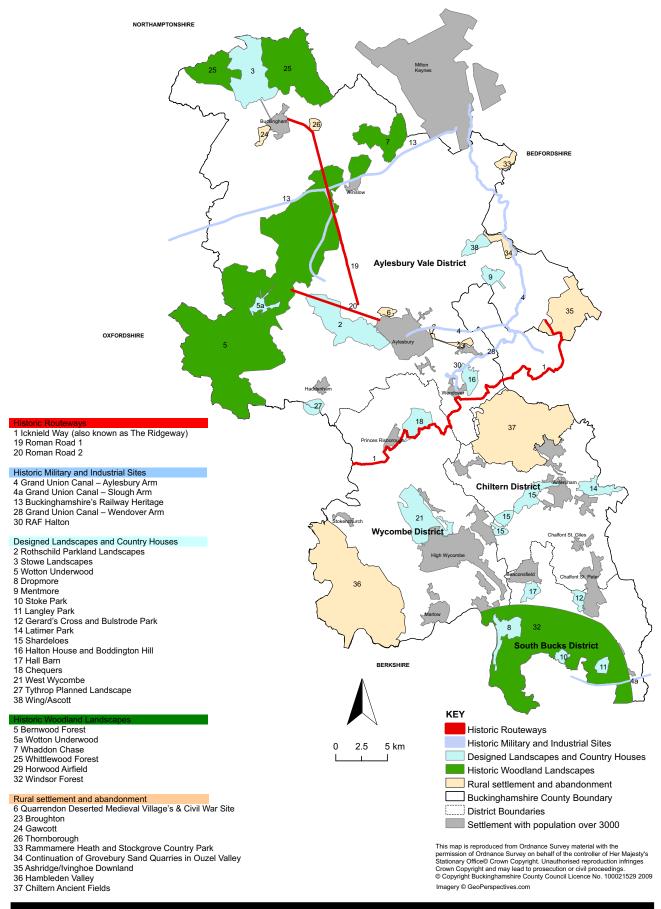


Table 4.3
Potential correlations between Historic Themes and Green Infrastructure functions

✓ = Clear positive correlation

? = Possible positive correlation

Flood Risk & Renewables Integrating Communities Heritage Preservation **Education & Training** Nature Conservation Links and Gateways Transport and RoW Land/Townscape Green Produce Recreation ?

G.I Functions

HE Opportunity Theme

County Example

Theme	
Historic Route ways	Icknield Way, Akeman St. Roman Road
Designed landscapes & Country Houses	Stowe, Dropmore
Historic Woodland Landscapes	Chiltern Woodlands
History of Early Man	Grims Ditch
Rural Settlement and Abandonment	Quarrendon – deserted medieval site
Historic Agricultural Landscapes	Early/Parliamentary Enclosure fields
Historic Military/ Industrial Sites	Disused airfields/ hospitals e.g. Westcott Royal Ordnance Factory

There is much scope to further incorporate Historic Landscape Characterisation in the Green Infrastructure process. The MKSM Historic Environment Assessment made positive suggestions on where development could support the restoration and enhancement of the historic environment through new accessible Green Infrastructure provision. Whaddon Chase, on the southern fringe of Milton Keynes, provides a key location identified in the MKSM study. The former hunting forest could be reinstated as a community park and woodland alongside other recreational and agricultural uses and would provide a valuable 'green buffer' to growth proposals beyond the Buckinghamshire County boundary.

Strategic Historic Environment Opportunities

Chris Blandford Associates (2007) used the HLC and other historic environment information to identify 38 Historic Environment Opportunity Areas (Figure 4.8).

These provide strategic countryside areas with opportunities for enhancing the management, presentation, accessibility and interpretation of historic environment assets for the benefit of local communities, visitors and businesses. They represent seven key strategic themes (Historic Opportunity Themes), which have the potential to contribute to Green Infrastructure functions.

Table 4.3 provides an indicative overview of each Historic Opportunity Theme and its expected relationship with overall Green Infrastructure functions as obviously positive; potentially positive or obviously negative. The potential to realise these functions in a specific location will be variable but will require undertaking detailed site-specific considerations that are beyond the remit of this Strategy.

Appendix G provides an assessment for each Historic Environment Opportunity Area identifying the key assets, management issues and opportunities for enhanced management, presentation, interpretation/ intellectual access and physical access specific to each area.

Summary

There are a range of strategic opportunities for enhancing the historic environment and a number of key strategic themes have potential to contribute to Green Infrastructure functions throughout Buckinghamshire. In addition to the conservation of existing assets, an appreciation of the historic environment can provide inspiration for locally distinctive opportunities and solutions. For example, areas of former woodland might be re-planted for wood-fuel or to screen new development; historic canals, railways and tracks can be promoted for new access routes and ancient monuments incorporated into expanding towns can help meet open space standards.

Distinctive, High Quality and Diverse Landscapes

Existing Landscape Character

There is a great diversity of landscape character across Buckinghamshire. Green Infrastructure initiatives, together with sensitively designed and located development, can provide an opportunity to strengthen and enhance local distinctiveness, landscape quality and diversity of character.

The landscapes of Buckinghamshire range from the River Thames and the edge of London in the south, to the Ouse Valley and the beginnings of a Midlands landscape in the north. In between, dramatically separated by the nationally important AONB landscape, are the landscapes of the Chilterns and the Vale of Aylesbury that are very different both visually and in terms of their historical development. Despite the fact that it lies in the southeast of England, an area under considerable development pressure, the County remains essentially rural and over three-quarters of the land is farmland or woodland.

The Buckinghamshire landscape is more diverse than many English counties, reflecting the result of historical processes acting upon frequent changes in geology and landform upon which the administrative boundaries are superimposed. In places the landscape is of an intimate scale, almost hidden from view, elsewhere it is open and exposed. Locally there are landscapes spoiled by unsympathetic developments or poor land management. Yet nearby there may be one of the many tracts of land retaining the traditional and historic features and patterns that are so quintessential of the English landscape.

The Landscape Plan for Buckinghamshire: Part 1 - Landscape Character Assessment currently provides a broad assessment and overview of the County's landscape.³⁶ It is currently the only available published landscape character assessment for the County and identifies 13 Landscape Character Zones (see Figure 4.9) as follows:

Z1 – Valley Farmlands
 Z3 – Greensand Ridge
 Z4 – Whittlewood Ridge
 Z5 – Northern Clay Vale
 Z6 – Southern Clay Vale

Z7 – Midvale Ridges Z8 – Escarpment and Foothills

Z9 – River Valleys Z10 – Incised Dip Slope

Z11 – Valley Floodplain Z12 – Colne Valley

Z13 – Wooded Plateau

The Landscape Plan for Buckinghamshire identifies priorities for the conservation, enhancement and management of each of the zones (held in Appendix H) and indicates strategic opportunities for positive landscape initiatives and interventions that will strengthen landscape character and 'sense of place' in Buckinghamshire as part of Green Infrastructure provision.

The Landscape Plan for Buckinghamshire Part 1: Landscape Character Assessment (Buckinghamshire County Council, c.2000)

Figure 4.9 Buckinghamshire Landscape Character Zones Buckingham Z1 72 Aylesbury Vale District **Z5** Z8 **Z7** Haddenhan Z10 **KEY** ce Risborough Chesham **County Level Landscape Character Zones** Z1 Valley Farmlands Chiltern District Clayland Villages Amersham Greensand Ridge **Wycombe District** Z4 Whittlewood Ridge Z5 Northern Clay Vale Chalfont St Gile High Wycombe Z6 Southern Clay Vale Z10 Z7 Mid-Vale Ridges Z8 Escarpment and Foothills Z11 Chalfont St Peter Z9 River Valleys Z10 Incised Dip Slope South Bucks District Z11 Valley Floodplain Z12 Colne Valley Z13 Wooded Plateau Z12 **National Level Character Areas** Chilterns Area of Outstanding Natural Beauty Chiltern Escarpment Settlements with population over 3000 Colne Valley 5 km **Buckinghamshire County Boundary** Greensand Ridge **District Boundaries** Mid-Vale Ridge Forests - Bernwood (1) Whaddon (2) This map is reproduced from Ordnance Survey material with the permission of Ordnance Survey on behalf of the controller of Her Majesty's Stationary Office® Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. © Copyright Buckinghamshire County Council Licence No. 100021529 2009 Northern Clay Vale Ouse Valley

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Whittlewood & Salcey Forest

Strategic Landscape Opportunities

The Landscape Plan's vision is of 'a productive and sustainable rural landscape retaining its essential character, local distinctiveness and quality'. A range of landscape planning and management principles that can directly support Green Infrastructure aims in Buckinghamshire underpins this vision. The vision also depends upon the following objectives, many of which are applicable in a historical context:

- The landscape of Buckinghamshire will remain predominantly rural in nature.
- Greater compatibility between the rural and urban landscapes will be encouraged.
- The landscape will continue to be a dynamic and evolving resource
- Change will be seen as an opportunity to enhance rather than dilute local character and to remedy degraded landscapes.
- Due weight will be given to the nature and importance of each landscape component whose cumulative effect produces local distinctiveness.
- Local distinctiveness will be reflected in the sitting and design of appropriate new development and in new landscape elements
- Economic and environmentally sustainable agriculture is practical everywhere facilitated by targeted grant schemes where necessary
- Encouragement will be given to the production and consumption of traditional local produce.
- Characteristic field patterns and boundary features will be maintained and enhanced.
- Hedgerow regulations will be actively enforced and hedgerow planting will exceed hedgerow loss.
- Woodland resources will be actively and economically managed for long term sustainability, ecological vibrancy and the supply of produce for a local market.
- Woodland planting will continue with better targeting based on a strategic landscape approach.
- The landscape importance of water features will be recognised for their amenity and recreational value and provided for by land use development at all scales.
- Historically important landscapes and features will be recognised for their intrinsic value, and will be the subject of targeting of grant to ensure enhancement, interpretation and enjoyment of the public.

- Sub urbanisation will be restricted with the intrusion of visible infrastructure (signs, lighting, transport networks, communications masts etc) kept to a minimum.
- Built environments will harmonise with their landscape setting, respect local distinctiveness in settlement patterns and reflect local traditions in architecture using locally sourced materials wherever possible.
- Increased public understanding and direct practical involvement in landscape related issues will become more common place.
- Organisations and individuals will work together to achieve the vision.

The Buckinghamshire Green Infrastructure Strategy aims to reflect the Landscape Plan's vision and associated objectives that account for the needs of biodiversity and the natural and historic environments.

Buckinghamshire Strategic Environmental Character System (BECS)

The Buckinghamshire Strategic Environmental Character System (BECS) is a Buckinghamshire County Council led project that brings together GIS data and other spatial datasets into a holistic, coordinated system (Fig 4.10). It has been designed to meet the requirements of national Planning Policy Guidance, which advocates an evidence-based approach for decision-making (e.g. PPS 1, PPS 7, PPS, 9, PPG 15 and PPG 16).

The System will help to protect the rural nature and special character of Buckinghamshire and to guide decisions relating to planning and land use/land management change. The project has three main objectives:

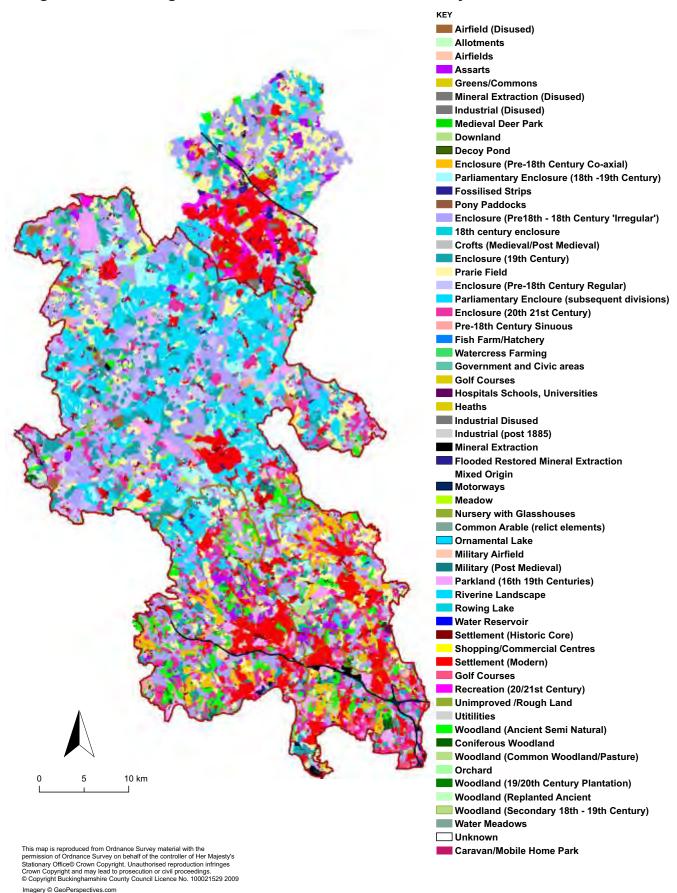
- To establish a seamless GIS habitat survey map of the Buckinghamshire landscape.
- To ensure that biodiversity mapping and Historic Landscape Characterisation data can be integrated with other components of landscape data.
- To secure consistent relevant mapping of the County's physical geography to inform an overall Landscape Character Assessment.

Buckinghamshire Habitat Mapping Project

Buckinghamshire County Council in partnership with Buckinghamshire and Milton Keynes Environmental Records Centre (BMERC) has adopted the Integrated Habitat System (IHS)³⁷ to create a landscape-scale habitat map of the administrative area of Buckinghamshire and Milton Keynes.

³⁷Developed by Somerset Environmental Records Centre.

Figure 4.10 Buckinghamshire Environmental Character System



The mapping exercise is based on rapid assessment of habitats from aerial photographs supplemented with documentary evidence including survey reports, site citations and where feasible some 'ground-truthing' to ensure consistency and accuracy. The IHS method allows a hierarchical assessment of habitats and their importance to be mapped, taking into consideration EU Habitats Directive Annex 1 Habitats, UK Biodiversity Action Plan (BAP) Priority Habitats and designated sites. Also mapped are sites showing potential for restoration and the broader habitat types covered by the Phase 1 Habitat Survey method. In addition to capturing details on the habitats the map will include data on management and formation types, as well as other relevant information.

The Habitat Mapping Project will create an important tool for informing a range of processes and enable the conservation of the natural environment at a time when it is coming under increasing pressure. Underlying habitat data with physiographic data allows us to identify factors fundamental for specific habitats and where additional habitats are most likely to be found or created. The identification of areas with greatest potential for habitat creation and restoration will facilitate the establishment of an ecological network approach to co-ordinate efforts, and support wider scale initiatives at a regional and national level.

A Strategic Green Infrastructure Network for Buckinghamshire

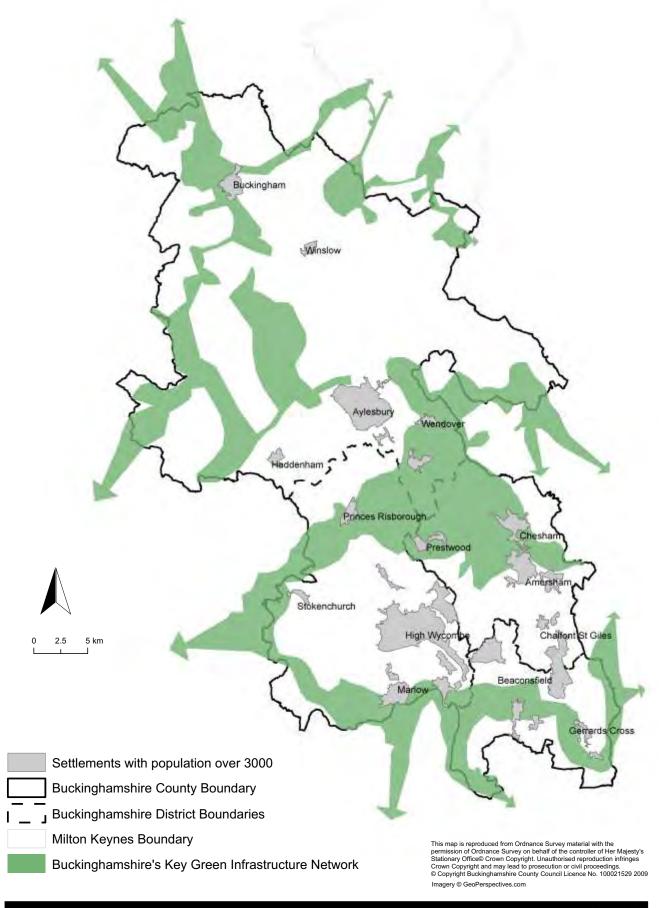
A 'Strategic Green Infrastructure Network for Buckinghamshire' (Figure 4.11) provides a broad overview of the existing County's Green Infrastructure as a multi-functional connected network.

This visual representation of the network has been created by the analysis of overlapping Buckinghamshire Green Infrastructure assets and it illustrates how these link to assets beyond the County boundary. Using a Geographical Information System, core themes of Green Infrastructure, consisting of biodiversity, accessible greenspace, access routes and historic environment have been brought together in order for strategic level analysis and identification of multi-functional Green Infrastructure assets.

The final integration map represents a Strategic Green Infrastructure Network for Buckinghamshire, illustrating only those elements of the network where at least three themes of Green Infrastructure overlap.

The map provides a better understanding the County's Green Infrastructure as a multifunctional network allowing key stakeholders to enhance and maintain connectivity. It forms the basis of further investigation allowing the identification of Green Infrastructure Priority Areas in which resources should be prioritised and targeted (see Chapter 5) and identifies clearly how Buckinghamshire's Green Infrastructure assets link to neighbouring counties.

Figure 4.11 Multi-functional Strategic Green Infrastructure Network for Buckinghamshire



Chapter 5
Discussion and Recommended Strategic Framework



Discussion

The Strategic Approach

This document provides a strategic approach to the delivery of Green Infrastructure in Buckinghamshire focusing on land that needs to be enhanced or secured to create a Green Infrastructure network at a County or sub regional level. The recommended approach is intended to be flexible and responsive to opportunities such as changing land ownership, community aspirations, and access to funding and new growth areas that may change priorities for investment over time.

Green Infrastructure Initiatives of Sub-Regional Significance

There are a number of Green Infrastructure initiatives which operate at a sub regional level providing benefits both within and outside of Buckinghamshire. Such initiatives should continue to be supported by the Buckinghamshire GIC and its wider partners. The geographical areas covered by the following Green Infrastructure initiatives are shown in Figure 5.1 and consist:

Chilterns AONB - in 1965, an area of 833km2 of the Chiltern Hills in Oxfordshire, Buckinghamshire and Bedfordshire was designated as an Area of Outstanding Natural Beauty (AONB), providing one of the largest AONB in England. The area encompasses the dramatic chalk escarpment with its characteristic open down land and rolling farmland, interspersed with extensive woodlands and dotted with picturesque villages and historic buildings. The Chilterns Conservation Board is a statutory body established in 2004 with a statutory duty to prepare the management plan for the Chilterns AONB. The Chilterns Conservation Board has two statutory duties relevant to this strategy: 1) To conserve and enhance natural beauty; 2) To promote understanding and enjoyment of the Chilterns AONB's special qualities.

North West London Green Arc – a partnership-based strategic environmental initiative that seeks to protect the Green Belt and increase opportunities for people to interact with the rural countryside in and around London. The North West London Green Arc covers countryside from Watling Chase Forest in the east to the River Thames in the south and the Chilterns AONB in the north and forms part of the wider Green Arc initiative. The initiative aims to link existing open spaces such as parks, nature reserves, rivers and woodlands by a network of natural corridors to improve access and provide environmental improvements for people and wildlife. Within the initiative vision are proposals for the creation of new open spaces and working with the planning system to secure sensitive and sustainable development, as well as provide economic benefits to local communities and businesses. The Green Arc approach encourages landowners to work together rather than in isolation, enabling larger areas of land to be protected and act as a barrier to landscape fragmentation.

Colne Valley Regional Park – the Regional Park was designated in the 1960's and provides a framework for co-ordinating management of landscape (including settlements), waterscape, nature conservation resources and facilities for countryside recreation along the Colne Valley. Situated on London's western edge, it extends to cover parts of the Counties of Buckinghamshire, Hertfordshire and Surrey, the Unitary Authorities of Slough and Windsor & Maidenhead and the London Borough of Hillingdon, and the Districts of: Chiltern, South Bucks, Spelthorne and Three Rivers. The Park forms the core of the North West London Green Arc.

Thames River Corridor – The River Thames Alliance was set up in 2003 to help manage the future of the non-tidal Thames. It consists of a partnership of public and private sector organisations. The River Thames Alliance has prepared a strategy and marketing plan to provide a cross-boundary framework for co-ordinating management of the landscape, waterscape, nature conservation resources and facilities for countryside and water-based recreation along the Thames river corridor.

Greensand Ridge – a cross-boundary initiative focused on the Greensand Ridge mostly in Bedfordshire, the south-eastern part of which extends into Buckinghamshire. The initiative encompasses Green Infrastructure assets such as Stockgrove Country Park, comprising 80 acres of varied habitat including a lake, ancient woodland, conifer plantations, meadows and heaths.

Grand Union Canal Environmental Enhancement & Restoration - a potential initiative that could enhance the landscape, waterscape, nature conservation resources and facilities for countryside recreation along the canal corridor through the outer London boroughs, Hertfordshire, Bedfordshire, Milton Keynes and Buckinghamshire. This initiative could include the potential restoration of the disused Buckingham and Wendover arms of the canal.

Bernwood Royal Forest Project – A 50 Parish initiative focused on a 12th Century Royal Hunting Forest boundary in north Buckinghamshire and south east Oxfordshire. The project area has considerable historic landscape and cultural interest and significant potential for conservation and recreation enhancement. Strategically situated between Oxford, Bicester, Buckingham and Aylesbury, the area offers important opportunities for addressing Green Infrastructure deficiencies and issues in North West Buckinghamshire. The Bernwood Project area incorporates the Bernwood Biodiversity Opportunity Area and is recognised in the South East Regional Forestry Framework as a priority area.

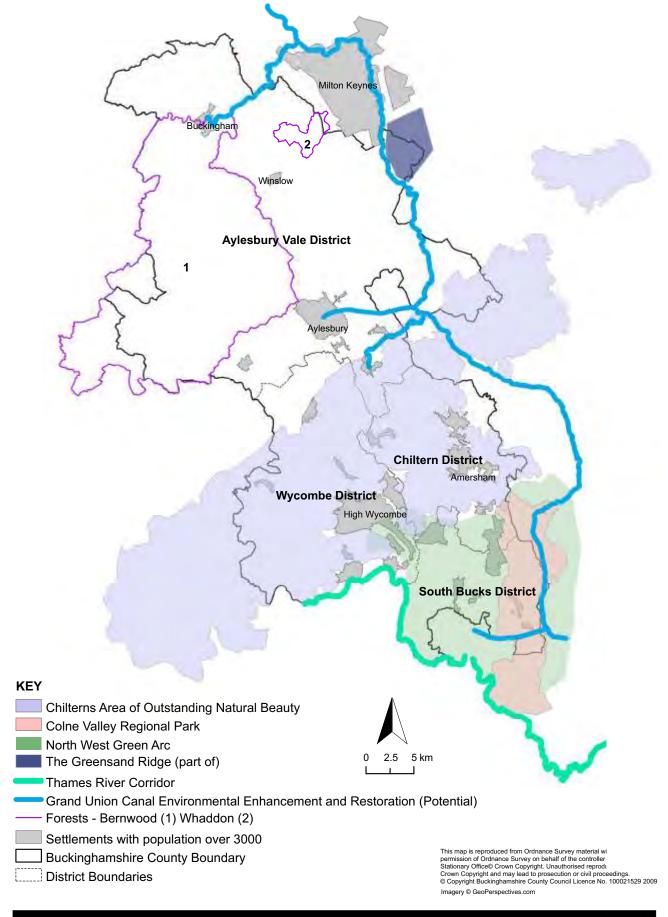
Whaddon Chase Initiative - A former royal hunting Forest and parkland situated in North Buckinghamshire, to the South West of Milton Keynes city. The Chase is historically and ecologically significant and offers considerable potential for providing opportunities for Green Infrastructure whilst offering a 'green buffer' to the proposed growth of Milton Keynes. Whaddon Chase is also recognised as a Biodiversity Opportunity Area. The location is also prioritised in the Milton Keynes Green Infrastructure Strategy 'Southern Green Infrastructure Action Area'.

Priority Action Areas for Green Infrastructure Investment

Green Infrastructure applies to the whole of Buckinghamshire and occurs at any scale. However, a number of strategic areas within the County have been prioritised for one or more of the following reasons:

- Targeting investment in Green Infrastructure is more likely to deliver multiple benefits across a range of key environmental, social and economic policy areas
- Certain areas are more likely to experience the direct or indirect impacts of growth
- There is a need to address current deficits of provision which are more prevalent in certain areas of the County

Figure 5.1 Green Infrastructure Initiatives of Sub-Regional Importance



 Some existing valuable areas of Green Infrastructure are currently under significant pressure or are expected to receive future pressure

This Strategy identifies three 'Green Infrastructure Priority Action Areas' in Buckinghamshire which aim to target investment and limited resources to strategic locations which meet these criteria.

The opportunity analysis (presented in Chapter 4) for Green Infrastructure resources has been used to define the following components of delivery within each Priority Action Area:

Countryside Access Gateways - Key locations that are best placed to act as gateways to the wider Green Infrastructure network and allow the provision of visitor facilities and site access information. Acting as gateways will be able to facilitate and encourage access to a hierarchy of strategic and local planned Green Infrastructure opportunities. Existing gateways may be in need of enhancement whilst others may have the potential to develop into a gateway. The sensitivity and capacity of sites acting as gateways, especially those with sensitive natural or historic environment features, will need to be considered.

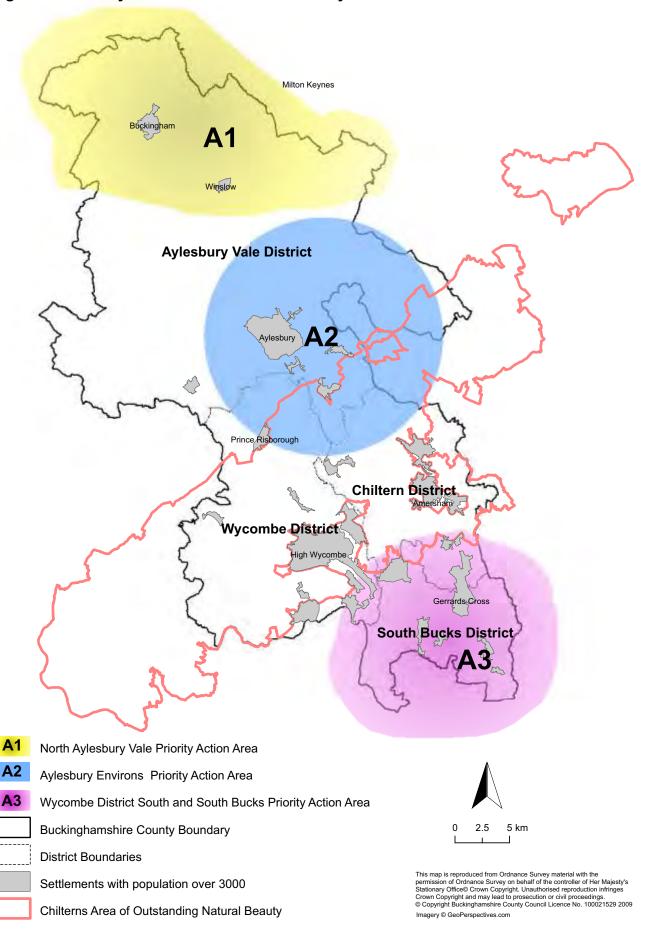
Access Links – Existing or proposed new links providing strategic movement corridors between main settlements and Countryside Access Gateways and incorporate roads, Rights of Way, quiet lanes, and permissive access routes. Access Links can be multifunctional and encompass a range of sustainable modes of transport such as walking, horse riding, cycling, and can also be public transport corridors linked with rail stations and bus routes.

Green Infrastructure Opportunity Zones – Land exists where there are strategic opportunities, needs or demands to create new Green Infrastructure opportunities or enhance existing assets. New Green Infrastructure opportunities would be provided to either address a general deficit in a locality (such as lack of accessible Green Infrastructure provision or a gap in the connectivity of the access network), or seek to increase the quality or diversity of existing Green Infrastructure (such as habitat creation or visitor facility improvements).

A proposed plan for the provision of Green Infrastructure within each of the three Priority Action Areas is set out in the following section with details of possible Green Infrastructure projects included in the Action Plan (Appendix I).

In parallel with the Priority Action Areas, there is also a need to maintain and target action that will contribute to the broad vision for Green Infrastructure across the wider County. This includes the Chilterns AONB (most of which lies outside these three Action Areas) and the Areas of Opportunity for Biodiversity set out in Chapter 4.

Figure 5.2 Priority Green Infrastructure Priority Action Areas



Priority Action Area 1: North Aylesbury Vale

Priority Action Area 1 covers North Aylesbury Vale where deficiency in accessible Green Infrastructure is most prominent. The aims for this Priority Action Area are as follows:

- To contribute to the Green Infrastructure needs of communities on the west side of Milton Keynes and Leighton-Linslade in Bedfordshire. Both areas are identified for significant growth and population expansion up to 2026.
- To provide Green Infrastructure for communities in Buckinghamshire and focused on Buckingham and Winslow.
- To provide Green Infrastructure for the new communities in Buckinghamshire from the expansion of the South West of Milton Keynes.

Overview of the Action Area

The major existing strategic assets that contribute to Green Infrastructure resources in the North Aylesbury Vale Action Area are provided in Table 5.1.

An analysis addressing the main strategic issues, needs and opportunities for Green Infrastructure in Action Area 1, has highlighted the following:

Strategic Issues in North Aylesbury Vale

- There are a limited number of accessible Green Infrastructure sites across the Action Area compared to the rest of the County
- There is a notable lack of larger areas of accessible greenspace in the arc around the south and west of Milton Keynes – this deficit will be exacerbated with growth in Aylesbury Vale, Milton Keynes and the sub region
- Winslow has no accessible greenspace over 20ha within 10km, which is below the minimum ANGSt guideline for provision
- Detailed Landscape Character Assessments of the area highlight the need to strengthen the character and distinctiveness of the ridge landscapes through active land management actions
- Landscape Character Assessments also describe opportunities for enhancing the character and distinctiveness of the extensive vale landscape types through positive landscape intervention measures.

• Despite a dense rights of way network there is a lack of multipurpose access links for walking, cycling and horse riding and the network is currently under used.

Table 5.1
Existing strategic assets contributing to Green Infrastructure in Priority Action Area 1

Resource	Existing sites in Buckinghamshire
Accessible Green Infrastructure	 College Wood Foxcote Reservoir Hazelborough Wood Park Copse (Bucks/Northants border) Pilch Fields Rammamere Heath Round Wood Stockgrove Country Park (Bucks/Beds border) Stowe Landscape Garden Thornborough Community Woodland Whitfield Wood Wicken Wood Windmill Piece
Countryside Access Routes	 Rights of Way network Grand Union Canal (navigable waterway) and towpaths Promoted routes e.g. Ouse Valley, Cross Bucks Way & Seven Shires Way, National Cycle Network Route 51
Biodiversity and the Natural Environment	 8 SSSI sites 38 County Wildlife Sites Claydon and Padbury streams Geological sites and features River Ouse and Ouzel Corridors Woodland, heathland and grassland habitats
Historic Environment	 Ancient Hunting Forests: Whittlewood, Whaddon Chase, Bernwood Forest Disused railway line through Winslow Gawcott (Historic Rural settlement) Roman Road from Buckingham via Thornborough towards Fleet Marston Stowe Park Thornborough (Historical agricultural landscapes)
Distinctive, High Quality and Diverse Landscapes	 Clayland Farmlands Greensand Ridge Northern Clay Vale landscape character zones Valley Farmlands Whittlewood Ridge

Strategic Opportunities

The opportunities for enhancing the management, presentation, accessibility and interpretation of historic environment assets focus upon:

- Bernwood Forest
- Gawcott
- Stowe Park
- The Roman Roads
- Thornborough
- Whaddon Chase
- Whittlewood Forest (linking with Northamptonshire)

The biodiversity opportunities for landscape-scale habitat management, restoration and creation focus upon:

- The Greensand Ridge
- The northern part of Ludgershall & The Claydons
- Tingewick Meadows and Woods
- Whaddon Chase (including the Milton Keynes urban fringe)
- Whittlewood Forest

The biodiversity opportunities for river corridor habitat management, restoration and creation focus upon:

- The Claydon and Padbury Streams
- The River Ouse Valley
- The River Ouzel Valley

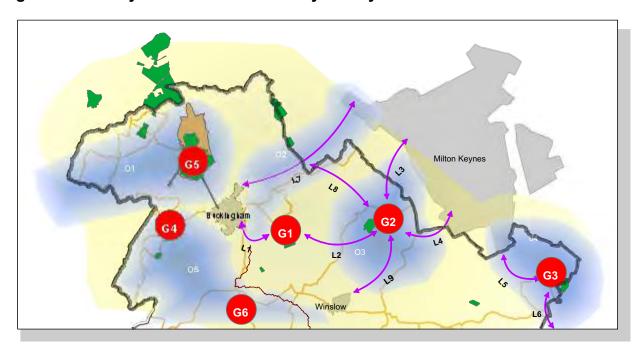
Issues, needs and opportunities relating to the above are shown in the following Proposal Plan for the North Aylesbury Vale Priority Action Area (Figure 5.3):

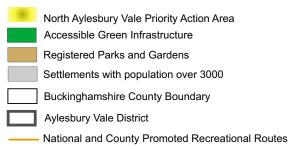
Countryside Access Gateways

The following sites in the North Aylesbury Vale Priority Action Area are considered to offer the best opportunities to provide principal gateways to the wider countryside, with potential to offer connections to strategic and local access links and existing or proposed accessible greenspaces along with visitor facilities/information services:

- G1 Thornborough Community Woodland/Coombs Quarry (New) opportunity
- G2 Whaddon Chase (New) opportunity
- G3 Stockgrove Country Park (Existing)
- G4 Bernwood Forest North (New) opportunity
- G5 Stowe Park & Gardens (Existing)
- G6 Claydon House & Grounds (Existing)

Figure 5.3 Priority Action Area 1: North Aylesbury Vale





Green Infrastructure Opportunity Zones

01	Whittlewood
02	

Ouse Valley Corridor
Whaddon Chase

O4 Brickhills/Greensand Ridge and Ouzel Valley Corridor

O5 Bernwood Forest

Countryside Access Gateways



G2 Whaddon Chase (New)

G3 Stokegrove Country Park (Existing)

G4 Bernwood Forest North (New)

G5 Stowe Park and Gardens (Existing)

G6 Claydon House and Grounds (Existing)

Access Links

- L1 Stowe Park and Gardens to Thornborough/Coombes Quarry (via Buckingham Riverside Walk)
- L2 Thornborough/Coombs Quarry to Whaddon Chase
- L3 Whaddon Chase to Milton Keynes (Via Shenley and Stony Stratford)
- L4 Whaddon Chase to Milton Keynes (Via A421 corridor)
- L5 Stockgrove County Park to Milton Keynes (Via Bletchley)
- L6 Stockgrove County Park to Leighton Linslade (extending via Ouzel Valley/Tiddenfoot Waterside Park to Grove Lock)
- L7 Buckingham to Stony Stratford (Via Ouse Valley)
- L8 Whaddon Chase to Ouse Valley
- L9 Winslow to Whaddon Chase

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Access Links

Existing or proposed new links providing strategic movement corridors between main settlements and Countryside Access Gateways within the North Aylesbury Vale Priority Action Area include:

- L1 Stowe Park & Gardens to Thornborough/Coombs Quarry (via Buckingham Riverside Walk)
- L2 Thornborough/Coombs Quarry to Whaddon Chase
- L3 Whaddon Chase to Milton Keynes (via Shenley and Stony Stratford)
- L4 Whaddon Chase to Milton Keynes (via A421 corridor)
- L5 Stockgrove County Park to Milton Keynes (via Bletchley)
- L6 Stockgrove County Park to Leighton-Linslade (extending via Ouzel Valley/ Tiddenfoot Waterside Park to Grove Lock)
- L7 Buckingham to Stony Stratford (via Ouse Valley)
- L8 Whaddon Chase to Ouse Valley
- L9 Winslow to Whaddon Chase

Green Infrastructure Opportunity Zones

Sites where there is a strategic opportunity, need or demand to create new or enhance existing Green Infrastructure within the North Aylesbury Vale Priority Action Area include:

O1 Whittlewood

There are opportunities to link Stowe Park & Gardens and Buckingham with Green Infrastructure networks in Northamptonshire³⁸ (and Milton Keynes) and potential for landscape-scale habitat restoration and management within Whittlewood Forest via:

- The Sub-Regional Green Infrastructure Corridors of Yardley, Salcey, Whittlewood Wooded Ridge and Northampton to Salcey [Milton Keynes Link];
- The Local Green Infrastructure Corridors of Midleton Cheney Brackley, Farthingstone, Towcester, Milton Keynes, Gyresham and Buckingham

³⁸Green Infrastructure: Making the Connection – Strategic Framework Study for Northamptonshire (River Nene Regional Park, November 2006)

O2 Ouse Valley Corridor

There are opportunities to link with the Buckingham and Milton Keynes Local Green Infrastructure Corridor with potential to deliver a strategic approach to river corridor habitat management, restoration and creation and develop the role of the valley as a key accessible greenspace.

O3 Whaddon Chase

The Whaddon Chase area offers the potential to deliver accessible greenspace provision within the broad arc around the south and west of Milton Keynes for communities in Winslow and north Buckinghamshire. The Chase provides a potential landscape-scale approach to habitat management, restoration and creation (including the Milton Keynes urban fringe), and the enhancement of historic environment assets.³⁹

O4 Brickhills/Greensand Ridge, the Ouzel Valley River Corridor and Grand Union Canal Corridor

This area provides opportunities to link with Green Infrastructure networks in Bedfordshire.⁴⁰ There is potential to develop additional open space along the Ouzel River Valley Green Infrastructure Corridor, to address visitor issues at Stockgrove Country Park (see Appendix E), to enhance linkages with the Greensand Ridge Corridor through landscape-scale habitat management, restoration and creation and enhance the management, presentation, accessibility and interpretation of Rammamere Heath.

O5 Bernwood Royal Forest

The former Royal Forest of Bernwood area offers an important opportunity to create new areas of accessible greenspace to address the identified shortfall in Green Infrastructure provision for communities in Winslow. This area provides the potential for landscape-scale habitat management, creation and restoration, with focus upon Tingewick Meadows and Woods and the Ludgershall and the Claydons area. There is also opportunity to enhance the management, presentation, accessibility and interpretation of the historic environment assets.

Green Infrastructure Project Proposals

A schedule of recommended potential Green Infrastructure projects within the North Aylesbury Vale Action Area is included in the Strategy Action Plan set out in Appendix I. These projects would contribute to a strategic Green Infrastructure framework by addressing specific themes that can provide for a range of functions and benefits as identified in the plan.

³⁹For more information please refer to: Appendix I and Project Proposal for Whaddon Chase Green Infrastructure Initiative (Countryside and Heritage Group)

⁴⁰Bedfordshire & Luton Strategic Green Infrastructure Plan (Bedfordshire & Luton Green Infrastructure Consortium, 2007)

The potential projects are a response to the needs and opportunities arising from the analysis, and reflect suggestions from the Buckinghamshire GIC for actions to address perceived needs for enhanced Green Infrastructure provision in the County (see Appendix E). In most cases, these projects may require feasibility studies to examine in detail issues of project design, land ownership considerations and sources of funding. A proposed framework for the delivery of the Green Infrastructure projects in Buckinghamshire is set out in Chapter 6.

Priority Action Area 2: Aylesbury Environs

Priority Action Area 2 covers southern Aylesbury vale and parts of Chiltern and Wycombe Districts. The aim of Priority Action Area 2:

• To provide for the Green Infrastructure needs of communities in and around Aylesbury. The area has been identified for significant growth up to 2026.

Overview of the Action Area

In overview, the major existing strategic assets that contribute to Green Infrastructure resources in the Aylesbury Environs Action Area are set out in Table 5.2:

Table 5.2
Existing strategic assets contributing to Green Infrastructure Priority Action Area 2

Resource	Existing sites in Buckinghamshire
Accessible Green Infrastructure	The network of medium and large sites along the Chilterns escarpment include: • Ashridge Estate (Bucks/Herts Border) • Bacombe Hill (Chilterns escarpment) • Baldwin's Wood (Chilterns escarpment) • Beacon Hill (Chilterns escarpment) • Coombe Hill (Chilterns escarpment) Cluster of small sites in the Chess Valley (North of Chesham) • Piddington Wood • Pulpit Wood (Chilterns escarpment) • Tring Park (Herts) • Wendover Woods(Chilterns escarpment) • Aylesbury Riverside Walk and Linear Park
Countryside Access Routes	There is a dense Rights of Way network within Aylesbury Environs Action Area consisting: The Ridgeway Trail The Icknield Way regional route The Aylesbury Ring The South Bucks Way The Chiltern Link Routes along the Aylesbury and Wendover Arms of the Grand Union Canal Grand Union Canal as a navigable waterway Towpaths along the Grand Union Canal Round Aylesbury Walk The Chiltern Way Chess Valley Walk

Resource

Existing sites in Buckinghamshire

Biodiversity and the Natural Environment

There is a network of numerous woodland habitats within the Aylesbury Environs Action Area which are designated for their nature conservation value including:

- Isolated pockets of calcareous grassland associated with the Chilterns escarpment.
- The River Thame and its network of tributaries extending across the clay vale.
- A number of geological sites and features along the Chilterns escarpment.

Historic Environment

Numerous historic sites including;

- The eastern part of Bernwood Forest (a former royal ancient hunting Forest)
- The designed landscapes of Rothschild Parklands to the West of Aylesbury
- The medieval settlement of Broughton Manor between Aylesbury and Aston Clinton
- The Roman Roads running northwest from Aylesbury and from Fleet Marston towards Buckingham.
- The military history of RAF Halton
- The Grand Union Canal and arms to Wendover and Aylesbury
- The lvinghoe downland
- The Icknield Way
- The site of Quarrendon Medieval village and Tudor Mansion
- Wendover Woods (Military History)

Distinctive, High Quality and Diverse Landscapes

The area is characterised by:

- Low-lying Northern and Southern Clay Vales
- Mid-Vale Ridges to the north of the area
- Chilterns escarpment and foothills to the south of the area

The analysis of accessible greenspaces using the ANGSt as prescribed by Natural England, in relation to Priority Action Area 2 has shown the following:

Strategic Issues

There are a limited number of accessible greenspace sites within the clay vale relative to the Chiltern's escarpment. The escarpment includes a number of important and popular sites, in particular Wendover Woods and also sites such as Bacombe and Coombe Hills which are well-used but more sensitive due to their nature conservation status.

In accordance to ANGSt assessments Aylesbury and Princes Risborough do not meet the minimum standard of provision for accessible greenspace. The lack of larger areas of accessible greenspace around Aylesbury as a whole is particularly notable and the town has relatively limited urban greenspaces.

Aylesbury has a relative lack of medium to large accessible greenspaces in proximity to the town and main residential areas. For example:

There is a lack of sites over the 20 ha size threshold within 2km and also sites over 500ha in size within 10km of Aylesbury.

Within 5km of the southern edge of Aylesbury there are a number of sites up to the 100ha size threshold along the Chilterns escarpment, however being more than 5km away from other parts of the town, they do not offer sustainable access.

Under provision will be further exacerbated by urban growth unless new accessible Green Infrastructure is provided, links to existing sites are improved and current suitable sites receive investment to enable them to withstand increased use where appropriate.

Haddenham, despite its population, has no accessible greenspace over 2ha within 10km, failing to meet the minimum standard of provision.

Unlike many areas, Aston Clinton and Wendover meet the minimum level for the provision of larger areas of accessible greenspace. A Wendover wood, at 325 hectares, provides the largest area of greenspace access and plays a strategic role in the County.

Despite a dense Rights of Way network there is a lack of multipurpose provision for walking, cycling and horse riding.

Strategic Opportunities

The main strategic opportunities for Green Infrastructure in this Priority Action Area are considered to be:

Biodiversity opportunities for landscape-scale habitat management, restoration and creation focusing upon:

- Thame Valley area within the clay vale and the Pitstone (Pitstone Quarry). Pitstone
 Quarry straddles Buckinghamshire and Hertfordshire border. The quarry has been
 dsignated a SSSI due to its important geological interest. The area is also a Local
 Wildlife Site that has important biodiversity value and is used for recreational
 purposes.
- Lower Chiltern's Escarpment, the Chiltern's Escarpment
- Prestwood area
- Central Chilterns Chalk Rivers

The opportunities for enhancing the management, presentation, accessibility and interpretation of historic environment assets focus upon:

- Bernwood Forest
- Rothschild Parklands
- Chequers and Halton House historic landscapes
- Quarrendon
- Broughton Manor
- Roman Roads
- Grand Union Canal
- RAF Halton
- Ashridge and Ivinghoe downland
- Icknield Way
- Wendover Woods

Major opportunities exist for enhancing the character and distinctiveness of the clay vale landscape zones through positive landscape intervention measures informed by detailed landscape character assessments.

A priority should be given to strengthen the character and distinctiveness of the Mid-Vale Ridges and the Chilterns' landscapes through active land management actions informed by detailed landscape character assessments.

The issues, needs and opportunities identified for the Aylesbury Environs Priority Action Areas are brought together in a Plan for the Aylesbury Environs Priority Action Area shown in Figure 5.4.

The main components of the Aylesbury Environs Priority Action Area are set out below.

Countryside Access Gateways

Sites displaying opportunities to provide a role as principal gateways to the wider countryside, offering visitor facilities and information and connections to a hierarchy of strategic and local access links and existing or proposed accessible greenspaces include: G1 Quarrendon/North Aylesbury (New)

G2 Tring Reservoirs Complex/College Lake Wildlife Centre (Existing)

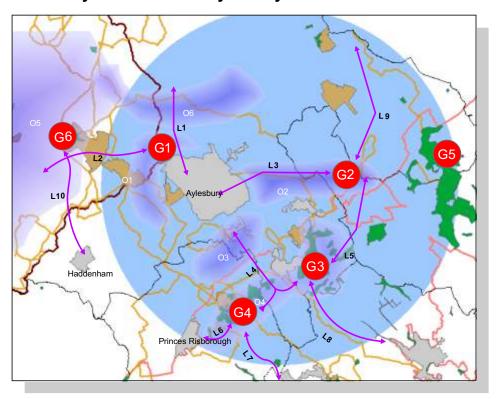
G3 Wendover Woods (Existing)

G4 Bacombe and Coombe Hills (New)

G5 Ashridge/Ivinghoe (Existing)

G6 Waddesdon Manor (Existing)

Figure 5.4 Priority Action Area 2: Aylesbury Environs





Countryside Access Gateways

- G1 Quarrendon/North Aylesbury (New)
- G2 Tring Reservoirs Complex/College Lake Wildlife Cenre (Existing)
- G3 Wendover Woods (Existing)
- Bacombe and Coombe Hills (Existing)
- G5 Ashridge/Ivinghoe (Existing)
- G6 Waddesdon Manor (Existing)

Access Links

- L1 Aylesbury to Hardwick (via Quarrendon/North Aylesbury)
- L2 Quarrendon/North Aylesbury to Bernwood Forest (via Eythrope Park)
- L3 Aylesbury to Tring Reservoirs Complex (via Grand Union Canal corridor)
- L4 Aylesbury to Wendover Woods/Bacombe and Coombe Hills
- L5 Tring to Wendover Woods (via new green bridge over A41 road corridor)
- L6 Princes Risborough to Bacombe, Coombe and Whiteleaf Hills
- L7 Bacombe, Coombe and Whiteleaf Hills to Amersham (via Prestwood)
- L8 Wendover Woods to Chesham
- L9 Tring Reservoirs Complex/College Lake Wildlife Center to Leighton-Linslade (via Grand Union Canal Corridor)
- L10 Waddeson Manor to Haddenham

Green Infrastructure Opportunity Zones

North West of Aylesbury

East of Aylesbury

Aylesbury Southern Fringes

Chilterns Escarpment

Bernwood Forest

Quainton-Wing Hills

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Access Links

Existing or proposed new links providing movement corridors between main settlements and Countryside Access Gateways within the Aylesbury Environs Priority Action Area include:

- L1 Aylesbury to Hardwick (via Quarrendon/North Aylesbury)
- L2 Quarrendon/North Aylesbury to Bernwood Forest (via Eythrope Park)
- L3 Aylesbury to Tring Reservoirs Complex (via Grand Union Canal corridor)
- L4 Aylesbury to Wendover Woods/Bacombe and Coombe Hills
- L5 Tring to Wendover Woods (via new green bridge over A41 road corridor)
- L6 Princes Risborough to Bacombe, Coombe and Whiteleaf Hills
- L7 Bacombe, Coombe and Whiteleaf Hills to Amersham (via Prestwood)
- L8 Wendover Woods to Chesham
- L9 Tring Reservoirs Complex/College Lake Wildlife Centre to Leighton- Linslade (via Grand Union Canal corridor)
- L10 Waddesdon Manor to Haddenham

Green Infrastructure Opportunity Zones

O1 North West of Aylesbury

The creation of new strategic open space meeting ANGSt requirements for Green Infrastructure over 100 ha would help to address the high levels of greenspace deficiency across Aylesbury Vale. This would provide a strategic resource for the town and green gap to buffer new growth areas and will secure, conserve and make accessible new open space at Quarrendon Leas. Delivering accessible Green Infrastructure across land at Quarrendon would also allow wider housing growth proposals around Aylesbury to meet Government aims for liveability and sustainable communities. It is also important that further growth continues to support the development of Quarrendon Leas and its ability to absorb increased population demands.

There are opportunities for enhancing the management, presentation, accessibility and interpretation of historic environment assets including the Rothschild Parklands, Quarrendon and the Roman Roads in this area.

Enhancement of the urban-edge landscapes around the northern and western fringes of Aylesbury through creation of a strong framework of wetland and grasslands habitats with trees and woodlands, to extend to the existing Aylesbury Linear Park. Landscape-scale habitat management, restoration and creation focused on the Thame Valley would also help address Green Infrastructure deficits and contribute to the provision of, and access to, natural greenspace.

O2 East of Aylesbury

With both of current and future populations of Aylesbury there needs to be a focus on creating and enhancing strategic green access links, corridors and paths that link Aylesbury with the wider vale and provide necessary links to allow sustainable access to sub-regionally important areas such as Bernwood Forest and the Chiltern Hills. An initiative which could provide an enhancement of the Aylesbury and Wendover arms and towpaths of the Grand Union Canal, meeting priorities identified for developing linkages between Aylesbury, Leighton – Linslade, Wendover and Milton Keynes would be a high priority and should be supported through growth around the town.

Opportunities also exist for enhancement of the urban-edge landscapes around the eastern fringe of Aylesbury through creation of a strong framework of trees and woodlands. These could provide sport/formal recreational facilities connected to Aylesbury by multi-purpose greenways.

O3 Aylesbury Southern Fringes

Opportunities exist to retain and enhance the sense of identity of the separate villages of Bishopstone, Stoke Mandeville and Western Turville, through the provision of a strong framework of trees, woodlands and grasslands to buffer and enhance the urban-edge landscapes around the southern fringe of Aylesbury. This would provide a high quality setting for sustainable public transport and cycle route access links between the town and the larger areas of accessible greenspaces on the Chiltern's escarpment. The existing 'Aylesbury Linear Park' is less well developed to the south of the town and would also benefit from an increase in green space.

Enhancement of Wendover Woods (Countryside Access Gateway (G3)) would serve the recreational needs of Buckinghamshire and the expanded Aylesbury population and address the current greenspace deficiencies across the District. This could be based on connectivity between Wendover Woods (Forestry Commission), Bacombe Hill (Bucks CC) and Coombe Hill (National Trust) and would meet District ANGSt requirements for the provision of 500 ha of strategic Green Infrastructure for Buckinghamshire as a whole.

New developments and their communities must be provided with local accessible greenspace within walking distance of homes. This will help offset visitor pressure on sensitive sites along the Chiltern's escarpment, many of which are nationally or

internationally important designated sites for nature conservation or archaeological interest and are highly sensitive. Public bodies have a duty to ensure that designated sites are protected through the planning process and other means.

O4 Chiltern's Escarpment

The Chiltern's escarpment falls within the AONB, with much of it owned by public bodies due to their importance for landscape, biodiversity, historic, cultural and recreational reasons.

There is scope to develop further the collaboration between agencies and private owners to exploit the potential to conserve these sensitive sites and enhance their landscape and wildlife value, for example by extending and linking the areas of chalk downland. Public access is already excellent with fine views across the Vale of Aylesbury, with the Ridgeway National Trail linking all the major sites.

These sites are very popular at present and have limited capacity to cope with significant numbers of additional visits without compromising their special qualities. This reinforces the need to develop alternative attractive green space close to where new houses will be built. Nearly all visitors to the Chilterns escarpment will choose to drive because of the

distance and to avoid the steep climb to the top of the escarpment. New green space will take time to develop and until this can be achieved existing sites will experience increasing pressures of visitation. This means there may be a need to enhance the existing capacity to sustain a higher level of visits.

The Chiltern's escarpment has a high concentration of high quality sites which can be visited at present. There are also accessible site and routes throughout the Chilterns AONB which has a dense network of public Rights of Way and promoted routes. This includes the Chiltern Way and Chess Valley Walk. This network would benefit from a higher level of management but the primary effort should be to encourage more people to use the network on their doorstep.



The quality of the historic environment in this area is exceptional with many well known sites and routes together with those yet to be surveyed fully. They provide many opportunities for interpretation to add the understanding and enjoyment of visitors.

O5 Bernwood Forest

The former 'Royal Forest of Bernwood' area offers an opportunity to create new areas of accessible greenspace to address the identified shortfall in Green Infrastructure provision for communities in Aylesbury Vale. This area provides the potential for landscape-scale habitat management, creation and restoration, with a focus upon the Biodiversity Opportunity Area and ancient woodland edge habitat. The southern area of Bernwood is characterised by an arc of remnant ancient woodland between Quainton and Shabbington Woods, which is a stronghold of the nationally protected Black Hairstreak butterfly. There is also opportunity to enhance the management, presentation, accessibility and interpretation of historic environment assets, with the internationally important medieval features that are present in this area.

O6 Quainton-Wing Hills

Opportunities exist to strengthen the character and distinctiveness of the limestone hills between Quainton and Wing and their associated historic villages. Green Infrastructure provision in this area could focus on management of the Ascott Estate Tudor gardens. There is also the potential to create and enhance access links between the Hills and Leighton-Linslade on the Buckinghamshire-Bedfordshire border and buffer development proposals from proposed growth associated with Leighton-Linslade.

Current Green Infrastructure Project Proposals

A schedule of recommended potential Green Infrastructure projects within the Aylesbury Environs Action Areas is included in the Strategy Action Plan set out in Appendix I. These projects would contribute to a strategic Green Infrastructure framework. The potential projects are a response to the needs and opportunities arising from the analysis, and reflect suggestions from the GIC for actions to address perceived needs for enhanced Green Infrastructure provision in the County (see appendix E). In most cases, these projects will require feasibility studies to examine in detail issues of project design, land ownership considerations and sources of funding. A proposed framework for the delivery of the Green Infrastructure projects in Buckinghamshire is set out in Chapter 6

Priority Action Area 3: Wycombe District South and South Bucks

This Action Area covers the southern part of Wycombe and Chiltern District and the whole of South Bucks District. This is an area with existing accessible Green Infrastructure, much of it fragmented, and under pressure from a large surrounding 'catchment' population. The aim of Priority Action Area 3 is:

 Providing for the Green Infrastructure needs of communities in the Local Authority areas of Wycombe District South and South Bucks in Buckinghamshire, and for Windsor & Maidenhead, Slough and Hillingdon in neighbouring areas.

Overview of the Action Area

An overview of the major existing strategic assets that contribute to Green Infrastructure resources in the Wycombe District South and South Bucks Action Area is provided in Table 5.3.

Table 5.3
Existing strategic assets contributing to Green Infrastructure Priority Action Area 3

Resource	Existing sites in Buckinghamshire
Accessible Greenspaces	Large (>100ha) sites include: • Black Park County Park • Burnham Beeches • Cliveden • Langley Park • Stoke Common Smaller sites (<2ha) include: • Birchland and Walk Woods • Denham Country Park • Dorney Common • Dorney Lake Country Park • Dorney Wood • Farnham Common • Ingrams Copse

Resource **Existing sites in Buckinghamshire** Countryside Rights of Way network including: Hedgerly Way Access Routes Marlow Way Shakespeare's Way South Bucks Way • Thames Path National Trail The Beeches Way Chiltern Way Navigable Waterways: Grand Union Canal River Thames Non-Navigable Waterways: River Colne Jubilee River Network of woodland, wood pasture/parkland and heathland Biodiversity habitats much of which is designated for its Nature Conservation and the Natural Isolated pockets of fen, marsh, swamp and reed bed habitats Environment associated with the River Colne's floodplain and Burnham Beeches: River corridors of the River Thames and Colne and the chalk stream tributaries; and Geological sites and features Spade Oak Nature Reserve – Little Marlow Windsor and Common Lands (former royal ancient hunting Historic Environment forest) Designed Landscapes: Dropmore Park Stoke Park Langley Park Bulstode Park Hall Barn Action Area dominated by strongly rolling Wooded Plateau Distinctive, High Quality landscape character zone, contrasting the Valley Floodplain and Diverse landscapes of the River Thames and the Colne Valley Landscapes

An analysis to address the main strategic issues, needs and opportunities for Green Infrastructure in this Priority Action Area has highlighted the following:

Strategic Issues

There are a significant number of sizeable and accessible greenspace sites across the Action Area compared to the north of the County

All of the main settlements in this area currently meet the minimum ANGST provision standard for larger areas of accessible greenspace in Buckinghamshire

There is increasing demand from communities outside of Buckinghamshire, in Slough, Maidenhead and the outer west London Boroughs, for the use of accessible greenspace in this area

Key accessible greenspaces in this area have a high conservation value and are sensitive and vulnerable to excessive visitor pressure

Detailed Landscape Character Assessments highlight the priority to strengthen the character and distinctiveness of the wooded plateau landscapes through active land management actions

Detailed Landscape Character Assessments show opportunities to continue the enhancement of the character and distinctiveness of the Colne Valley through positive landscape intervention measures.

Strategic Opportunities

The main strategic opportunities for Green Infrastructure in this Priority Action Area are considered to be:

The opportunities to enhance the management, presentation accessibility and interpretation of historic environment assets focus on:

- royal ancient hunting forest
- common lands
- designed landscapes

The biodiversity opportunities for river corridor habitat management, restoration and creation focus upon:

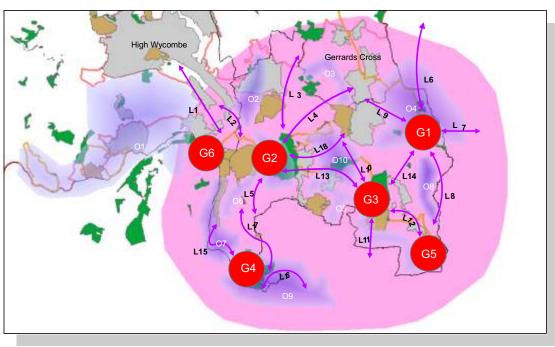
- The Colne Valley
- The lower reaches of the Central Chilterns Chalk Rivers
- The Thames Valley

The biodiversity opportunities for landscape-scale habitat management, restoration and creation focus on:

wood pasture/parkland

Issues, needs and opportunities are shown in the following Priority Action Area for the Wycombe District South and South Bucks Action Area (Figure 5.5):

Figure 5.5 Priority Action Area 3: Wycombe District South and South Bucks





Access Links

- L1 High Wycombe to Bourne End
- L2 Wooburn to Burham Beeches
- L3 Beaconsfield to Burnham Beeches
- L4 Gerrards Cross to Burnham Beeches
- L5 Slough to Burnham Beeches
- L6 Rickmansworth to Denham Country Park
- L7 Ruislip/Ickenham to Denham Country Park
- L8 Uxbridge to Denham Country Park
- L9 Gerrards Cross to Denham Country Park
- L₁₀ Gerrards Cross to Black Park and Langley Park
- L11 Slough to Black Park and Langley Park
- L12 Thorney Park to Black Park and Langley Park
- L13 Black Park and Langley Park to Burnham Beeches
- L14 Black Park and Langley Park to Denham Country Park
- L15 Dorney Lake Country Park to Maidenhead (Via Thames Path)
- L16 Dorney Lake Country Park to Eton (Via Thames Path)
- L17 Dorney Lake Country Park to Slough (Via Thames Path)
- L18 Burnham Beeches to Gerrards Cross (Via Stoke Common and Littleworth Common)

Countryside Access Gateways

- Denham Country Park and the Colne Valley Regional Park Centre (Existing)
- G2 Burnham Beeches (Existing)
- G3 Black Park and Langley Park (Existing)
- G4 Dorney Lake Country Park (Existing)
- G5 Thorney Park and Little Britain (Existing)
- G6 Cliveden (Existing)

Green Infrastructure Opportunity Zones

01	Marlow Gravel Pits
O2	South of Beaconsfield
O3	Beaconsfield/Gerrards Cross Area
O4	Colne Valley Regional Park North
O5	North of Slough
O6	Cliveden/Burnham Beeches Area
07	Jubilee River
O8	Colne Valley Regional Park South
09	River Thames Corridor

South Bucks Heaths and Parklands

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Countryside Access Gateways

The following sites in the Wycombe District South and South Bucks Priority Action Area are considered to offer opportunities to provide principal gateways to the wider countryside, with potential to offer connections to strategic and local access links and existing or proposed accessible greenspaces along with visitor facilities/information services:

- G1 Denham Country Park and the Colne Valley Regional Park Centre (Existing)
- G2 Burnham Beeches (Existing)
- G3 Black and Langley Parks (Existing)
- G4 Dorney Lake Country Park (Existing)
- G5 Thorney Park and Little Britain (Existing)
- G6 Cliveden (Existing)

Access Links

Existing or proposed new links providing strategic movement corridors between main settlements and Countryside Access Gateways within the Wycombe District South and South Bucks Action Area include:

- L1 High Wycombe to Bourne End
- L2 Wooburn to Burnham Beeches
- L3 Beaconsfield to Burnham Beeches
- L4 Gerrards Cross to Burnham Beeches
- L5 Slough to Burnham Beeches
- L6 Rickmansworth to Denham Country Park
- L7 Ruislip/Ickenham to Denham Country Park
- L8 Uxbridge to Denham Country Park
- L9 Gerrards Cross to Denham Country Park
- L10 Gerrards Cross to Black and Langley Parks

- L11 Slough to Black and Langley Parks
- L12 Thorney Park to Black and Langley Parks
- L13 Black and Langley Parks to Burnham Beeches
- L14 Black and Langley Parks to Denham Country Park
- L15 Dorney Lake Country Park to Maidenhead (via Thames Path)
- L16 Dorney Lake Country Park to Eton (via Thames Path)
- L17 Dorney Lake Country Park to Slough (via Thames Path)
- L18 Burnham Beeches to Gerrards Cross (via Stoke Common and Littleworth Common)

Green Infrastructure Opportunity Zones

O1 Marlow Gravel Pits

This site presents a major opportunity to use disused gravel pits in order to create a new accessible greenspace focused around a lakeside setting. This provision would help reduce the pressure on other existing sites in the area and contribute to meeting the demands from growing communities outside of the County. The site offers opportunities to link habitat management, restoration and creation with the wider Thames corridor, including enhanced access links with the towpath (Thames Path and Shakespeare Way), the Chilterns AONB (including the Chiltern Way) and Marlow.

O2 South of Beaconsfield

Opportunities exist in this area for a landscape-scale habitat management, restoration and creation project to enhance, link and buffer national nature reserves. There is also potential to create new accessible natural greenspace as an after-use for landfill sites south east of Beaconsfield. Green Infrastructure provision in this area could focus on management and interpretation of the historic parkland of Hall Barn.

O3 Beaconsfield/Gerrards Cross Area

This area, including the Forestry Commission woodland at Wilton Park to the east of Beaconsfield, offers opportunities for landscape-scale habitat management, restoration and creation to enhance, link and buffer the woodland sites. Opportunities exist to allow the creation of accessible natural greenspaces as a positive after-use for the landfill sites east of Beaconsfield. Green Infrastructure provision in this area could focus on the management, presentation, accessibility and interpretation of the historic parkland of Bulstode Park and associated common land in this area.

O4 Colne Valley Regional Park North

In the longer term, and following the completion of gravel extraction at sites near Denham, there are possibilities to create a new accessible greenspace as a positive after-use of landfill. Possibilities also exist for habitat management, restoration and creation to enhance, link and buffer the fen/marsh/swamp/reed bed habitats associated with the River Colne's floodplain and, in relation to woodlands, to enhance the character and distinctiveness of the Colne Valley landscape.

O5 North of Slough

Together with the River Thames corridor, this area provides a broad arc of countryside around the northern fringes of Slough. There are strategic biodiversity opportunities for landscape-scale habitat management, restoration and creations across the wooded plateau. Green Infrastructure provision in this area could focus on enhancing the management, presentation, accessibility and interpretation of designed landscapes at Stoke Park and Langley Park.

O6 Cliveden/Burnham Beeches Area (complements O10)

This area provides opportunities to enhance links between the accessible greenspaces at Cliveden and Burnham Beeches to provide greater access connections, and to enhance, link and buffer existing sites of nature conservation value. This includes opportunities for further enhancing the management, presentation, accessibility and interpretation of Cliveden's designed landscapes in the wider context of the former royal ancient hunting Forest of Windsor and common land.

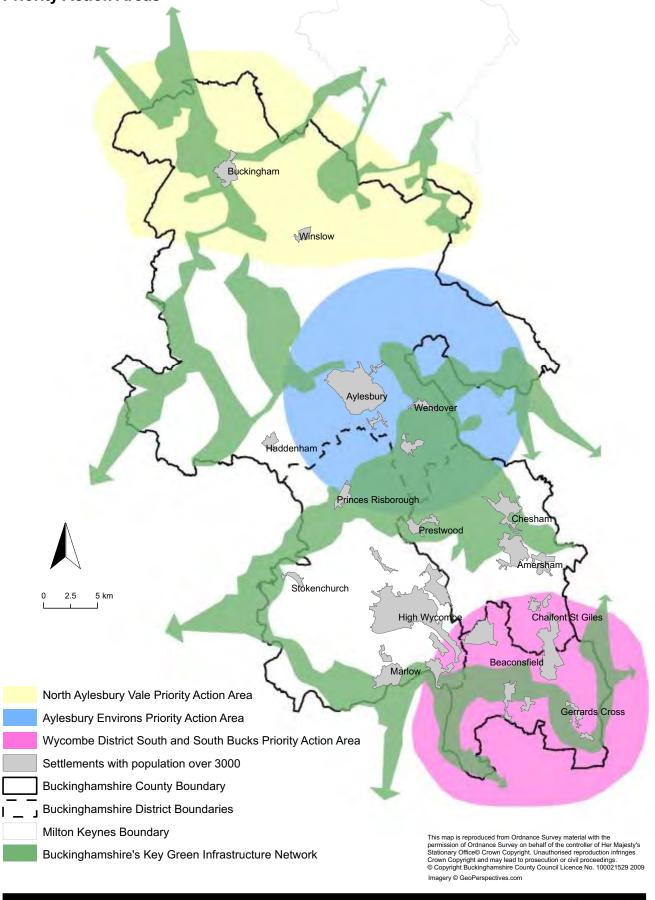
O7 Jubilee River

Through opportunities for habitat management, creation and restoration, potential exists here to further develop the landscape, ecological and recreational value of the Jubilee River Path corridor.

O8 Colne Valley Regional Park South

This area presents a significant strategic opportunity to create a major Countryside Access Gateway, focusing upon the Little Britain area (including Packet Boat Marina, Stockley Park Land, Little Britain Lake, Slough Arm of the Grand Union Canal and Huntsmoor Park). Combined, these sites have the potential to serve as an access gateway using existing facilities, access arrangements, promoted routes and other access links. Such provision would help reduce increasing demands for accessible greenspace on sensitive sites in this Priority Area. There are also wider opportunities along the river corridor for riparian habitat management, restoration and creation, and for the implementation of landscape and access improvement measures to enhance the character and distinctiveness of the Colne Valley.

Figure 5.6
Multi-functional Strategic Green Infrastructure Network for Buckinghamshire with Priority Action Areas



O9 River Thames Corridor

Using a strategic approach to address the protection and management of the River Thames Corridor as a whole, this area provides significant opportunities to deliver major landscape, nature conservation, access and recreational benefits, and will support the emerging policy in the South East Plan.

O10 South Bucks and Heaths and Parklands

There are significant opportunities to meet biodiversity objectives within this project area by taking a strategic approach to habitat management, restoration and creation across Littleworth Common, Burnham Beeches, Stoke Common and Black Park.

A hidden landscape can be found across south Buckinghamshire, and is characterised by commons, ancient woodlands, hedges and lanes; added to these features are the many parklands containing their designed landscapes and biologically important features including notable concentrations of veteran trees. Conserving these key elements will deliver multiple benefits for landscape and biodiversity, and restore components of this ancient countryside echoing the once extensive pastoral systems of the past and provide increased potential for people to reconnect with a rich and diverse heritage.

Green Infrastructure Project Proposals

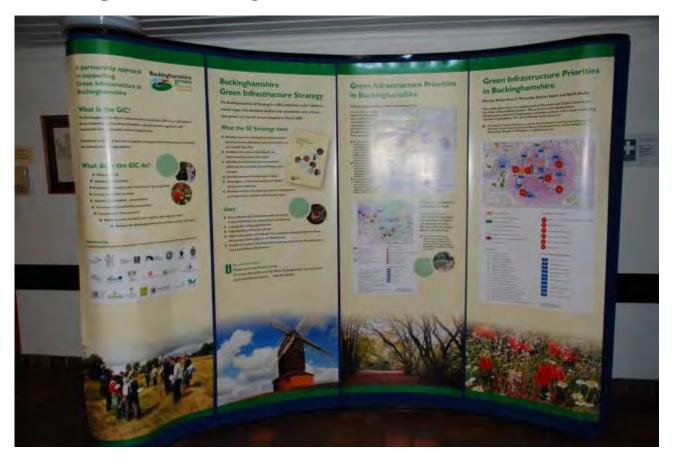
A schedule of recommended potential Green Infrastructure projects within the Wycombe

District South and South Bucks Priority Action Area is included in the Strategy Action Plan set out in Appendix I. These projects would contribute to a strategic Green Infrastructure framework. The potential projects are a response to the needs and opportunities arising from the analysis, and reflect suggestions from the Buckinghamshire GIC for actions to address perceived needs for enhanced Green Infrastructure provision in the County (see Appendix E). In most cases, these projects will require feasibility studies to examine in detail issues of project design, land ownership considerations and sources of funding. A proposed framework for the delivery of the Green Infrastructure projects in Buckinghamshire is set out in Chapter 6.



Chapter 6

Funding and Delivery



A key challenge over the twenty-year period of this Strategy is to co-ordinate project development, funding and delivery of Green Infrastructure at every level within Buckinghamshire.

The following section recommends:

- Establishing Green Infrastructure Partnerships
- Funding Mechanisms and Sources for GI delivery
- Prioritising Green Infrastructure Projects for Funding
- Developing Local Green Infrastructure Plans
- Integrating Green Infrastructure into Local Development Frameworks (LDFs)
- Implementing the Buckinghamshire Green Infrastructure Strategy

Establishing Green Infrastructure Partnerships

The delivery of a Green Infrastructure Action Plan for Buckinghamshire requires a coordinated approach through strong partnership working. The UK has a number of successful organisational models - ranging from County-wide Green Infrastructure consortia, non-executive boards and dedicated executive bodies, to Green Infrastructure partnerships set-up within specific growth locations.

In Buckinghamshire, the GIC has been established as a dedicated unit to co-ordinate Green Infrastructure delivery across the County. (See Terms of Reference, Appendix A)

The main work of the Consortium includes:

- Championing the importance, benefits and principles of Green Infrastructure to a wide audience – including the public, private and voluntary sectors and local Councils
- Influencing and enabling delivery of Green Infrastructure
- Marketing and promotion of Green Infrastructure
- Advising on the identification, selection and prioritisation of Green Infrastructure delivery projects
- Establishing partnerships which can fund, deliver, manage and take ownership of specific Green Infrastructure projects
- Identifying information on best practice approaches to delivery
- Liaising with partnerships to co-ordinate cross-boundary delivery of projects at the sub-regional scale.

In Buckinghamshire, the priorities are to further develop the Buckinghamshire GIC and focus resources on existing partnerships and project delivery within the three Priority Action Areas. This may require establishing Consortium based Sub-Groups to lead on specific projects or schemes with Theme leaders if appropriate.

Key partnerships have already been identified for the three Priority Action Areas, although there are many opportunities for developing other partnership approaches and mechanisms for delivery

Action Plan

A Green Infrastructure Action Plan has been created by the Consortium (Appendix I). The Action Plan has an important role to play in providing a transparent framework and tool to aid project selection and delivery. It responds to the needs and opportunities arising from the analysis, and reflects suggestions from the GIC for actions to address perceived needs for enhanced Green Infrastructure provision in the County. To ensure that it is kept relevant and up-to-date it is intended that the Action Plan reviewed and updated annually.

Funding Mechanisms and Sources for Project Delivery

The following section outlines various generic options for delivering and funding Green Infrastructure investment. Reflecting the multi-dimensional nature of Green Infrastructure,

and the potential for multiple social, economic and environmental benefits, there are a wide range of existing, emerging and potential future mechanisms for the delivery and funding of Green Infrastructure, including:

The provision and funding of Green Infrastructure can be delivered in a number of ways and this following section outlines various options for gaining funding for Green Infrastructure investment.

Reflecting the multi-dimensional nature of Green Infrastructure, and the potential for multiple social, economic and environmental benefits, there are a wide range of existing, emerging and potential future mechanisms for the delivery and funding of Green Infrastructure.

The following have been identified by stakeholders in Buckinghamshire:

Aggregates Levy Sustainability Fund (ALSF): The ALSF was introduced to reduce the environmental impact of aggregate extraction and promote a more sustainable and environmentally friendly way of mineral extraction and waste management. Availability is restricted to areas affected by aggregates extraction, but some funding is obtainable in conjunction with award partners such as Natural England.

Area-specific Environmental Projects: e.g. River Thame Project/Upper Thame Project, The Chilterns Chalk Streams Project.

Charitable trusts: Charitable trusts can be established to manage individual or a range of Green Infrastructure projects.

Conservation trusts: e.g. The National Trust and the Berks, Bucks and Oxon Wildlife Trust.

Co-operative ownership: of allotment space/community orchards etc via 'gifts' from developers.

Corporate Social Responsibility: Corporate Social Responsibility (CSR) is a concept whereby organisations manage their core business to add social, environmental and economic value in order to produce a positive sustainable impact for both society and for the business itself.41

District Council grants: District Council grants may be available for Green Infrastructure creation and enhancement. Availability and amount of funding will vary between Districts.

⁴¹Buckinghamshire County Council Corporate Social Responsibility Feasibility Study (2008)

Endowments: Endowments can provide provision of an income-generating fund that has running costs. The endowment costs could be used to facilitate the maintenance of the Green Infrastructure.

Environmental Stewardship: with focused and enhanced grant support that will deliver Green Infrastructure objectives.

Established area-based delivery vehicles and partnerships: such as Aylesbury Vale Advantage, The Chilterns Conservation Board, Colne Valley Park Partnership, and The River Thames Alliance.

European Funding: The European Union provides funding to member states for a wide range of issues. The two main mechanisms for funding are the Structural Funds and Community Initiatives both of which have a mainly economic and regeneration focus, although other more subject specific funding is also available. All funding has to be matched to some extent by the member state.

An example of European Funding is the LEADER Programme. The LEADER Programme is a source of funding for farmers, foresters, rural businesses and community organisations. The funding is part of the Rural Development Programme for England (RDPE) with money coming from Europe via the South East England Development Agency (SEEDA). There are two main areas that are covered by the LEADER Programme in Buckinghamshire; these are Aylesbury Vale and Rural Milton Keynes Area and Chiltern Hills and Chalk Arc LEADER Area.

Farming and Wildlife Advisory Group (FWAG): provision of conservation advice, and legislative support, and development of Farm Plans, for land managers and landowners.

Forestry Commission English Woodland Grant Schemes: the woodland creation grant is currently targeted to the Growth Areas such as Aylesbury Vale, and in future could target other parts of the scheme (e.g. biodiversity and access grants) through a challenge fund.

Government Agencies: can provide advice and support on delivery issues key agencies are: Natural England, English Heritage, Environment Agency, and Sport England.

Government Departments: can provide funding for service delivery, e.g. the department for Communities and Local Government allocates Growth Area Funding (GAF) For example, is used to support the delivery of components of Green Infrastructure. The three main components of GAF that can be used to support Green Infrastructure are:⁴²

Improving the interface between rural and urban environments

⁴²http://www.communities.gov.uk/housing/housingsupply/growthareas/growthareasandtheenvironment/Based on information from above website.

- Creating and restoring new areas of the countryside to improve greenspace provision
- Providing rare and sensitive habitats with increased protection through buffering and habitat enhancement works

Groundwork Thames Valley: and other environmental bodies.

Landfill Communities Fund: is set-up the distribution of funds generated from landfill tax in the UK. The Landfill Communities Fund is designed to help mitigate the effects of landfill upon local communities. The scheme applies only to projects within a set radius of an active landfill site. Grants are distributed by local Environmental Bodies (EBs), and in Buckinghamshire these include Sita Trust, Veolia in the south of the County and WREN in the north.

Major public sector owners of accessible Green Infrastructure land: e.g. Buckinghamshire County Council, Forestry Commission, National Trust etc.

National Lottery Funds:

- *Big Lottery Fund:* The aim of the fund is to provide money to good causes. The fund provides money to health, education and environment related projects. The remit covers several Green Infrastructure areas.
- Heritage Lottery Fund (HLF): The HLF purpose is to be used to conserve and enhance heritage assets including nature reserves and parkland.
- Sport England: The aim of Sport England is to increase participation in sport participation.

Private sector funding: through property and financial endowments.

Renewable energy grant schemes: for example the Low Carbon Buildings Programme.

Planning Obligations: These are legal agreements made under Section 106 of the Town and Country Planning Act 1990 (as Amended), usually in association with planning permissions for new development. Such obligations can restrict the use of land, require specific works to be carried out on land or require a sum or sums to be paid to the local planning authority.

Key to development is the need for Green Infrastructure provision that is able to support new residential development needs and to improve green space linkages. BCC is working in partnership with the Local Delivery Vehicle (Aylesbury Vale Advantage) and AVDC to quantify and cost infrastructure requirements in Aylesbury Vale District for the period to 2026 and on a proposed tariff approach to securing developer contributions for new and

improved infrastructure (including Green Infrastructure projects) that are required to help facilitate and deliver the proposed growth.

Significant changes to the current planning obligations system are proposed in the Government's Planning Bill, which contains provisions for a Community Infrastructure Levy (CIL). If enabling powers are introduced this would be a charge levied on development to ensure that the development of an area can be funded wholly or partly by owners or developers of land the value of which increases due to permission for development. Like the Milton Keynes roof tax the proposed CIL would establish standard charges through the Local Development Framework process and would be based on a costed "Infrastructure Delivery Plan".

Roof Tax: Roof Tax is a charge on new dwellings that can be used to pay for essential liveability requirements of new communities, often within a defined development area. In some designated growth areas (e.g. Milton Keynes) the conventional "negotiated approach" towards securing planning obligations and developer contributions has been replaced with a so called "Roof Tax". This is essentially a standard charge for new dwellings that can be used to pay for a range of infrastructure requirements to support new communities.

Small scale community-based funding: may be able to provide small grants to help local residents to establish and run community-based environmental projects.

Conclusion

The contribution of sources of funding should be considered as part of the development and delivery of future Action Plans by the Consortium and other County-based partnerships. In particular, partnerships should play a key role in identifying opportunities and facilitating relationships for working with the private sector to deliver Green Infrastructure, including promoting the funding and delivery of Green Infrastructure through developer contributions associated with development opportunities.

Prioritising Green Infrastructure Projects for Delivery and Funding

It is recommended that the Action Plan (Appendix I) should provide the framework for guiding partnerships in identifying priorities for Strategic Green Infrastructure delivery and funding. These Action Plan priorities are not to be confused with other green space provisions that may be required at a local level to meet planning policy requirements on new developments.

The criteria for selecting projects to go forward for Green Infrastructure funding should be based on:

1) The level of potential multi-functional public and environmental benefits that could be provided by a scheme

- 2) Location located within, or directly linked to, the Green Infrastructure Priority Action Areas.
- 3 The projects should have high local priority and also strategic value
- 4) Deliverability reviewing costs, potential funding opportunity, landownership and timescales
- 5) Long term sustainability management and maintenance arrangements for the short, medium and long term.

The Green Infrastructure Opportunity Areas referred to in Chapter 5 provide a starting point for consideration and appraisal by the Partnerships. This should not exclude other projects and schemes which can contribute to Green Infrastructure delivery.

Developing Local Level/Community Green Infrastructure Plans

This document sets out a County-level strategy for Green Infrastructure. However the delivery of Green Infrastructure in Buckinghamshire will also need to happen at a district and local level. Districts are currently creating their own greenspace strategies addressing future greenspace provision in their areas (see Chapter 2).

Informed by the evidence and proposals developed in this Strategy, it is recommended that Local Green Infrastructure Plans be developed within identified Priority Action Areas to suit local circumstances. These Plans should be used as a basis for co-ordinating local Green Infrastructure delivery, and provide technical evidence to inform LDFs and other relevant delivery plans at a more local level (e.g. Parish) there is a need for strong community input into identifying priorities/opportunities.

Community Green Infrastructure Planning in Buckinghamshire (Living Networks)

Buckinghamshire GIC agreed to a methodology and format for the undertaking of local level community based Green Infrastructure Planning in Buckinghamshire called Living Networks. This approach forms the basis of local Green Infrastructure working within the County and allows the standardisation of a cross-boundary/County approach to local Green Infrastructure planning. The main aim of Living Networks is to identify the key existing natural, historic, cultural and landscape assets, accessible greenspaces and Rights of Way; and to plan new features that will provide a network of Green Infrastructure for the benefit of present and future generations.

A pilot community Green Infrastructure project called Whaddon Chase Living Networks forms a pilot approach to undertaking Living Networks in Buckinghamshire. The area of Whaddon Chase has been selected by Buckinghamshire GIC due to its high environmental and landscape importance and its proximity to the urban fringe of the growth city of Milton Keynes. It is hoped that the Living Networks methodology can be rolled-out across other priority growth areas in Buckinghamshire and be used by local communities as the basis for securing funding and partnerships for local delivery.

It is envisaged that this Buckinghamshire Green Infrastructure Strategy will act as an overarching document that will help inform and guide district level and local Green Infrastructure plans. The Buckinghamshire GIC will act as a key role to the planning and delivery of Green Infrastructure due to its broad base, representation and expertise in the field.

District Level Green Infrastructure Planning

Firstly the Local Planning Authority needs to identify how Green Infrastructure will be addressed in the LDF this may be through an Area Action plan or a Supplementary Planning Document (SPD). The local need for Green Infrastructure must be established identifying deficiencies in existing Green Infrastructure and identifying new opportunities. An environmental characterisation of the area will need to be identified along with high level local Green Infrastructure initiatives and future delivery partners.

The Core Strategy of a LDF needs to include key principles and objectives for Green Infrastructure. It should also identify broad spatial priorities and areas of Green Infrastructure deficiency. Long term management of Green Infrastructure will need to be defined. The Local Green Infrastructure Plans should also be used as a tool to assist planners and developers in implementing Green Infrastructure principles.

This Green Infrastructure Strategy will inform the LDF process as supporting evidence based document. It is strongly recommended that the plan preparation process should involve local communities in the identification of projects to be put forward for Green Infrastructure funding as part of the Action Plans prepared by the Green Infrastructure Partnerships.

Implementing the Buckinghamshire Green Infrastructure Strategy

- The Buckinghamshire GIC should take the leading role in supporting and taking forward the initiatives and projects identified in the Action Plan (Appendix I)
- The Action Plan (Appendix I) will be reviewed and updated on an annual basis
- Engagement with local community and interest groups should be undertaken in the development and implementation of projects that have been identified within the Action Plan
- Partnerships with adjacent authorities and organisations should be informed where cross boundary working and projects would be mutually beneficial
- When preparing LDFs existing standards for open space and strategic Green Infrastructure should be subject to ongoing review
- Buckinghamshire GIC will continue to meet and focus on site-specific planning and design of Strategic Green Infrastructure projects identified in the Action Plan

Appendices

Appendix A

Terms of Reference for the Buckinghamshire Green Infrastructure Consortium

Terms of Reference

1. Name and status

- 1.1 The name of the group is the 'Buckinghamshire Green Infrastructure Consortium'.
- 1.2 The group has no legal status.

2. Aim

2.1 To assist in the delivery of the Buckinghamshire Green Infrastructure Strategy

3. Objectives

- 3.1 To ensure that Buckinghamshire's sub regional and local green infrastructure (GI) assets are protected and enhanced in accordance with the social, economic and environmental needs of the community.
- 3.2 To ensure that GI is planned for, delivered and managed in a coordinated and integrated way at both strategic and local levels across Buckinghamshire.

4. Outcomes

- 4.1 The outcomes of the group are as follows:
 - a) To make representations on development policies and proposals of significance at a sub regional level
 - b) To produce a development brief for the production of sub regional and local GI plans
 - c) To establish a GI plan steering group and other sub groups as necessary
 - d) To provide technical support and guidance to GI plan steering group, 'project manager' and any appointed consultants
 - e) To promote the value of GI provision and planning to key stakeholders and wider community
 - f) To act as a forum for exchanging information and discussing issues associated with GI planning, delivery and management
 - g) To participate in workshops to inform the GI plan's development and delivery
 - h) To consider reports from the GI plan steering group and other established sub groups
 - i) To promote and support the plan's adoption by all relevant bodies
 - j) To secure the necessary resources for the effective management of the Consortium

5. Membership

- 5.1 Membership of the Consortium will comprise of representatives with GI strategic planning or technical competencies from the following organisations:
- Aylesbury Vale Advantage
- Aylesbury Vale District Council
- Berkshire, Buckinghamshire, and Oxon Wildlife Trust
- British Waterways
- Buckinghamshire County Council
- Buckinghamshire Rural Affairs Group
- Buckinghamshire and Milton Keynes Biodiversity Partnership
- Campaign to Protect Rural England (Buckinghamshire)
- Chiltern Society
- Chilterns Conservation Board
- City of London
- English Heritage
- Environment Agency
- Forestry Commission
- Farming and Wildlife Advisory Group
- Milton Keynes Council
- National Trust
- Natural England
- South Bucks District Council
- Sustrans
- Wycombe District Council
- 5.2 Each organisation is able to nominate one representative onto the Consortium. Appropriate deputies will be able to attend in the nominee's absence.
- 5.3 The Consortium will be able to co-opt other organisations or individuals to join as members. It will also have the flexibility to invite others to attend meetings in response to a specific item or technical need.
- 5.4 An organisation's membership can be terminated with immediate affect by writing to the chairman.
- 5.5 All members are responsible for making effective and positive contributions to the meetings and for supporting the aims and objectives of the Consortium.

6. Meetings

- 6.1 A meeting shall consist of representatives from not less than six of the organisations or interests listed in 4.1 above.
- 6.2 The Consortium shall meet at a time and place to be agreed at the previous meeting.
- 6.3 The Consortium shall elect a chairman/ vice chairman at the inaugural meeting to serve for the duration of the group's existence.

- 6.4 The Consortium shall elect a secretary at the inaugural meeting to provide secretariat services to the group. Written records of the group meetings will be kept and distributed to all members within two weeks of the associated meeting. This record will include attendees, date, venue and a record of all new and ongoing actions.
- 6.5 The Consortium shall elect a treasurer at the inaugural meeting to act as 'banker' and present financial reports to members as required.
- 6.6 The Consortium shall be non-discriminatory in its operation.
- 6.7 Meeting agendas will be drawn up by the secretary, agreed by the chairman, and distributed to all members, along with any supporting papers, at least one week in advance of the meeting to which they relate. All members are able to submit items to the secretary for inclusion on the agenda, at least three weeks in advance of the meeting to which they relate.
- 6.8 Members will be expected to report the progress of the Consortium to their respective organisations.
- 6.9 The written records of the Consortium meetings, including any supporting paperwork, shall be made public, with the exception of those items deemed by the Consortium to have an overriding commercial or personal confidentiality.

7. Publicity Policy

7.1 Members will be expected to agree and follow an agreed policy for managing all media relations.

8. Decision-making

8.1 Decisions will be made at meetings through general consensus with objections registered.

9. Dissolution

9.1 The Consortium may be terminated after appropriate consultation between all parties.

10. Alterations to the terms of reference

- 10.1 The chairman shall notify each member in writing of any proposed alterations to the terms of reference fourteen days prior to any meeting.
- 10.2 All members of the Consortium shall agree any alterations to these rules and guidelines.

Appendix B: Detailed Plan Preparation Process of the Buckinghamshire Green Infrastructure Strategy

STAGE 1 – PREPARATION OF GREEN INFRASTRUCTURE PROSPECTUS & INITIAL KEY STAKEHOLDER CONSULTATION

1.9.3 It was recognised that delivering a bold and forward-looking vision for Green Infrastructure in Buckinghamshire requires support and action from a wide range of stakeholders. Accordingly, Buckinghamshire County Council sought to involve key partner organisations from an early stage in the development of this initiative. As part of this study, a short Prospectus was prepared by Chris Blandford Associates and circulated to key stakeholder organisations for comment. The Prospectus¹ set-out the background to the Green Infrastructure concept and assets in Buckinghamshire, and proposed an outline vision and spatial strategy for Green Infrastructure provision and management. This consultation focused at a strategic level in order to provide a strategic overview of Green Infrastructure requirements and opportunities to inform this study.

STAGE 2 – TECHNICAL DATA GATHERING, POLICY REVIEW, NEEDS ASSESSMENT, ASSESSMENT OF CURRENT STANDARDS OF PROVISION

1.9.4 This work involved reviewing the existing and emerging policy context to determine levels of support for Green Infrastructure provision and specific policy requirements. Within this context, analysis examined the quantity, quality and accessibility of existing assets which contribute to Green Infrastructure resources across the County. This provided the basis for the County-level overview of current and projected deficits/needs for accessible greenspace across the County and identification of opportunities for new and enhanced strategic scale Green Infrastructure provision. Systematic development of detailed maps of the environment including wildlife habitats, landscape and archaeology were created at this stage.

STAGE 3 – PREPARATION OF THE BUCKINGHAMSHIRE GREEN INFRASTRUCTURE TECHNICAL FRAMEWORK

- 1.9.5 Together with the consultation feedback on the Prospectus, the assessment of existing Green Infrastructure assets informed the development of the Strategic Framework for Green Infrastructure in Buckinghamshire. The Framework presents the policy requirements at all planning levels for Green Infrastructure provision and management and articulates a recommended overarching vision for Green Infrastructure across the whole of the County².
- 1.9.6 A recommended county-level framework and spatial strategy for delivering the vision was then developed. This identified priority 'Action Areas' for investment in Green Infrastructure provision in the period up to 2026 identifying proposals in each Action Area for strategic Green Infrastructure projects to be put forward for Government Growth Area

¹Towards a Vision for Green Infrastructure in Buckinghamshire – A Prospectus (CBA for Buckinghamshire County Council, November 2006)

²Towards A Strategic Framework For Green Infrastructure In Buckinghamshire Technical report (CBA May 2007)

Funding (GAF) and delivery by stakeholders. These Action Areas and their associated project proposals have been identified through an analysis of the broad patterns and opportunities arising from existing and potential Green Infrastructure resources, particularly in relation to the principal access and connection networks for people and wildlife. Areas proposed for significant planned growth have also been considered.

- 1.9.7 'Green Infrastructure Opportunity Areas' and proposed development areas were identified within each Action Area using a relatively 'broad brush' analysis of the relationships between the resources and identifiable needs based on the data currently available.
- 1.9.8 This stage concluded by recommending a strategic framework for the delivery of Green Infrastructure in Buckinghamshire³.

STAGE 4 – PREPARATION OF THE BUCKINGHAMSHIRE GREEN INFRASTRUCTURE STRATEGY

1.9.10 Consultation on the Strategic Framework for Green Infrastructure in Buckinghamshire was carried out through a forum of stakeholders (many of which are now members of the Buckinghamshire GIC). Feedback from this process of consultations was used as a basis to inform the development of the County-wide Green Infrastructure Strategy.

STAGE 5 - PREPARATION OF LOCAL GREEN INFRASTRUCTURE PLANS FOR PRIORITY ACTION AREAS AND CONSULTATION WITH LOCAL COMMUNITIES

- 1.9.11 The Buckinghamshire Green Infrastructure Strategy will aid the delivery of local Green Infrastructure plans that will meet district and parish requirements.
- 1.9.12 Local Green Infrastructure Plans should be used as supporting technical evidence to inform Local Development Frameworks and other relevant delivery plans. Specifically, the County Council and the key partners engaged in Green Infrastructure delivery should use these local plans as a means to identify land required for new Green Infrastructure for allocation within Local Development Frameworks.

³Towards A Strategic Framework For Green Infrastructure In Buckinghamshire Technical report (CBA May 2007)

Appendix C: Introduction: Aims and Purpose of the Study

Buckinghamshire County Council wishes to prepare a "Strategic Green Infrastructure Plan" for the County that articulates a clear vision and spatial strategy for green infrastructure in the county that promotes and enhances the special character of Buckinghamshire. The Plan will comprise a Map and supporting text that will illustrate existing assets and the potential for new green infrastructure related to growth pressures allocated to the area by the Milton Keynes and South Midlands Sub-Regional Strategy and the South East Plan (Consultation Draft). The study is required to support infrastructure plans being prepared by Buckinghamshire County Council and partners with a view to informing local development frameworks, community plans and future funding bids.

The study will utilise the definitions and principles of Green Infrastructure set out in Planning Sustainable Communities: A Green Infrastructure Guide for Milton Keynes & the South Midlands and have regard to the multi-functional roles of green space set out in The countryside in and around towns: A vision for connecting town and country in the pursuit of sustainable development (Countryside Agency 2005).

Background

The regional and sub-regional development context for Buckinghamshire is set out in the Draft South East Plan. In the period 2006-2026, the Plan envisages the construction of 16,800 new dwellings at Aylesbury and 4,400 in other parts of Aylesbury Vale plus the possibility of urban extensions from Milton Keynes into adjacent parts of the Vale, in which context proposals for 7,500 houses at Newton Longville have been put forward by the Milton Keynes Partnership Committee (MK2031 Growth Strategy). The southern parts of the county are significantly constrained by the Chiltern AONB and Metropolitan Greenbelt designations but in addition to the above, 6000 houses are proposed in Wycombe District as part of the Western Corridor and Blackwater Valley Sub-Region. Outside of these sub-regions, lower levels of growth are envisaged.

The Draft South East Plan contains a range of objectives which can be addressed by green infrastructure: it recognises (that positive and high quality management of the region's open countryside should be encouraged and supported (Policy C3); that green infrastructure should accompany new development (Policy BE1); that biodiversity and wildlife should be protected and habitats restored (Policy NRM4); that woodland should be protected and promoted (Policy NRM5); that Local Development Documents should address urban-rural fringe issues (Policy BE4) and that policies should support the conservation and enhancement of the historic environment (Policy BE7) and the contribution of parks, open spaces, physical recreation and cultural facilities to shaping healthy communities (Policy S3). The scale of growth at Milton Keynes/Aylesbury makes it important that opportunities for tourism, sport and recreation-related development are identified and fully integrated into development plans (Policy TSR7).

Local Development Frameworks are currently in preparation by District Councils that will determine the precise location of growth and associated infrastructure as well as setting out core planning policies. Preliminary work has been undertaken by the Countryside and Heritage Group to identify areas of potential for green infrastructure creation or

enhancement. This work has informed an infrastructure schedule prepared for Aylesbury Vale Advantage, the local delivery vehicle for growth in Aylesbury Vale District. Related work has informed the development of the North-West Green Arc and Milton Keynes Growth Strategy. Emerging from these studies are the related concepts of "Green Infrastructure Action Areas"; "Countryside Access Hub"; "Green Infrastructure Opportunity Areas" and "Strategic Access Links" defined as:

Green Infrastructure Action Area – these are priority areas for the creation and enhancement of green infrastructure. Three areas have been identified in the preliminary study: South Buckinghamshire Woods and Heaths serving existing communities in South Buckinghamshire, Hillingdon and Slough and providing for the Western Corridor Sub-Region; Aylesbury Environs providing for existing and new communities in Aylesbury and Milton Keynes Western Flank providing for existing and expanded communities on the west side of Milton Keynes and at Buckingham and Winslow. Within each Action Area there will be a need to consider in more detail the definition of:

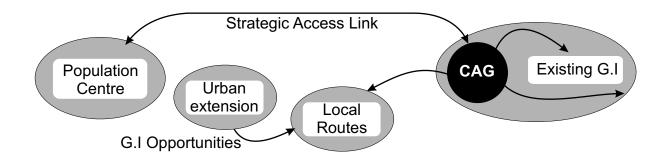
Countryside Access Gateway – a "gateway" to the countryside providing visitor facilities, information etc and local access routes to existing or proposed green infrastructure. Examples would include existing visitor centres at Black Park, Burnham Beeches and Wendover Woods. Existing Hubs may be in need of enhancement whilst other locations may have the potential to develop into a Hub.

Green Infrastructure Opportunity Area – locations where there is an opportunity and need to create new green infrastructure, or enhance existing. New green infrastructure will seek to either address to a general deficit in a locality or increase the quality or diversity of the "offer" from an existing hub. Analysis of the range of functions and benefits from each hub will be a critical factor as will be proximity and relationship to growth areas. It will be important to take full account of the historic and natural environments of each area to ensure that proposals respect and reinforce the special local characteristics of the Buckinghamshire landscape thus securing a real "sense of place".

Strategic Access Link – these are existing or proposed new links between population centres and gateways. They should promote sustainable transport through cycling and use of public transport and will need to have regard to the Local Transport Plan and Rights of Way Strategic Access Plan.

Conceptual Plan of relationships within an Action Area

NB: each area may require more than one Countryside Access Gateway (CAG)



The consultants first step will be to take these concepts together with an outline map and other information supplied by the Client to create a short well illustrated non-technical Green Infrastructure consultation paper aimed at elected members, partner organisations, parish councils, community groups etc. This paper should explain the overall concept of Green Infrastructure, provide a general overview map of the county explaining the overall strategy and selection of Action Areas. For each Action Area a generalised conceptual plan should be produced identifying existing infrastructure and proposed new and enhanced provision. An outline of the further steps should be provided together with an opportunity for comments. It is envisaged that the next step will involve further data gathering and analysis to refine the needs and opportunities assessment in order to inform a more robust and complete Strategic Green Infrastructure Plan, including indicative costs.

Methodology

The study will be based upon the general methodology for developing a Strategic Framework and Delivery Programme set out in Planning Sustainable Communities: A Green Infrastructure Guide for Milton Keynes & the South Midlands (p. 26-28). The Client envisages two stages:

Stage 1: Production of green infrastructure consultation document. Provision of data and overall concepts by Client to be worked up into consultation paper. This stage will be restricted to limited analysis of existing data to meet tight deadlines.

Stage 2: Collection of new data to enhance BCC data-sets. Enhanced analysis, including consideration of matters arising from consultation. Production of Strategic Green Infrastructure Plan.

In order to achieve the above, the Consultant will need to:

- Assess the type, quantity, quality and accessibility of existing strategic-scale green infrastructure assets. In stage 2, the consultant should make provision for enhancing the existing data sets with regard to the nature, accessibility, function and benefits⁴ of key assets.
- 2. Assess the provision of green infrastructure within agreed catchments of the county's main population centres considering both the current situation and the projected situation in 2026. This will enable comparative measures of provision to be made between communities and also comparison with national benchmarks (e.g. Accessible Natural Greenspace Standards (ANGSt) Toolkit) and the identification and quantification of deficits.
- 3. Identify opportunities for enhancing existing and creating new multi-functional Green Infrastructure addressing a variety of functions and benefits. Opportunity analysis should consider existing historic and natural assets; landscape character; sense of place; potential for (re)creating priority habitats; strategic access opportunities; educational potential and wider sustainability issues. Detailed issues of land ownership and economic viability are beyond the scope of this study but

Page 134

⁴For a systematic approach to analysis of functions and benefits see also Thames Gateway Green Infrastructure Guidance.

regard should be had to available information and expert opinion to ensure that proposals are "realistic" in the sense that they are worthy of taking forward as site or area specific Delivery Plans. Sufficient work should be done on costs to inform an Infrastructure Schedule for the South East Plan.

4. Produce a Draft Buckinghamshire Strategic Green Infrastructure Plan for consultation. Undertake consultation and revise as appropriate. Publish final Plan.

Key Factors to Consider

- 1. The project will cover the whole of the modern county of Buckinghamshire, covering the Districts of Aylesbury Vale, Chiltern, South Bucks and Wycombe. It will have regard to published plans covering adjacent and overlapping areas (e.g. Milton Keynes; Chiltern AONB Management Plan and Colne Valley Regional Park Action Plan). It will cover the period of the South East Plan (2006-2026).
- 2. Data is available in GIS format (see list below). The Countryside and Heritage Group is currently developing a "Buckinghamshire Environmental Character System" (BECS), which will fee data into the study. The consultant must be able to receive, manipulate and analyse GIS data.
- 3. The consultant will also be provided with a range of published and draft BCC reports relevant to the study (e.g. Buckinghamshire Landscape Plan and Biodiversity Action Plan; Historic Environment Assessments for the Growth Areas; Outcomes from local Green Infrastructure Workshops etc.) Relevant external reports and policies should be referred to (e.g. South East Forestry Plan).
- 4. It is a requirement that data captured in digital format compatible with the Client's systems. Digital data generated by the project must be compatible with systems used by BCC (i.e. Microsoft Word, Excel and Access and for GIS data Arc GIS version 8.3.)
- 5. The Project Manager will be the Consultant's main contact for the study. The consultant will be expected to work closely with the Countryside and Heritage and Strategic Plans Groups at Buckinghamshire County Council.

Outputs and Presentation of the Study

The outputs should be presented in paper and digital copy. All outputs must be provided in draft form for client approval in sufficient time to meet required deadlines.

The Green Infrastructure consultation paper and final strategy is envisaged as being in 4 A3 pages written in plain English, well-illustrated with generalised maps. A technical report will also be required setting out the policy context, consultation and analysis undertaken to arrive at the final plan.

Enhanced GIS data must be returned to the client in an agreed format suitable for use by the client.

Conditions and Standards of the Work

Buckinghamshire County Council is the commissioning body (or 'Client') for the study and will appoint a Project Manager. Consultants tendering for this project will be required to produce a Proposal which:

- Outlines the Consultant's understanding of the brief;
- Provides details of relevant qualifications and experience (including examples of previous GIP work and demonstration of GIS-capability);
- Identifies any assumptions or observations made by the Consultant;
- Set out how the Consultant intends to meet the objectives of the study including identification of the key elements of and stages within the project, how the Consultant will interact with the Project Management Group;
- Identify how the Consultant will meet the requirement for information arising from the study to be made available in digital format;
- Set out how interim and final outputs will be presented;
- Confirm adherence to the required timetable, provide project plan identifying appropriate consultation meetings and key milestones;
- Provide two independent referees with experience of the consultant's work, preferably on similar projects; and
- Set out the Consultant's fees and estimates for the delivery of the study.
 Separate costs should be provided for stages 1 and 2. The client reserves the right to commission only part of the work set out in the brief.

Methods, timetable, outputs and reporting will be as specified unless varied by written instruction issued by the Project Manager.

Copyright: the findings from the study will be the property of the Client. The use of this information by the Consultant for any purposes other than those specified in this document will require the written consent of the Client.

Outline Timetable

Tender submissions received by Client	18 September 2006
Award of contract	22 September 2006
Completion of stage 1	30 October 2006
Completion of stage 2	15 January 2007

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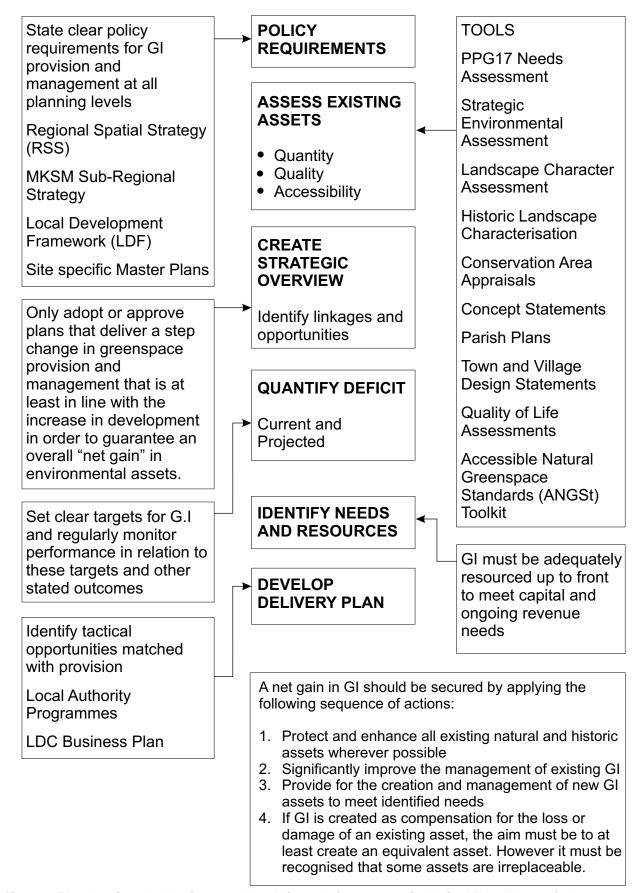
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Strategic Framework Methodology



(Source: Planning Sustainable Communities: A Green Infrastructure Guide for Milton Keynes & the South Midlands)

Key Datasets (indicative)

Type of Data	Existing data sources	Data Holder	Format
	SSSI		GIS Arc View shapefile
	County Wildlife Site		GIS Arc View shapefile
Notional	BBOWT Reserve	DOC/OIT	GIS Arc View shapefile
Natural Environment	RSPB Reserve	BCC/CIT	GIS Arc View shapefile
	National Nature Reserve		GIS Arc View shapefile
	Local Nature Reserve		GIS Arc View shapefile
	Biodiversity Action Plan		Report
	Scheduled Ancient Monuments		GIS Arc View shapefile / Designation Papers
Historic Environment	Conservation Areas		GIS Arc View shapefile / Conservation Area Appraisal
	Registered Parks and Gardens	BCC/CAS	GIS Arc View shapefile / Designation Papers
	Historic Landscape Character		GIS Arc View shapefile / County & Growth Area Reports
	Listed Buildings		GIS Arc View shapefile / Designation Papers
	Archaeological Notification Areas		GIS Arc View shapefile
	Open Access Land		GIS Arc View shapefile
	Forestry Commission Land		GIS Arc View shapefile
Strategic	National Trust Land	BCC/RoW	GIS Arc View shapefile
Access	RoW Promoted Routes		GIS Arc View shapefile
	RoW Definitive Map		GIS Arc View shapefile
	RoW Improvement Plan		Report

Type of Data	Existing data sources	Data Holder	Format
	Chiltern AONB		GIS Arc View shapefile
Stratagia	Greenbelt	TDC	GIS Arc View shapefile
Strategic Planning	Local Landscape Designations	TBC	GIS Arc View shapefile
	Population Data		?
Transportation	Local Transport Plan	всс	Report
	OS Mastermap	GIS	GIS Arc View shapefile
Physical Coography/	Floodplains	ТВС	GIS Arc View shapefile
Geography/ Landscape	Geological Data	ТВС	GIS Arc View shapefile
	Buckinghamshire Landscape Plan	BCC/CIT	Report

Appendix D: Sources of Information

- A Clear Vision for the South East: The South East Plan Draft Plan for Submission to Government (SEERA, March 2006)
- A Clear Vision for the South East: The South East Plan Implementation Plan Draft Plan for Submission to Government (SEERA, March 2006)
- A Strategy for England's Trees, Woodlands and Forests.
- Aylesbury Vale District Local Plan, Aylesbury Vale District Council, (2004)
- Bedfordshire & Luton Strategic Green Infrastructure Plan (Bedfordshire & Luton Green Infrastructure Consortium, 2007)
- Biodiversity by Design: A Guide for Sustainable Communities, (TCPA, 2004)
- Buckinghamshire County Council Corporate Social Responsibility Feasibility Study (2008)
- Buckinghamshire and Milton Keynes Historic Landscape Characterisation, (Buckinghamshire County Council, 2006)
- Buckinghamshire Community Strategy 2005-2008, (Buckinghamshire County Council)
- Buckinghamshire County Adopted Structure Plan (Buckinghamshire County Council, 1996)
- The Landscape Plan for Buckinghamshire Part 1: Landscape Character Assessment, Buckinghamshire County Council (c.2000)
- Buckinghamshire County Council Local Transport Plan 2006-2011
- Buckinghamshire & Milton Keynes Biodiversity Action Plan 2000 2010
- Buckinghamshire Rights of Way Improvement Plan 2008-18 Buckinghamshire County Council
- Chiltern District Adopted Local Plan, Chiltern District Council, (1997)
- Choosing Activity: a physical activity action plan. Department of Health and DCMS.
- Choosing Health: Making Healthier Choices Easier (2004) DoH Partnership working to resolve health problems
- Choosing Health (2004) Department of Health
- Department for Environment, Transport and the Regions (DETR) 2000. Countryside Rights of Way Act

- Economic Benefits of Accessible Green Spaces for Physical and Mental Heath (2005) Forestry Commission by CJC Consulting.
- Green Infrastructure: Making the Connection Strategic Framework Study for Northamptonshire (River Nene Regional Park, (2006)
- Green Space Strategies A Good Practice Guide, CABE Space
- Guide to the NHS for local planning authorities (2007) National Health Service
- Landscape Character Assessment Guidance for England and Scotland, Countryside Agency (2002)
- Health Concordat (2005) Countryside Agency, English Nature, Forestry Commission, Sport England, Association
- Health and Well being: Trees, Woodlands and Natural Spaces (2002) Forestry Commission
- MK2031 Growth Strategy (Milton Keynes Partnership Committee)
- MKSM Environmental and Quality of Life Sub-Group 2005. Planning Sustainable Communities: A Green Infrastructure Guide for Milton Keynes & the South Midlands
- Northamptonshire's Environmental Character and Green Infrastructure Suite, Northamptonshire County Council, (2006)
- Planning For Sport and Active Recreation: Objectives and Opportunities (2005) Sport England
- Planning Policy Guidance (PPG) 17 Planning for Open Space, Sport and Recreation (ODPM, 2004)
- Planning Policy Statement (PPS) 1 Delivering Sustainable Development
- Planning Policy Statement (PPS) 7– Sustainable Development in Rural Areas
- Planning Policy Statement (PPS) 9 Biological and Geological Conservation
- Planning Sustainable Communities: A Green Infrastructure Guide for Milton Keynes & the South Midlands, 2004
- Providing Accessible Natural Greenspaces in Towns and Cities: A Practical Guide to Assessing the Resource and Implementing Local Standards for Provision (English Nature, 2003)
- River Nene Regional Park, November 2006. Green Infrastructure: Making the Connection – Strategic Framework Study for Northamptonshire
- South Bucks District Adopted Local Plan, South Bucks District Council (March 1999)

- South East Regional Economic Strategy (2002-12)
- Spatial Planning for Sport and Active Recreation: Guidance on Sport England's Aspirations and Experiences (2005) Sport England
- Strategic Green Infrastructure Framework Study for Northamptonshire
- Sustainable Communities: Building for the Future (ODPM, 2003)
- Thames Gateway Green Infrastructure Guidance (Greening the Gateway Partnership)
- The Bedfordshire and Luton Strategic Green Infrastructure Plan
- The Countryside in and Around Towns: a vision for connecting town and country in pursuit of Sustainable Development (Countryside Agency/Groundwork)
- The Environment: Who cares? MORI, (2002)
- The Landscape Plan for Buckinghamshire Part 1: Landscape Character Assessment (Buckinghamshire County Council, c.2000)
- Trees Matter; the benefits of trees and woods in towns- National Urban Forestry Unit (1998)
- Towards a Vision for Green Infrastructure in Buckinghamshire A Prospectus (CBA for Bucks CC, 2006)
- Urban forest landscapes in the UK- progressing the social agenda, Coles R.W. and Bussey S.C. (Landscape and Urban Planning, 2000)
- Wycombe District Adopted Local Plan to 2011, Wycombe District Council (2004)
 Economic Benefits of Accessible Green Spaces for Physical and Mental Heath (2005)
 Forestry Commission by CJC Consulting.

Appendix E: Accessible Greenspaces and Countryside Access Routes

Strategic Audit and Needs Assessment

Purpose / Scope of Paper

The aim of the Buckinghamshire Green Infrastructure Strategy is to identify ideas for strategic scale Green Infrastructure projects that are multi-functional and can deliver a range of economic, social and environmental benefits. These projects must be justified through mapping and integration of the opportunities related to different Green Infrastructure assets, taking into account the need to meet current policy objectives.

Chris Blandford Associates (CBA) have produced three preliminary Topic Paper, of which there are four in total (see list below), on behalf of Buckinghamshire County Council (BCC). Each paper is a preliminary 'think paper' which will highlight the current identified asset resource and then seek to identify and analyse opportunities for enhancement of that resource to meet current policy objectives. These papers are designed to be built upon with site-specific knowledge from BCC and other invited consultees.

- Topic Paper A: Accessible Greenspaces and Countryside Access Routes Strategic Audit and Needs Assessment
- Topic Paper B: Biodiversity and the Natural Environment Opportunities Analysis
- Topic Paper C: Historic Environment Opportunities Analysis
- Topic Paper D: Landscape Opportunities Analysis

This topic paper sets out the findings of a strategic audit of the existing supply of accessible greenspace in Buckinghamshire. It also provides a strategic assessment of future needs for accessible greenspace provision in response to the demands of expanding communities within Buckinghamshire, and around the County's boundaries. This study considers the existing network of countryside access routes that link greenspace sites to settlements and the wider countryside. The study draws on guidance provided by the following key documents.

- PPG17 (Planning for Open Space, Sports and Recreation) companion guide 'Assessing Needs and Opportunities'
- The Town & Country Planning Association's 'Biodiversity by Design' guidance
- English Nature's 'Accessible Natural Greenspace in Towns and Cities' guide⁷
- The Green Infrastructure Guide for Milton Keynes and The South Midlands⁸
- Buckinghamshire Local Transport Plan⁹
- Rights of Way Improvement Plan¹⁰

⁵Planning Policy Guidance 17 Planning for Open Space, Sports and Recreation : Companion Guide - Assessing Needs and Opportunities (ODPM, 2004)

⁶Biodiversity by Design: A Guide for Sustainable Communities (TCPA. 2004)

Providing Accessible Natural Greenspaces in Towns and Cities: A Practical Guide to Assessing the Resource and Implementing Local Standards for Provision (English Nature, 2003)

⁸Planning Sustainable Communities – A Green Infrastructure Guide for Milton Keynes & the South Midlands

⁹Buckinghamshire County Council Local Transport Plan 2006 – 2011

¹⁰Buckinghamshire County Council Rights of Way Improvement Plan 2008-2018

The findings of the study are described below, supported by the following:

Tables

- Assessment of Accessible Greenspace Site Classification
- Existing Countryside Access Routes of Strategic Significance
- Assessment of Accessible Greenspace Provision by Settlement

Figures

- 4.1 Overview of Existing Green Infrastructure Resources in Buckinghamshire
- 4.2 Overview of Existing Countryside Access Routes of Strategic Significance in Buckinghamshire
- 4.3 Publically Accessible Green Infrastructure in Buckinghamshire based on the ANGSt model

Strategic Audit of Existing Accessible Greenspace

The mapping of accessible greenspaces is based on the following data supplied by Buckinghamshire County Council. (Figure 4.1)

- CROW Act 2000 Open Access Land (commons, heaths and downs)
- Country Parks
- Woodland Trust Land with Open Access
- Forestry Commission Land¹¹
- National Trust Land with Open Access¹²
- Buckinghamshire County Council Land with Open Access¹³

The map also identifies other accessible land shown on the published OS Explorer Maps not covered by the above datasets – namely, Burnham Beeches and Dorney Lake Country Park¹⁴.

It should be noted that accessible greenspaces within urban areas are not included in this strategic study, which focuses on provision of accessible greenspaces of strategic importance in the countryside around the county's main settlements. PPG17 (Planning for Open Space, Sports and Recreation) requires local authorities to undertake local audits of open space provision within their urban areas. As they become available in Buckinghamshire, these local studies can be used to identify and map accessible greenspaces within urban areas as a basis for assessing their future greenspace needs.

All access land in Buckinghamshire that is over 2ha is shown on Figure 4.1, and listed in the classification provided as Table A1. This threshold is used as it is considered to encompass accessible greenspaces of greatest significance in a county-wide context. The main types of greenspace included within this classification are country parks, natural/semi natural habitat (wood, heath and down) and commons. With the exception of a small number of urban commons, the vast majority of these sites lie outside urban areas, and

¹¹All Forestry Commission freehold land in Aylesbury Vale is CRoW open access. Some leasehold is not.

¹³Includes National Trust sites with full and limited open access

¹⁴Other than Country Parks owned by Buckinghamshire County Council Indicative boundaries digitised from the OS Explorer Map

provide key destinations for visits to the countryside from urban areas. Accessible greenspace over 2ha defined in the Bedfordshire & Luton Strategic Green Infrastructure Plan is also shown on Figure 4.1 for context.

All settlements with a population over 3000 (based on the 2001 census figures) are shown on Figures 4.1 to 4.3. This threshold is used as it is considered to encompass all the main settlements in Buckinghamshire (i.e. the market towns and larger villages) where demand for access to greenspace in the countryside is of greatest significance in a county-wide context.

Strategic Audit of Existing Countryside Access Routes

The existing network of countryside access routes considered to be of greatest strategic significance in Buckinghamshire is shown on Figure 4.2 and listed in Table A2. The routes include:

- Promotional Recreational Routes the network of routes for walkers, horse riders and cyclists actively promoted by Natural England (National Trails) and Buckinghamshire County Council.
- The Public Rights of Way Network the network of bridleways (access on foot, horseback or pedal cycle), byways (access on foot, horseback, pedal cycles and wheeled vehicles of all kinds) and footpaths (access on foot only)
- Strategic Waterways the network of navigable river/canal routes for watercraft.

The map is based on datasets supplied by Buckinghamshire County Council. This 'strategic' network of routes provides access in and out of the main settlements, and enables access to accessible greenspace sites and landscapes in the wider countryside.

Strategic Assessment of Accessible Greenspace Provision and Access Route Network Linkages

It is considered that the Accessible Natural Greenspace Standard promoted by English Nature (now Natural England) provides a useful model for assessing levels of provision in the context of this strategic study. It emphasises the importance for people of being able to have easy access to natural (and semi-natural) greenspace close to where they live; the standard is a way of ensuring that everyone has an opportunity to experience biodiversity and 'natural' areas as part of their everyday lives, providing benefits for people's health and well-being.

In addition to stating that no person should live more that 300m from their nearest area of natural greenspace, which should be at least 2ha, the Standard highlights the need for the provision of larger natural greenspace sites. The Standard suggests at least one 20 ha site within 2 km and one 100ha within 5km and one 500ha site within 10km. The Standard also recommends that provision should be made of at least 2ha of accessible natural greenspace per 1000 population. Given the practical difficulties of incorporating the Standard within existing densely developed urban areas, the urban fringe is considered to be a key area for the provision of larger sites (i.e. greater than 20ha).

The maps in Figures 4.3 identify the location and distribution of 'strategic' accessible greenspace in relation to population to establish areas of deficiency measured against the Standard. Based on these maps, the assessment of accessible greenspace provision by

settlement is set out in Table A3. This assessment has found that 5 of the settlements considered in this study currently meet the minimum Standard for provision of larger accessible natural greenspace – Buckingham, Amersham, Chesham, Wendover and Aston Clinton. None of the other 19 settlements currently meet the minimum Standard with respect to the provision of accessible greenspace at all three tiers of the hierarchy. Of these only 2 settlements – Haddenham and Winslow - do not meet any part of the minimum Standard in this respect. This assessment has found that all 19 settlements meet the minimum Standard with the respect to the provision of 2ha of accessible greenspace per 1000 population.

Figure 4.2 shows that in general the public rights of way network provides good linkages between settlements and the surrounding accessible greenspaces in the wider countryside. However, looking at the existing network of countryside access routes of strategic significance shown on Figure 4.2, there are considered to be two main gaps in this strategic access network:

- East to west linkages connecting Stokenchurch, Walters Ash, High Wycombe, Hazelmere, Beaconsfield and Chalfont St Peter with the accessible greenspace;
- North to south linkages connecting Prestwood/Walters Ash/Hazelmere/High Wycombe and Marlow/Bourne End with the accessible greenspace – particularly the River Thames corridor;

An assessment of accessible greenspace provision by District is set out in Table A1 (existing situation) and Table A2 (projected situation for 2026) below.

Table A1 - Assessment of Accessible Greenspace Provision by District

District Existing Accessible Greenspace (ha)		Population 2001	Provision (ha) per 1000 Population	
Aylesbury Vale	1974	165,700	11.91	
Wycombe	1146	162,100	7.07	
Chilterns	846	89,200	9.48	
South Bucks	1173	61,900	18.95	

Table A2 - Assessment of Accessible Greenspace Provision by District in 2006

District Existing Accessibl Greenspace (ha)		Population 2001	Provision (ha) per 1000 Population
Aylesbury Vale	1974	198,600	9.94
Wycombe	1146	161,900	7.08
Chilterns	846	88,700	9.54
South Bucks	1173	62,600	18.74

The above analysis shows that at a District level the current provision of accessible greenspace exceeds the Standard of 2ha per 1000 population – both now and in 2026. However, as the above analysis shows, some of this provision at all tiers in the hierarchy is poorly distributed in relation to the main settlements, particularly those in Aylesbury District. It also does not take into account large settlements adjacent to the county boundary (e.g. Milton Keynes and Slough) whose populations are likely to use accessible greenspace within Buckinghamshire to meet their needs.

Need for Enhanced Provision

Based on the Standard promoted by English Nature (Natural England), this preliminary assessment has identified a need to provide new accessible natural greenspace in appropriate locations to meet the needs of growth communities within and around the County over the next 20 years. This enhanced level of provision would need to be supported by improvements to the public rights of way network in line with the Buckinghamshire Rights of Way Improvement Plan. New accessible greenspace sites and links will need to:

- Address the spatial deficiencies in provision identified by this study for specific settlements;
- Be well linked into the strategic access route network; and
- Take into account the opportunities for enhancement of natural habitats, historic environment assets and landscapes identified in Topic Papers B, C and D.

Quality and Functionality of Accessible Greenspaces

The quality of the accessible greenspace network within the County is of strategic importance. However, as a desk-based exercise this study has not assessed the existing or potential quality of accessible greenspace on an individual site basis. This would involve carrying out site-based quality audits of each site using a standard audit form that reflects advice from CABE Space on assessing the quality of greenspace provision (see Annex 2 of Green Space Strategies – A Good Practice Guide for details). In summary, this type of quality audit would need to focus on examining the following qualities of greenspaces:

- Adaptability and robustness;
- Biodiversity:
- Character and distinctiveness;
- Connectivity and accessibility;
- Definition and enclosure:
- Inclusiveness:
- Legibility; and
- Sustainability

In addition, a quality audit could also enable the collection of site-specific information to inform a detailed examination of the extent to which the greenspaces (and access routes) contribute to meeting the ten key functions for 'countryside in and around towns' identified by the Countryside Agency (Natural England) and Groundwork. These functions are:

- A bridge to the country;
- A classroom;
- A cultural legacy;
- A gateway to the town;
- A health centre;

- A nature reserve;
- A place for sustainable living;
- A productive landscape;
- A recycling and renewable energy centre; and
- An engine for regeneration

The above requirement would need to be addressed in the Green Infrastructure Strategy through inclusion of appropriate actions in the implementation plan.

Table 1: Accessible Greenspace Site Classification

Site No.	Site Name:	Size (Ha)	Greenspace Type
1	Ashridge Estate	500>	Natural/semi-natural habitat
	Hazelborough Wood	500>	Natural/semi-natural habitat
2 3	Bernwood Forest	100>	Natural/semi-natural habitat
4	Burnham Beeches	100>	Natural/semi-natural habitat
5	Wendover Woods	100>	Natural/semi-natural habitat
6	Stowe Landscape Garden	100>	Natural/semi-natural habitat
7	Cookhamdean Common	100>	Common
8	Bradenham	100>	Natural/semi-natural habitat
9	Lower Deans Wood,	100>	Natural/semi-natural habitat
· ·	Watlington Hill, Watlington Park		
10	Black Park Country Park	100>	Country Park
11	Ash Grove Plantation	100>	Natural/semi-natural habitat
12	Penn Wood	100>	Natural/semi-natural habitat
13	Bisham Woods	100>	Natural/semi-natural habitat
14	Cliveden	100>	Natural/semi-natural habitat
15	Hodgemoor Woods	100>	Natural/semi-natural habitat
16	Tring Park	100>	Natural/semi-natural habitat
17	Frith Wood	100>	Natural/semi-natural habitat
18	Coombe Hill & Bacombe Hill	100>	Natural/semi-natural habitat
18A	Dorney Lake Country Park	100>	Country Park
19	Heath Wood	20>	Natural/semi-natural habitat
20	Beacon Hill	20>	Natural/semi-natural habitat
21	Ashley Hill Forest	20>	Natural/semi-natural habitat
22	No site name	20>	Unclassified
23	Stoke Common	20>	Common
24	Wicken Wood	20>	Natural/semi-natural habitat
25	Crowsley Park Woods	20>	Natural/semi-natural habitat
26	Watercroft Wood, Leygrove's	20>	Natural/semi-natural habitat
	Wood & Codmore Common		
27	Birchland & Walk Woods	20>	Natural/semi-natural habitat
28	Hughenden Manor	20>	Natural/semi-natural habitat
29	Dorney Common	20>	Common
30	Aldbury Nowers	20>	Natural/semi-natural habitat
31	Magna Carter Island	20>	Natural/semi-natural habitat
32	Langley Park Country Park	20>	Country Park
33	Baldwin's Wood	20>	Natural/semi-natural habitat
34	College Wood	20>	Natural/semi-natural habitat
35	Cock Marsh	20>	Natural/semi-natural habitat
36	Piper's Hill	20>	Natural/semi-natural habitat
37	Pulpit Wood	20>	Natural/semi-natural habitat
38	Burnt Platt	20>	Natural/semi-natural habitat
39	No Site Name	20>	Unclassified
40	Wadesdon Manor	20>	Natural/semi-natural habitat
41	Hudnall Common	20>	Common
42	Aston Wood	20>	Natural/semi-natural habitat
43	West Wycombe Park,	20>	Natural/semi-natural habitat
	West Wycombe Village		
44	Harrocks Wood	20>	Natural/semi-natural habitat
45	Gillifield Wood	20>	Natural/semi-natural habitat

46	Dunstable Downs	20>	Natural/semi-natural habitat
47	Land at Bledlow Ridge	20>	Natural/semi-natural habitat
48	Whitfield Wood	20>	Natural/semi-natural habitat
49	Chinkwell Wood	20>	Natural/semi-natural habitat
		20>	
50	Lodge Hill		Natural/semi-natural habitat
51	Stockgrove Country Park	20>	Country Park
52	Moor End Common	20>	Common
53	Piddington Wood	20>	Natural/semi-natural habitat
54	Philipshill Wood	20>	Natural/semi-natural habitat
55	Pike Hill	20>	Natural/semi-natural habitat
		20>	Common
56	Brill Common Complex	20>	
57	Pullingshill Wood & Marlow	20/	Natural/semi-natural habitat
	Common		_
58	Widbrook Common	20>	Common
59	Hempton Plain	20>	Natural/semi-natural habitat
60	Kimble Wood	20>	Natural/semi-natural habitat
61	Great Hampden Common	20>	Common
62	No Site Name	20>	Unclassified
		20>	Country Park
63	Thorney Park Country Park		•
64	Park Copse	20>	Natural/semi-natural habitat
64A	Thornborough Wood	20>	Natural/semi-natural habitat
64B	Missenden Abbey Park	20>	Natural/semi-natural habitat
64C	Hog and Hollowhill	20>	Natural/semi-natural habitat
65	Great Tinkers Wood	2>	Natural/semi-natural habitat
66	Piddington Wood	2>	Natural/semi-natural habitat
	Ascott	2>	Natural/semi-natural habitat
67			
68	Ibstone Common	2>	Common
69	Harpsden Wood	2>	Natural/semi-natural habitat
70	Chesham Bois Wood	2>	Natural/semi-natural habitat
71	Pheasants Hill	2>	Natural/semi-natural habitat
72	Bois Common	2>	Common
73	Drayton Common	2>	Common
74	Allnutt's Wood	2>	Natural/semi-natural habitat
75	Munces Wood	2>	Natural/semi-natural habitat
76	Marlow Common	2>	Common
		2>	Natural/semi-natural habitat
77 70	Pepperboxes Wood	2>	Natural/semi-natural habitat
78	Beacon Hill		
79	Adams Wood	2>	Natural/semi-natural habitat
80	Hogshaw Hill Farm	2>	Natural/semi-natural habitat
81	Land at Shepherd's Green &	2>	Natural/semi-natural habitat
	Greys Green		
82	Ramscoat Wood	2>	Natural/semi-natural habitat
83	Round Wood	2>	Natural/semi-natural habitat
84		2>	Country Park
	Denham Country Park	2>	Natural/semi-natural habitat
85	Denham Woods		
86	Hogback Wood	2>	Natural/semi-natural habitat
87	Brickkiln Copse	2>	Natural/semi-natural habitat
88	Land including Bank Green	2>	Natural/semi-natural habitat
	and Peppett Green	2>	Natural/semi-natural habitat
89	Flowers Bottom		
90	Land at NW High Wycombe	2>	Natural/semi-natural habitat
91	Summer Heath	2>	Natural/semi-natural habitat
.			

92	Bledlow Ridge	2>	Natural/semi-natural habitat
93	Mayditch Common	2>	Common
94	Land North of Turville	2>	Natural/semi-natural habitat
95	Land W of Rout's Green	2>	Natural/semi-natural habitat
96	Cowcroft Wood	2>	Natural/semi-natural habitat
97	Little Heath	2>	Natural/semi-natural habitat
98	Lake End Common	2>	Common
99	Hundridge Wood	2>	Natural/semi-natural habitat
100	Winter Hill	2>	Natural/semi-natural habitat
101	Gomm's & Bubbles	2>	Natural/semi-natural habitat
102	Windmill Piece	2>	Natural/semi-natural habitat
103	Northtown Moor	2>	Natural/semi-natural habitat
104	Woodburn Common	2>	Common
105	Land at Chesham	2>	Natural/semi-natural habitat
106	Cookham Moor	2>	Natural/semi-natural habitat
107	Land NW of West Wycombe	2>	Natural/semi-natural habitat
108	Island Pond Wood	2>	Natural/semi-natural habitat
109	Burcote Wood	2>	Natural/semi-natural habitat
110	Land south west of Ibstone	2>	Natural/semi-natural habitat
111	Land north east of Burnham Gore	2>	Natural/semi-natural habitat
112	Land east of Speen	2>	Natural/semi-natural habitat
113	Claydon House	2>	Natural/semi-natural habitat
114	Chartridge	2>	Natural/semi-natural habitat
115	Dorney Wood	2>	Natural/semi-natural habitat
116	Land at Cookham Dean	2>	Natural/semi-natural habitat
117	Land SW of Ibstone	2>	Natural/semi-natural habitat
118	Allotments at Stokenchurch	2>	Natural/semi-natural habitat
119	Greys Court	2>	Natural/semi-natural habitat
120	Whelpley Hill	2>	Natural/semi-natural habitat
121	Hedgerley Green	2>	Natural/semi-natural habitat
122	Land near Medmenham	2>	Natural/semi-natural habitat
123	Brittens Field	2>	Natural/semi-natural habitat
124	Winchmore Hill Common	2>	Common
125	Southend Common	2>	Common
126	Ham Wood	2>	Natural/semi-natural habitat
127	Peveril Wood	2>	Natural/semi-natural habitat
128	Land North-West of Turville Heath	2>	Natural/semi-natural habitat
129	Ingrams Copse	2>	Natural/semi-natural habitat
130	Part of Penn Street Common	2>	Common
131	The Green, Ashley Green	2>	Natural/semi-natural habitat
132	Hunts Wood	2>	Natural/semi-natural habitat
132A	Long Spinney	2>	Natural/semi-natural habitat
132B	Whiteleaf Hill	2>	Natural/semi-natural habitat
132C	Captain's Wood	2>	Natural/semi-natural habitat
132D	Spade Oak Meadow	2>	Natural/semi-natural habitat
132E	Caps Wood	2>	Natural/semi-natural habitat
132F	Oldhouse Woods	2>	Natural/semi-natural habitat
132G	Northmoor Hill Wood	2>	Natural/semi-natural habitat
132H	Farnham Common	2>	Common
132J	Cholesbury & Hawridge Commons	2>	Common

Table 2: Countryside Access Routes of Strategic Significance Promoted Recreational Routes

D 1		Local Authority	l
Route No	Name	Local Authority	Location
1	The Ridgeway (Bucks), National Trail	Chiltern, Wycombe, Aylesbury Vale	SW-NE across the Chilterns
2	Thames Path (Bucks), National Trail	Wycombe, S. Bucks	Follows River Thames, in South of County
3	National Byway Route	Aylesbury Vale	Long Crendon to Boarstall
4	The Icknield Way, Bucks CC Promoted Route	Wycombe, Aylesbury Vale	Wendover to Bledlow
5	BFR- Spur: Joining Bic/Buck and Hadd/Lud	Aylesbury Vale	Buckingham to Haddenham
6	Seven Shires Way, Bucks CC Promoted Route	Wycombe, Aylesbury Vale	Piddlington to Barton Hartshorn
7	Phoenix Trail, Sustrans Promoted Cycle Route	Wycombe	Thame to Princess Risborough
8	South Bucks Way, Bucks CC Promoted Route	Chiltern, Wycombe, Aylesbury Vale, S. Bucks	Denham to Great Missenden
9	North Bucks Way, Bucks CC Promoted Route	Wycombe, Aylesbury Vale	Quainton to Milton Keynes
10	Brill & Boarstall, Bucks CC Promoted Route	Aylesbury Vale	Circular Brill to Boarstall
11	Stoke Mandeville & Bishopstone, Bucks CC Promoted	Wycombe, Aylesbury Vale	Circular Stoke Mandeville to Bishopstone
12	Oving & North Marston, Bucks CC Promoted Route	Aylesbury Vale	Oving to Granborough
13	Thornborough, Bucks CC Promoted Route	Aylesbury Vale	Circular Thornborough to Buckingham
14	Three Locks & Great Brickhill, Bucks CC Promoted Route	Aylesbury Vale	Circular Brickhill to Rushmere
15	Tingewick & Water Stratford, Bucks CC Promoted Route	Aylesbury Vale	Circular around Water Stratford
16	Marsworth, Bucks CC Promoted Route	Aylesbury Vale	Circular Marsworth to Southend Hill
17	Bledlow, Bucks CC Promoted Route	Wycombe	Circular Radnage to Bledlow
18	The Aylesbury Ring, Bucks CC Promoted Route	Wycombe, Aylesbury Vale	Circular around Aylesbury
19	Hedgerley, Bucks CC Promoted Route	S. Bucks	Circular Burnham Beeches to Hedgerley
20	Cuddlington & Upper Winchendon, Bucks CC Promoted Route	Aylesbury Vale	Circular Cuddington to Upper Winchendon

21	Princess Risborough, Bucks CC Promoted Route	Wycombe	Circular around Princess Risborough
22	Hambleden & Medmenham, Bucks CC Promoted Route	Wycombe	Circular Hambledon to Medmenham
23	Marlow, Bucks CC Promoted Route	Wycombe	Circular Marlow to Hurley
24	The Chiltern Link, Bucks CC Promoted Route	Chiltern, Aylesbury Vale	Chesham to Wendover
25	Stewkley, Bucks CC Promoted Route	Aylesbury Vale	Circular around Stewkley
26	Waddesden, Bucks CC Promoted Route	Aylesbury Vale	Circular Waddesdon to Upper Winchendon
27	Great Missenden, Bucks CC Promoted Route	Chiltern	Circular Great Missenden to Ballinger South
28	The Tramway Trail, Bucks CC Promoted Route	Aylesbury Vale	Circular Waddesdon to Quainton
29	The Chess Valley Walk, Bucks CC Promoted Route	Chiltern	Chesham to Rickmansworth
30	Westbury Circular Ride, Bucks CC Promoted Route	Aylesbury Vale	Circular Westbury to Biddlesdon
31	The Aylesbury Arm, Bucks CC Promoted Route	Aylesbury Vale	Aylesbury to Marsworth
32	The Ouse Valley Way, Bucks CC Promoted Route	Aylesbury Vale	Biddlesdon to Milton Keynes
33	Ellesborough & Kimble, Bucks CC Promoted Route	Wycombe	Northeast of Princess Risborough
34	The Beeches Way, Bucks CC Promoted Route	Wycombe, S. Bucks	Cookham to Yewsley
35	Two Ridges Link, Bucks CC Promoted Route	Aylesbury Vale	Leighton Buzzard to Ivinghoe Beacon
36	The Wendover Arm, Bucks CC Promoted Route	Aylesbury Vale	Wendover to Aston Clinton
37	Swans Way, Bucks CC Promoted Route	Wycombe, Aylesbury Vale	Salcey Forest (Northants) to

Strategic Waterways

Route No	Name	Local Authority	Location
1	Grand Union Canal	Aylesbury Vale, S. Bucks	
2	River Thames	Wycombe, S. Bucks	

Assessment of Accessible Greenspace Provision by Settlement

Assessment of Acces	Sibic Orcerispa	CETTOV		Settieni	CIIL	a	<u>a</u>
Settlement	District Council	2001 Population	_ Total Greenspace (ha) within 10km	Ha/1000 population	At least one 20ha site within 2km?	At least one 100ha site within 5km?	At least one 500ha site within 10km
High Wycombe	Wycombe	77,178	3,066	39.73	Yes	Yes	No
Aylesbury (inc Stoke Mandevilleand Bierton	Aylesbury Vale	69,021	865	12.53	No	Yes	No
Amersham (inc Little Chalfont	Chiltern	21,470	1,238	57.66	Yes	Yes	Yes*
Hazelmere/Tylers Green	Wycombe	20,500	2,329	113.61	Yes	Yes	No
Chesham	Chiltern	20,357	2,354	115.64	Yes	Yes	Yes*
Chalfont St. Peter/ Gerrards Cross	Chiltern/ South Bucks	19,622	1,827	93.11	Yes	Yes	No
Marlow/Marlow Bottom	Wycombe	17,522	2,225	126.98	Yes*	Yes*	No
Bourne End/Flackwell Heath	Wycombe	12,795	2,714	212.11	Yes*	Yes*	No
Buckingham	Aylesbury Vale	12,512	1,002	80.08	Yes	Yes	Yes*
Beaconcfield	South Bucks	12,292	2,277	185.24	Yes	Yes	No
Princes Risborough	Wycombe	8,121	1,376	169.44	Yes	Yes	No
Wendover	Aylesbury Vale	7,385	1,333	180.50	Yes	Yes	Yes*
Iver/Iver Heath	South Bucks	7,329	1,101	150.23	Yes	Yes	No
Gt. Missenden/ Prestwood	Chiltern	7,070	1,988	281.19	Yes	Yes	No
Farnham Royal/ Farnham Common	South Bucks	6,052	1,719	284.04	Yes	Yes	No
Haddenham	Aylesbury Vale	4,720	255	54.03	No	No	No
Chalfont St. Giles	Chiltern	4,710	1,540	326.96	Yes	Yes	No
Winslow	Aylesbury Vale	4,519	161	35.63	No	No	No
Stoke Poges	South Bucks	4,112	1,450	352.63	Yes	Yes	No
Aston Clinton	Aylesbury Vale	4,038	1,830	453.19	Yes	Yes	Yes*
Stokenchurch	Wycombe	3,949	1,274	322.61	Yes*	Yes*	Yes
Walters Ash/Naphill	Wycombe	3,869	1,535	396.74	Yes	Yes	No

^{*}Some or all of the provision outside the County Based on 2001 census figures taken from Bucks CC website

Appendix F

Topic Paper B: Biodiversity and the Natural Environment – Strategic Opportunities Analysis

Purpose / Scope of Paper

This Topic Paper (B) defines the existing biodiversity resource in Buckinghamshire. It also summarises recent work in progress by the Buckinghamshire & Milton Keynes Biodiversity Partnership to identify Areas of Opportunity for Biodiversity - strategic areas in a countywide context for targeting the delivery of the Partnership's Biodiversity Action Plan (2006 to 2010).

Existing Biodiversity Resources

Sites with statutory designations such as SSSIs that are part of the national biodiversity resource. The figure also shows non-statutory sites that are of county value. The Buckinghamshire & Milton Keynes Biodiversity Action Plan (BAP) identifies twelve key wildlife habitats in the County that are a priority for conservation based on the UK BAP criteria. These include:

- Calcareous Grassland
- Chalk Streams
- Earth heritage Sites (geological sites and features)
- Farm Habitats (arable and improved grassland)
- Fens, Marsh, Swamp and Reedbed
- Hedgerows
- Lowland Heathland
- Neutral Grassland
- Rivers and Streams
- Standing Water
- Urban Habitats
- Woodland

The statutory and non-statutory sites shown together with the sites supporting known BAP priority wildlife habitats for conservation and restoration are considered to provide the strategic tier of the biodiversity resource in Buckinghamshire.

Areas of Opportunity or Biodiversity

Ashridge and Ivinghoe Beacon Biodiversity Opportunity Area Statement

Area Coverage 2130 ha

Number of Designated Sites Local Wildlife Sites 2SSSI 4

BAP Habitat Lowland Calcareous Grassland 18 haLowland Beech and Yew Woodland 22 ha

This area includes the Chiltern Escarpment around Ivinghoe Beacon, Pitstone Hill and the Ashridge Estate and the summit of the Escarpment at Ashridge. It also includes sites on the lower ground around Pitstone.

Joint Character Area Chilterns

Landscape Types The escarpment and lower slopes are agricultural unwooded, while the plateau is agricultural wooded

Geology Chalk. The plateau is overlain with clay with flints.

Topography The escarpment is very steeply sloping land.

Biodiversity Calcareous Grassland – There is calcareous grassland on Ivinghoe Hills and Pitstone Hill SSSIs and in Pitstone Quarry One LWSWoodlands – Part of Ashridge is designated in the Chilterns Beech Woodlands SAC and in Ashridge Commons & Woods SSSI. It contains Beech and Yew Woodland, Mixed Deciduous Woodland and mature pollards. Eutrophic Standing Water – College Lake is a flooded gravel pitFen – There is a small fen in Pitstone Fen LWSArable Field Margins – Areas of College Lake LWS are used to grow rare arable weedsHedgerows – There are some areas of pre-18th century enclosure which may contain species rich hedgerows.

Access The Ashridge Estate, Pitstone Hill and Ivinghoe Beacon are National Trust. College Lake is managed by BBOWT.

Archaeology Beacon Hill at Ivinghoe is a SAM

Targets Calcareous Grassland – Management, Restoration, CreationWoodland - Management, RestorationArable Field Margins – Management, CreationWood Pasture & Parkland - Management, RestorationEutrophic Standing Water – ManagementFen – ManagementHedgerows - Management, Restoration, Creation

Bernwood Biodiversity Opportunity Area Statement

Area Coverage 8574 ha
Number of Designated Sites Local Wildlife Sites 25SSSI 7
BAP Habitat Lowland Mixed Deciduous Woodland 334 ha

The area extends in a south western arc from the ancient woodlands south of the Claydons, to the lower lying Shabbington and White Cross Green Woods It lies adjacent to Upper Ray, and Brill & Muswell Hill BOAs in Bucks and the Brill & Muswell Hill, Otmoor and Oxford Heights East Conservation Target Areas in Oxfordshire

Joint Character Area Upper Thames Clay Vales, Midvale Ridge Landscape Types Wooded Farmland. The majority is rolling lowland with seasonal waterlogging.

Geology Mudstone except for a thin vein of sandstone near Boarstall and a thin layer of inter-bedded mudstone and limestone around the base of Brill Hill.

Topography Low and undulating. In the north of the area Finemere and Sheephouse Woods sit on the most westerly of a range of lower hills that extends across Aylesbury Vale

Biodiversity Woodland – The area contains 7 ancient woodland SSSIs. There is a concentration of 4 ancient woodland SSSIs (Grendon & Doddershall, Finemere, Sheephouse and Ham Home-cum-Hamgreen Woods in the north of the area). Rushbeds Wood is a wet woodland on the lower ground. In the south west are the Shabbington Woods complex and White Cross Green and Oriel Woods. There are numerous smaller woods designated as LWSs scattered across the areaWood Pasture & Parkland – Wooton Underwood Estate Lowland Meadows – There are lowland meadows at Bernwood Meadows, Shabbington, Whitecross Green Wood and Lapland Farm. Calcareous Grassland – There is 1 calcareous grassland site – the railway cutting at Rushbeds Wood SSSI Ponds – The area contains many potential BAP habitat ponds including the area around Ludgershall Hedgerows – There is a good network of hedgerows throughout the area – and the area is a hot-spot for Brown Hairstreak butterflies

Access BBOWT own Finemere Wood, Rushbeds Wood, Whitecross Green Wood and Bernwood Meadows (part of Shabbington Woods SSSI). National Trust own Boarstall Duck Decoy The Bernwood Way starts at Brill and there is a good network of footpaths throughout the area

Archeology There is ridge and furrow scattered throughout the area. There are 2 historic parks and gardens (Wooton Underwood and Middle Claydon) and a scheduled ancient monument at Ludgershall.Part of a much larger Mediaeval Hunting Forest

Targets Woodland – Management, Restoration Wood Pasture & Parkland –

Management, Restoration Lowland Meadows – Management, Restoration, Creation

Ponds - Management, Restoration, Creation Hedgerows - Management, Restoration,

Creation

Brill and Muswell Hill Biodiversity Opportunity Area Statement

Area Coverage 922 ha
Number of Designated Sites Local Wildlife Sites 4SSSI 1
BAP Habitat Lowland Mixed Deciduous WoodlandLowland Meadow

A geologically complex hill rising from the surrounding lowlands of the Bernwood Forestlt lies adjacent to Bernwood BOA.

Joint Character Area Midvale Ridge, a small area is within Upper Thames Clay Vales **Landscape Types** Brill Hill is a wooded and farmed chalk outcrop.

Geology Brill Hill and Muswell Hill consist of sandstone capping limestone, with the lower slopes being interbedded sandstone, limestone and mudstone.

Topography Brill and Muswell Hills are very steeply sloping hills (rising up to 185m) rising out of a low flat floodplain.

Biodiversity Woodland – There are a number of small lowland deciduous woodlands in the area. Calcareous Grassland –Brill Common is a matrix of calcareous and acid grasslands Acid Grassland - Brill Common is a matrix of calcareous and acid grasslands Ponds – The area contains many potential BAP habitat ponds including many on the slopes of Brill Hill Hedgerows – There is a good network of hedgerows around pre-18th century enclosures throughout the area, so many may be species rich.

Access Brill Parish Council own Brill Common. The Bernwood Way starts at Brill and there is a good network of footpaths throughout the area

Archeology There is a scheduled ancient monument at Brill.Part of a much larger Mediaeval Hunting Forest

Targets Woodland – Management, Restoration Calcareous Grassland – Management, Restoration Acid Grassland – Management, Restoration Ponds - Management, Restoration, Creation Hedgerows - Management, Restoration, Creation

Central Chilterns Chalk Rivers Biodiversity Opportunity Area Statement

Area Coverage 2150 ha

Number of Designated Sites Local Wildlife Sites 0SSSI 0

This area comprises of the valleys of 2 chalk streams – the Wye and the Misbourne. The Wye Valley connects the Upper Hughenden Valley, Radnage Valley and Gomm Valley BOAs while the Misbourne connects to the Colne Valley

Joint Character Area Chilterns, Thames Valley

Landscape Types The Misbourne flows through a wooded agricultural landscape until it's lower reaches where it has an unwooded wetland landscape, The Wye Valley is predominantly urban until south of Loudwater where it is wooded agricultural.

Geology Chalk except for the final reaches of the Misbourne which is mudstone. There is alluvium on the valley bottoms and wider sands and gravels on the lower reaches of both.

Topography Valleys with steep slopes with protruding spurs and a strong convex profile to the upper slopes. The valley bottoms are gently sloping with little flood plain. **Biodiversity** Rivers / Streams – Both the Misbourne and Wye are chalk streams and are a priority in the UK Rivers and Streams HAP. Lowland Meadows – There are lowland meadows at Old Rectory Meadows SSSI in the Misbourne Valley. Lakes – Shardeloes Lake in Misbourne Valley. Woodland – There are 2 woodland LWSs in the Wye Valley. Traditional Orchards – There are potential BAP orchards in both valleys. Wood Pasture & Parkland – There are potential parklands in both valleys – Misbourne Valley –Missenden Abbey, Shardeloes, Denham Place and Wye Valley – West Wycombe Hughenden Manor, Wycombe Abbey. Hedgerows – Some areas of the Misbourne Valley contain pre-18th century enclosures which may contain species rich hedgerows.

Access The Wye flows through West Wycombe Park (National Trust), The Rye & Kings Mead (both Wycombe DC) and other public open spaces. Warren LNR is owned by Wycombe DC. The Hughenden Stream flows through Hughenden Park (National Trust / Wycombe DC). There are public footpaths along stretches of the Misbourne and Wye. Archaeology There are historic parks and gardens in both valleys – Misbourne Valley – Missenden Abbey, Shardeloes, Denham Place and Wye Valley – West Wycombe, Hughenden Manor, Wycombe Abbey.

Targets Chalk Rivers – Management, Restoration Lowland Meadows – Management, Restoration, Creation Eutrophic Standing Water– Management, Restoration Woodland – Management Traditional Orchards - Management, Restoration Wood Pasture & Parkland - Management, Restoration Hedgerows - Management, Restoration, Creation

Chess Valley Biodiversity Opportunity Area Statement

Area Coverage 2606 ha

Number of Designated Sites Local Wildlife Sites 19SSSI 1

BAP Habitat Lowland Meadow 14 haLowland Mixed Deciduous Woodland 33 ha Lowland Beech and Yew Woodland 32 ha

The River Chess flows through Chesham towards the Hertfordshire Border. The BOA also includes the headwaters of the Chess. The area is adjacent to the Chess Valley Key Biodiversity Area in Hertfordshire

Joint Character Area Chilterns

Landscape Types Wooded agricultural land on low hills

Geology Chalk bedrock, with alluvial deposits at the valley bottom.

Topography A narrow, steeply sloping valley with protruding spurs. The valley bottom is gently sloping.

Biodiversity Chalk River – River Chess is a chalk river and is a priority UK BAP riverHedgerows – The valleys around Chartridge have a concentration of ancient species rich hedges, while the area around Bellingdon, Cholesbury and Hawridge is predominantly pre 18th Century enclosures. There are several green lanes designated as LWSs.Acid Grassland / Heathland – There are areas of these habitats on Hawridge and Cholesbury Commons and remnants on Leyhill Common. Calcareous Grassland – There may be areas of semi-improved grassland in the BOA. Arable Field Margins – There are many arable fields in the area and the Chilterns is a Plantlife priority area for rare arable plants Lowland Meadows – There are lowland meadows in 2 SSSIs – Frogmore Meadows and Sarratt Bottom Woodland – The area contains 11 woodland LWSs. Traditional Orchards – There are 2 potential BAP orchards in the areaWood Pasture and Parkland – There is existing parkland at Latimer

Access The Chess Valley walk runs along the valley from Chesham. The Woodland Trust own 4 woods around Chesham Bois.

Archaeology Latimer Historic Park and Garden. 1 SMR – Cholesbury Camp Hillfort Targets Chalk Rivers – Management, RestorationHedgerows – Management, Restoration, Creation Acid Grassland – Management, RestorationHeathland - Management, Restoration Calcareous Grassland - Management, Restoration Arable Field Margins – Management, CreationLowland Meadows – Management, Restoration, Creation Woodland - Management, Restoration Traditional Orchards - Management, Restoration Wood Pasture & Parkland - Management, Restoration

Chiltern Escarpment Biodiversity Opportunity Area Statement

Area Coverage 787 ha

Number of Designated Sites Local Wildlife Sites 6SSSI 4Special Area of Conservation 2 **BAP Habitat** Lowland Calcareous Grassland 55 ha Lowland Beech and Yew woodland 69 ha Lowland Heathland 10 ha

The steeply sloping Chilterns Escarpment runs from Wendover to Bradenham and contains many calcareous grassland and woodland SSSIs.It is adjacent to the Dunsmore Woodlands and Radnage Valley BOAs

Joint Character Area Chilterns (small area in Upper Thames Clay Vales)
Landscape Types Wooded agricultural land
Geology Chalk

Topography A very steeply sloping chalk escarpment rising to 260m at Coombe Hill **Biodiversity** Calcareous Grassland – There is Calcareous Grassland in many SSSIs including Bacombe and Coombe Hills, Ellesborough and Kimble Warren, Grangelands and Pulpit Hill, Windsor Hill as well as on LRS such as Brush Hill and Whiteleaf Cross and LWSs. There are no large contiguous expanses of calcareous grassland however and most sites are isolated from each other by other habitats. Woodland – There are several woodland SSSIs Ellesborough and Kimble Warren, Grangelands and Pulpit Hill, Windsor Hill, Bradenham Woods and other BAP woodland on LWSs. Wood Pasture & Parkland – Chequers offers parkland habitat. Parts of Giles and Ninn woods are managed as wood pasture.

Access The grassland SSSIs are open access. There are 2 LNRs near Princes Risborough (Brush Hill and Whiteleaf Cross).

Archaeology Chequers is a registered historic parks and garden. There are 8 scheduled ancient monuments all in the northern half of the BOA.

Targets Calcareous Grassland – Management, Restoration, CreationWoodland - Management, RestorationWood Pasture & Parkland - Management, Restoration

Colne Valley Biodiversity Opportunity Area Statement

Area Coverage 1748 ha

Number of Designated Sites Local Wildlife Sites 1SSSI 2Local Nature Reserve 1 BAP Habitat Lowland Meadow 1 ha

The Colne Valley is located on the south eastern corner of Bucks. The Colne flows through Herts before forming the boundary between Bucks and London and into Surrey. The Colne Valley BOA is contiguous with the Colne Valley Key Biodiversity Area in Herts and there are SSSIs close to the borders in Hillingdon and Surrey. It is also connected to the South Bucks Heaths & Parklands and Central Chilterns Chalk Streams BOAs

Joint Character Area Thames Valley

Landscape Types Mostly wetland and agricultural, with woodlands limited to watercourses. The areas around Denham Green and Rush Green are wooded agricultural **Geology** Mostly mudstone with chalk in the Misbourne Valley and around Denham overlain with sands, silt and gravels.

Topography A shallow flat bottomed valley.

Biodiversity Rivers and Streams – The River Colne provides a valuable route for species movement between the Thames and Hertfordshire. Lakes – There is one eutrophic standing water SSSI in Bucks – the Mid Colne Valley SSSI reservoirs. There are also open water SSSIs close to the border with Bucks in the Herts and Surrey sections of the Colne Valley. Reedbed – There are reedbeds in the Mid Colne Valley SSSI. Woodland – There are wet woodlands at Old Rectory Meadows and Denham Marsh Wood SSSIs (the latter is in Hillingdon) and small areas of wet woodland fringing the rivers and streams. There are also BAP woodlands at Meadows & Oldhouse Wood SSSI and in 2 LWSs. Lowland Meadows / Purple Moor Grass and Rush Pastures – There are areas of these habitats in Old Rectory Meadows and Kingcup Meadows & Oldhouse Wood SSSI. Fens – Fen habitat is found at Kingcup Meadows & Oldhouse Wood SSSI. Frays Farm Meadows SSSI in Hillingdon contains reedbed, lowland meadow, fen and wet woodland Ponds – There are ponds scattered throughout the Colne Valley Wood Pasture & Parkland- There is an area of Parkland around Long Coppice Farm at Dromenagh. Traditional Orchards - There is a potential BAP orchard at Denham Park Hedgerows – the lower Misbourne Valley, the Fulmer area and the area between Denham and Iver all contain concentrations of pre-18th century enclosures which may contain species rich hedgerows.

Access Northmoor Hill Wood is an LNR. The Grand Union Canal Towpath passes some designated sites

Archaeology Denham Place is a registered park and garden. There is a SAM at Savay Farm, Denham

Targets Rivers & Streams – Management, Restoration Eutrophic Standing Water-Management, Restoration Reedbed –. Management, Restoration, CreationWoodland – Management, Restoration, Creation Lowland Meadows - Management, Restoration, Creation Purple Moor Grass and Rush Pastures Management, Restoration, Creation Fens – Management, Restoration, Creation Ponds – Management, Restoration, Creation Wood Pasture & Parkland- Management, Restoration Traditional Orchards – Management, Restoration Hedgerows - Management, Restoration, Creation

Dunsmore Woods Biodiversity Opportunity Area Statement

Area Coverage 752 ha
Number of Designated Sites Local Wildlife Sites 4SSSI 1
BAP Habitat Lowland Heath 10 ha Lowland Beech & Yew Woodland 20 ha

This area covers the Chilterns dipslope behind the Escarpment covers an area of BAP priority beech and yew and mixed deciduous woodlands. This BOA connects with the Chiltern Escarpment BOA

Joint Character Area Chilterns

Landscape Types Wooded Agricultural land

Geology Chalk overlain by clay with flints on the higher ground.

Topography The Chiltern dipslope sloping gently away from the top of the Chilterns Ridge.

Biodiversity Woodland –There are 6 woodland LWSs in the area.Lowland Heathland-There is an area of lowland heathland at the top of Coombe Hill, within Bacombe and Coombe Hills SSSI. Hedgerows –There are 3 green lane / hedgerow LWSs in the south of the area. Arable Field Margins – There are several arable fields in the area and the Chilterns is a Plantlife priority area for rare arable plants

Access National Trust own Coombe Hill & Low Scrub.

Archaeology

Targets Woodland – Management, RestorationHedgerows - Management,

Restoration, CreationArable Field Margins – Management, Creation

Gomm Valley Biodiversity Opportunity Area Statement

Area Coverage 1582 ha

Number of Designated Sites Local Wildlife Sites 8SSSI 1

BAP Habitat Lowland Calcareous Grassland 8 haLowland Beech & Yew Woodland 3 ha

The Gomm Valley lies between High Wycombe and Beaconsfield. The BOA is connected with the Central Chilterns Chalk Rivers BOA

Joint Character Area Chilterns

Landscape Types Wooded agricultural land on low hills

Geology Mainly chalk with areas of mudstone around Beacon Hill. Overlain in some areas by clay with flints with sands and gravels in the Wye Valley.

Topography In the south of the area is the Wye Valley which is a narrow valley with steeply sloping sides. North of this are the three hills of Beacon Hill, Common Wood and Pond Wood (which rise to about 180m). There are 2 dry valleys (very steep sided on the Common wood slopes).

Biodiversity Calcareous Grassland – There are small unconnected calcareous grassland sites on the slopes of the Wye Valley including Gomm Valley SSSI. Woodland – There are three large areas of wood on the higher ground and small designated woodland sites on the Wye Valley slopes. Wood Pasture & Parkland – Penn Wood and Common Wood are relict wood pasture. Lowland Meadows – There is one lowland meadow site at Thatchers Field LWS. Hedgerows – The area between Wooburn Manor and Forty Green is mostly pre-18th Century enclosures and so may contain species rich hedgerows.

Access There is a good network of footpaths through the area. In addition the Gomm Valley SSSI is managed by BBOWT, Butterfly Conservation own part of Holtspur Bank, there is the Holtspur Bank LNR owned by South Bucks DC, while Gomm Wood is owned by Wycombe DC. Penn Wood is owned by Woodland Trust, Common Wood by Penn & Tylers Green Residents Assn and Kings Wood by Chepping Wycombe PC.

Archaeology

Targets Calcareous Grassland – Management, Restoration, Creation Woodland – Management, Restoration Lowland Meadows – Management, RestorationHedgerows – Management, Restoration Wood Pasture & Parkland - Restoration

Greensand Ridge Biodiversity Opportunity Area Statement

Area Coverage 1595 ha

Number of Designated Sites Local Wildlife Sites 9SSSI 1

BAP Habitat Purple Moor Grass & Rush Pasture 4 ha Lowland Mixed Deciduous Woodland 14 haLowland Acid Grassland 15 haFens 2 ha

This area contains Bow Brickhill Park and Heath, running south to the end of the Greensand Ridge and through the acid grassland foothills around Little and Great Brickhill to the Ouzel ValleyThe BOA connects to the Bedfordshire Heathland Opportunity Area. Joint Character Area Bedfordshire Greensand Ridge (partially also Bedfordshire & Cambridgeshire Claylands)

Landscape Types Wooded agricultural landscape with areas of heathland. The southern end is agricultural with dispersed woodland

Geology Mostly Greensand, with mudstone on the bottom of the slopes. There are several pockets of glacial materials overlying the greensand.

Topography The end of the Greensand Ridge, undulating foothills around Great and Little Brickhill. The western slopes around Bow Brickhill are very steep and the highest point is 180m at Bow Brickhill Heath.

Biodiversity Heathland - There are areas of heathland on Rammamere Heath and remnants of heathland vegetation can still be found on Bow Brickhill Heath and in some areas of plantation woodlandAcid Grassland – There are areas of acid grassland in association with the areas of heathland. There are extensive areas of semi-improved acid grassland throughout the Brickhills.Fen / Purple Moor Grass and Rush Pasture – There are wet flushes in both the foothill grasslands and in the plantation woodlands Hedgerows – many of the enclosures around the Brickhills are pre-18th century and may have species rich hedgerows associated with them Lowland Meadows – There are areas of marshy lowland meadow to the west of Stockgrove Country ParkPonds – There are ponds associated with seepages.Wood-Pasture & Parkland – there is parkland at Stockgrove House Woodlands – Most of the woods on the ridge plateau are coniferous plantation. Dunscombe wood is mixed conifer and broadleaved.

Access Parts of Rammammere Heath SSSI are accessible.

Archaeology Danesborough Hill Fort is an SAM. There are a few fields of surviving Ridge and Furrow

Targets Heathland – Management, Restoration, Creation Acid Grassland - Management, Restoration, CreationFen - Management, Restoration Hedgerows - Management, Restoration Lowland Meadows - Management, Restoration Ponds - Management, Restoration, Creation Wood-pasture & Parkland – Management, Restoration Woodlands - Management, Restoration

Hambleden and Wormsley Valleys Biodiversity Opportunity Area Statement

Area Coverage 3595 ha

Number of Designated Sites Local Wildlife Sites 26SSSI 4

BAP Habitat Lowland Mixed Deciduous Woodland 150 haLowland Beech & Yew Woodland 116 haLowland Calcareous Grassland 40 ha

The Hambleden Valley is a mostly dry valley running from Skirmett south towards the Thames. The lower reaches do contain a chalk stream. The Wormsley Valley is a dry valley that connects with it. The BOA connects to the Medmenham and South Western Commons BOAs

Joint Character Area Chilterns

Landscape Types Wooded Agricultural land

Geology Chalk with overlying sand and gravels in the valley floor, and small areas of clay with flints and gravels as the slopes reach the plateau of the Wormsley Valley Topography Two valleys with gently sloping bottoms with steep sloping sides consisting of numerous spurs rising to a plateau.

Biodiversity Calcareous Grassland – In the Wormsley Valley there are 3 calcareous grassland SSSIs spread over 6 sites. There are a few small sites of calcareous grassland on the eastern flank of the Hambleden Valley - including Fayland Chalk Bank SSSI. Woodland – There are areas of BAP woodland scattered across the plateau and on the steeper slopes including Lowland Mixed Deciduous Woodland and Lowland Beech and Yew Woodland. Hedgerows – The Wormsley Valley and the eastern edges of the Hambleden Valley contain pre-18th century enclosures and these may be bordered by species rich hedgerows. Chalk River – the Hambleden chalk stream flows through the lower reaches of the Hambleden Valley.

Access There is a network of footpaths throughout.

Archaeology

Targets Calcareous Grassland – Management, Restoration, Creation Woodland – Management, Restoration Hedgerows - Management, Restoration, Creation Chalk River – Management, Restoration

Medmenham Biodiversity Opportunity Area Statement

Area Coverage 1860 ha

Number of Designated Sites Local Wildlife Sites 10SSSI 2Special Area of

Conservation 1

BAP Habitat Lowland Meadow 1 haLowland Calcareous Grassland 5 haLowland Beech & Yew Woodland 47 ha

This BOA covers the north-south ridge west of Marlow, from the Thames Valley at Medmenham up to Moor Common in the north. The BOA connects to the Hambleden and Wormsley Valleys and South Western Commons BOAS

Joint Character Area Chilterns
Landscape Types Wooded Agricultural land

Geology Chalk with overlying clay with flints on some higher ground and sand and gravels in the lower areas.

Topography A north – south orientated ridge.

Biodiversity Calcareous Grassland – There several small sites of calcareous grassland including Homefield Wood SSSI, Lodge Farm Bank Field, and Munday Dean LWS.Woodland – The area contains part of the Chiltern Beechwoods SAC at Pullingshill and Hollowhill Woods. It also includes Homefield Wood SSSI and several woodland LWSs such as Munces Wood, Highruse Wood and Hog and Kings Hanging Woods. Hedgerows – The area around Marlow Bottom contains pre-18th century enclosures and these may be bordered by species rich hedgerows.

Access There is a network of footpaths throughout.

Archaeology There are 2 SAMs – Medmenham Hill Fort and the fort at Danesfield House.

Targets Calcareous Grassland – Management, Restoration, Creation Woodland – Management, Restoration Hedgerows - Management, Restoration, Creation

Ouse Valley Biodiversity Opportunity Area Statement

Area Coverage 4338 ha

BAP Habitat Lowland Calcareous Grassland 3 ha Lowland Wood-Pasture and Parkland 28 ha

Number of Designated Sites Local Wildlife Sites 5

The Ouse Valley runs right across the county from Whitfield in the west to Olney in the east. The stretch of the Ouse Valley in Milton Keynes only is included in the BOA. The BOA connects with the Yardley Chase and the Bedfordshire Wetland Opportunity Area.

Joint Character Area Bedfordshire and Cambridgeshire Claylands Landscape Types Predominantly agricultural unwooded.

Geology Mudstone overlain by sand, silt and gravels.

Topography A narrow meandering river valley – at its broadest north of Milton Keynes. There are confluences with 2 main valleys – the Ouzel from the south and the Tove from the north.

Biodiversity Rivers & Streams – The Ouse is a predominantly natural river flowing across the county and creating a corridor for the dispersal of biodiversity. Otters have been spotted along its entire length in Bucks and MK.Floodplain Grazing Marsh – Areas to the north of Milton Keynes, around Olney and in the Tove Valley have been identified as Floodplain Grazing Marsh. Calcareous Grassland – Old Limestone Quarry LWS near Calverton contains calcareous grassland as well as neutral grassland species. There are degraded calcareous grasslands around Olney. Eutrophic Standing Water – There is an open water LWS - Kickles Pits and Gayhurst Quarry in Newport Pagnell. North of Milton Keynes there are numerous other areas of eutrophic standing water – mostly flooded gravel workings that are valuable for birdlife. These include the Hanson Centre and the Stony Stratford Nature Reserve. Reedbeds / Wet Woodland – The gravel site at Wolverton is to be reinstated as a floodplain forest including reedbeds, wet woodland, fen and lowland meadow habitats.Hedgerows – There is a concentration of pre-18th century enclosures between Tyringham and Emberton which may contain species rich hedgerows.

Access Stony Stratford Nature Reserve and it is owned by Milton Keynes Parks Trust. There are riverside walks in Buckingham and some sections north of Milton Keynes. **Archaeology**

Targets Rivers & Streams – Management, Restoration Lowland Meadows - Management, Restoration, Creation Calcareous Grassland – Management, Restoration Woodland – - Management, Restoration, Creation Fen – Management, Creation Eutrophic Open Standing Water – Management, Restoration, CreationReedbeds – CreationHedgerows – Management, Restoration, CreationPonds – management, Restoration, Creation

Radnage Valley Biodiversity Opportunity Area Statement

Area Coverage 2626 ha

Number of Designated Sites Local Wildlife Sites 23SSSI 2Special Area of Conservation 1

BAP Habitat Lowland Mixed Deciduous Woodland 57 haLowland Calcareous Grassland 61 haLowland Beech & Yew Woodland 142 ha

The Radnage Valley is a valley with calcareous grassland surviving on its steep slopes .It also contains areas of BAP woodland, though the valley bottom is arable. The area also includes the ridge to the east containing Bradenham Woods and Naphill Common. This BOA connects to Chiltern Escarpment, Central Chilterns Chalk Rivers and the Chilterns Escarpment North Conservation Target Area in Oxfordshire

Joint Character Area Chilterns

Landscape Types Wooded agricultural land

Geology Chalk with overlying deposits of alluvium sand and gravel and head in the valley bottom, and clay with flints on the highest points of the ridges.

Topography A system of steep sided valleys with gently sloping valley bottoms. Four separate valleys merge into one around West Wycombe.

Biodiversity Calcareous Grassland. There are calcareous grassland sites on the northern slopes of the valley including Buttlers Hangings SSSI and the following LWSs Beechgrove Grassland, Janes Field/Daws Hill, Yoesden Bank and Wood, Chawley Manor Farm Fields, Bank opposite Plomers Bottom & Horseshoe Field. Woodland – The area contains part of the Chilterns Beechwoods SAC at Bradenham Woods and Naphill Common. There are also several LWS woods on West Wycombe Hill, Bradenham Hill and at the top of the ridge south east of The City.Arable Field Margins – The bottom of the valley is predominantly arable. The Chilterns is a Plantlife priority area for rare arable plants. Wood Pasture and Parkland – Naphill Common is relict wood pasture. The West Wycombe Estate contains an area of parkland. Traditional Orchards – There are two potential BAP orchards at Townend. Hedgerows – the area may contain species rich hedgerows as there is a concentration of pre-18th century enclosures.

Access Much of the calcareous grassland is access land. National Trust own Bradenham Hill and manage West Wycombe Park. BBOWT manages Buttler's Hangings SSSI. Naphill Common is open access.

Archaeology West Wycombe Park and Bradenham Manor. The Camp on Church Hill is a SAM. There is a short section of Grimms Ditch at Walters Ash.

Targets Calcareous Grassland – Management, Restoration, Creation Woodland - Management, Restoration Arable Field Margins - Management, Creation Wood Pasture & Parkland – Management, Restoration Traditional Orchards - Management, Restoration Hedgerows – Management, Restoration, Creation

South Bucks Heaths and Parklands Biodiversity Opportunity Area Statement

Area Coverage 5662 ha

Number of Designated Sites Local Wildlife Sites 1 SSSI 5 Special Area of Conservation 1 National Nature Reserve 1

BAP Habitat Lowland Wood-Pasture & Parkland 42 ha Lowland Mixed Deciduous Woodland 233haLowland Acid Grassland 1 haLowland Calcareous Grassland 2 ha Lowland Beech & Yew Woodland 158 haLowland Meadow 5 ha Wet Woodland 6 ha Lowland Heath 36 ha Fens 3 ha

This area covers a large proportion of South Bucks District and contains a central core of commons, heathland and wood pasture (including Burnham Beeches, Stoke Common and Black ParkThis BOA connects with Colne Valley and Thames Valley

Joint Character Area Thames Valley Landscape Types Agricultural wooded

Geology Mostly mudstone overlain by sands and gravels. Small areas around Dorney Wood and Cliveden and in the Alderbourne Valley are chalk.

Topography A generally flat plateau cut in the centre by the Alderbourne Valley. The areas to the south of Stoke Poges and to the east of Black Park are lower (by around 40m) and flatter and form part of the ancient river terraces of the Thames and Colne. Biodiversity This area contains a complex mosaic of many BAP priority habitats. Heathland – The key heathland sites are Stoke Common, Black Park and Burnham Beeches. However a much wider area was once heathland and relict habitat can still be found in some areas. Acid Grassland – The key acid grassland sites are as per heathland. Calcareous Grassland – There is one calcareous grassland site at Cliveden. Fen – There are wet flushes in the west of the area, at Burnham Beeches and at Black Park. Hedgerows – There are several areas with concentrations of pre-18th century enclosures where there are species rich hedges. As some areas were once part of large parklands there are also likely to be veteran trees located in some hedgerowsLowland Meadows – There are also two sites around Stoke Poges and Wexham. Ponds – There are BAP quality ponds in Littleworth Common and Burnham Beeches and potential ponds across the area. The temporary ponds on heathlands are important for Starfruit. Traditional Orchards – There are potential BAP orchards around Langley. Woodland – The whole area is heavily wooded – with a concentration of BAP woods centring on Burnham Beeches. Wood Pasture & Parkland – Burnham Beeches SAC contains wood pasture with large number of ancient pollards. There are many parkland sites including Black Park, Langley Park, Dorney, Cliveden, and Dropmore.

Access Burnham Beeches and Stoke Common are City of London. Langley and Black Parks are BCC. Cliveden is National Trust. Ingrams Copse is Woodland Trust. Littleworth Common is open access.

Archaeology There are several registered parks and gardens – Clivendon, Dorney, Dropmore, Hedsor House, Langley Park, Hall Barn, Stoke Park and Stoke Park Garden of Remembrance. There are additionally 4 SAMs.

Targets Heathland – Management, Restoration, Creation Acid Grassland - Management, Restoration, Creation Calcareous Grassland – Management Fen - Management, Restoration, Creation Hedgerows - Management, Restoration Lowland Meadows - Management, Restoration, Creation Ponds - Management, Restoration, Creation Traditional Orchards - Management, Restoration Wood Pasture & Parkland - Management, Restoration, Creation Woodland - Management, Restoration

South Western Commons Biodiversity Opportunity Area Statement

Area Coverage 360 ha

Number of Designated Sites Local Wildlife Sites 2SSSI 3

BAP Habitat Lowland Dry Acid Grassland 0.5 ha Lowland Mixed Deciduous Woodland 8.9 haLowland Beech & Yew Woodland 33.5 haLowland Meadow 2.5 ha

An area with a diverse geology, topography and biodiversity. The higher ground, acid grassland and heaths of Lane End and the lower areas of chalk. This BOA connects with Hambleden & Wormsley Valleys BOA

Joint Character Area Chilterns

Landscape Types Wooded agricultural land

Geology Mudstone (including London Clay). Moorend Copse contains swallow holes where streams drop through the clay into the chalk beneath.

Topography The land generally drops away gently to the south. There are two adjacent valleys with much steeper sides – to the south east near Marlow and the Hambleden Valley to the west.

Biodiversity Acid Grassland – There are 2 areas of lowland dry acid grassland at Moorend Common SSSI. Lowland Meadows – There is an area of lowland meadow at Frieth Meadows SSSI. Heathland – There are areas of heathland on Moorend Common SSSI. Woodland - including areas of Beech High Forest and Wet Woodland (wet woodland at Widdenton Park Wood SSSI).

Access Lane End Parish Council own Moor End Common. There are numerous footpaths across the area.

Archaeology

Targets Acid Grassland – Management, Restoration, Creation Lowland Meadows - Management, Restoration, Creation Heathland - Management, Restoration, Creation Woodland - Management, Restoration Hedgerows – Management, Restoration Arable Field Margins – Management, Creation

Thame Valley Biodiversity Opportunity Area Statement

Area Coverage 473 ha

Number of Designated Sites Local Wildlife Sites 0SSSI 0
BAP Habitat Lowland Wood-Pasture & Parkland 12 haFloodplain Grazing Marsh 32 ha

The Thame Valley BOA covers the Thame between Waterperry and Haddenham.

Joint Character Area Upper Thames Clay Vales with a small area in the Midvale Ridge,

Landscape Types Mostly agricultural unwooded land. The area south of lckford is agricultural wetland.

Geology Predominantly mudstone and limestone interbedded, overlain by sand, silt and gravels.

Topography A wide gently undulating valley

Biodiversity Rivers and Streams – The River Thame and its tributaries offer an important means for species distribution through the area. Lowland Meadows – There is a concentration of neural grassland sites. Hedgerows – There are concentrations of pre-18th century enclosure around Shabbington and these may contain species rich

hedgerows. Ponds – There are ponds scattered across the area. Wood Pasture and Parkland – There is potential parkland habitat at Tythrop House.

Access There are some public footpaths crossing the BOA.

Archaeology There is ridge and furrow scattered across the area. There are three Registered Parks and Gardens – Eythrope Park, Mentmore and Hartwell House. There are 12 SAMs in the area.

Targets Rivers and Streams – Management, Restoration Lowland Meadows – Management, Restoration, Creation Hedgerows – Management, Restoration, Creation Ponds – Management, Restoration, Creation Wood Pasture & Parkland - Management, Restoration

Upper Hughenden Valley Biodiversity Opportunity Area Statement

Area Coverage 1124 ha
Number of Designated Sites Local Wildlife Sites 11SSSI 1
BAP Habitat Lowland Beech & Yew Woodland 60 haLowland Calcareous Grassland 5.3 ha

The Hughenden Valley is a valley which runs north from Hughenden up to the villages of Speen and Bryant's Bottom. It contains several BAP woodlands – especially on the eastern flanks and areas of neglected calcareous grassland survive on its steep slopes..This BOA connects to Central Chilterns Chalk Rivers BOA.

Joint Character Area Chilterns

Landscape Types Wooded agricultural land

Geology Chalk with overlying deposits of alluvium sand and gravel in the valley bottom, and clay with flints on the highest points of the ridges.

Topography A steep sided valley with gently sloping valley bottoms. The valley splits into three at its head.

Biodiversity Woodland – The area contains BAP quality woodlands at Millfields Wood SSSI and Gomms Wood, Longfield and Hatches Woods and Piggott's Wood. There are several other mixed deciduous woodland sites spread across the area. Calcareous Grassland. There are calcareous grassland sites at Millfield Wood SSSI and the LWS at Cowslip Meadow. The area also contains concentrations of unmanaged calcareous grassland that has now reverted to rank grassland or scrub but which offer the opportunity for restoration. Little Stocking Meadow is one of the few sites in the county containing Meadow Clary. Arable Field Margins – The bottom of the valley is predominantly arable. The Chilterns is a Plantlife priority area for rare arable plants. Traditional Orchards – There is a potential BAP orchard at Orchard Farm. Lowland Meadows – There is lowland meadow habitat at Prestwood. This site is an ex-brickworks and its complex geology has created an area of lowland meadow containing both calcareous and acid species. Hedgerows – there is a concentration of pre-18th century enclosures throughout the valley which may contain species rich hedgerows.

Access National Trust own Hughenden Park. BBOWT own Millfield Wood. The Woodland Trust owns some of Gomms Wood. Prestwood Picnic Site is a LNR. Archaeology

Targets Calcareous Grassland – Management, Restoration, Creation Woodland - Management, Restoration Arable Field Margins - Management, Creation Traditional Orchards - Management, Restoration Hedgerows – Management, Restoration, Creation Lowland Meadows - Management

Upper Ray Biodiversity Opportunity Area Statement

Area Coverage 1232 ha

Number of Designated Sites Local Wildlife Sites 11 SSSI 1

BAP Habitat Lowland Meadow 88 ha

This area consists of the low lying valley of the Upper River Ray as it flows from Grendon Underwood to the border with Oxfordshire. It also includes the hills around Charndon. The BOA connects with the Bernwood BOA and the Ray Conservation Target Area in Oxfordshire

Joint Character Area Upper Thames Clay Vales Landscape Types Unwooded agricultural lowlands.

Geology Largely Oxford Clay mudstone. There is alluvium along the streams and occasional patches of Till and Head.

Topography A flat river valley.

Biodiversity Lowland Meadows: Extensive areas of lowland meadows including MG1, MG4,MG5b,MG6 & MG11 communities. Ponds: There are numerous ponds scattered across the meadows. Streams: The Upper Ray is serviced by a number of streams, including the Tetchwick Stream. Species: An important area for Great Crested Newts, Brown Hairstreak and True Fox Sedge.

Access BBOWT own several parcels of land adjacent to the Ray. Otherwise parts of the area are poorly served by public footpaths.

Archaeology There is a large amount of surviving ridge and furrow in the area with the fields around Ludgershall being of national importance.

Targets Lowland Meadow: Management, Restoration Ponds: Management, Restoration, CreationRivers: Management, Restoration Hedgerows – Management, Restoration

Wendover Woodlands Biodiversity Opportunity Area Statement

Area Coverage 1385 ha

Number of Designated Sites Local Wildlife Sites 17 SSSI 1

BAP Habitat Lowland Mixed Deciduous Woodland 84 ha Lowland Calcareous Grassland 5 ha Lowland Beech & Yew Woodland

Wendover Woods are located on the Chiltern Escarpment and the top of the Chilterns Plateau between Wendover and Tring.

Joint Character Area Chilterns Landscape Types Low wooded hills

Geology Chalk. The plateau and dipslope are overlain with chalk with flints.

Topography The escarpment is steeply sloping, rising to a plateau that falls away gently to the south east.

Biodiversity Calcareous Grassland – There are a concentration of calcareous grassland in the 2 SSSIs at Dancersend. Aston Clinton Ragpits SSSI is a valuable site with 9 orchid species, Chiltern and autumn gentians and 27 species of butterfly. There are also small areas of calcareous grassland at RAF Halton RAF. Woodlands – There is beech and yew woodland at Dancersend, Wendover Woods, Pavis and Northill Woods and the Great Widmoor and Barn Woods Complex. There are also BAP mixed deciduous woodlands at Dancersend SSSI and in LWSs including Drayton Wood and Buckland Wood. Arable Field

Margins – There are some arable fields on the plateau and the Chilterns is a Plantlife priority area for rare arable plants.

Access Dancersend, and Aston Clinton Ragpits are owned by BBOWT and Wendover Woods is Forestry Commission.

Archaeology There is 1 scheduled ancient monument – Boddington Hill Fort. **Targets** Calcareous Grassland – Management, Restoration, Creation Woodland - Management, Restoration Arable Field Margins – Management, Creation Hedgerows - Management, Restoration, Creation

Whaddon Chase Biodiversity Opportunity Area Statement

Area Coverage 3062 ha

Number of Designated Sites Local Wildlife Sites 12 SSSI 2

BAP Habitat Lowland Mixed Deciduous Woodland 221 ha Lowland Wood-Pasture and Parkland 185 ha Lowland Meadow 52 ha Fens 27 ha

The area covers Whaddon Chase – a royal hunting forest

Joint Character Area Bedfordshire & Cambridgeshire Claylands Landscape Types Wooded agricultural land.

Geology Mudstone with overlying till, head and sand and gravel deposits.

Topography The North western end of a ridge running NW – SE. With gentle slopes running into the Great Ouse Valley to the north.

Biodiversity Woodland – There are many native woodland sites located across the area. There is a concentration of BAP quality woods south of Nash and Whaddon.Fens –There is a large fen north of College Wood. Lowland Meadows – There are several small areas of lowland meadow spread across the area. Hedgerows – There are concentrations of pre 18th century enclosures around Little Horwood and Nash and these may contain species rich hedgerows. Wood-pasture & Parkland – There is a large parkland site at Whaddon. Ponds – There are a few potential BAP priority ponds in the area.

Access There is a good footpath network. The Woodland Trust own College Wood. Archaeology Fields with existing ridge and furrow are found around Nash and Saldon. Whaddon Chase was an ancient hunting forest. SMRs are Snelshall Benedictine Priory and Whaddon Bowl Barrow. Part of a much larger Mediaeval Hunting Forest Targets Fens – Management, Restoration, Creation Hedgerows - Management, Restoration, Creation, Creation, Creation, Creation Woodlands - Management, Restoration, Creation Wood-pasture & Parkland - Management, Restoration Ponds – Management, Restoration, Creation

Whittlewood Forest Biodiversity Opportunity Area Statement

Area Coverage 4985 ha

Number of Designated Sites Local Wildlife Sites 19 SSSI 1

BAP Habitat Lowland Wood-Pasture & Parkland 281 ha Lowland Meadow 3 ha Purple Moor Grass & Rush Pasture 1 ha Lowland Mixed Deciduous Woodland 150 ha Wet Woodland 0.2ha Eutrophic Standing Water 20 ha

This area covers the Yardley-Whittlewood Ridge north of Buckingham. It is more heavily wooded than most of the rest of Aylesbury Vale and contains areas of parkland including Stowe.

Joint Character Area Yardley – Whittlewood Ridge and Bedfordshire & Cambridgeshire Claylands

Landscape Types Mostly wooded agricultural land, at 9% woodland the woodland cover is higher than in most of the north of the county.

Geology A complex geology that can be summarised as limestone in the south, mudstone in the north, sandstone in the south east, mostly overlain by till with some sands and gravels and alluvium in the valleys.

Topography A slightly undulating plateau running south west – north east incised by valleys with streams.

Biodiversity Lowland Meadows – Small areas at Biddlesden Park, Longs Wood & Meadow and Akeley Playing Fields LWSs. Also semi improved neutral grassland at Foxcote Reservoir and Wood SSSI. Fen – There is a small fen at Vyladd Marsh LWS. Woodland – There are 15 woodland LWSs (and other potential BAP woodlands) in a belt between Evershaw and Wicken.Wood Pasture & Parkland – Stowe contains extensive areas of parkland, and there are 2 parkland LWSs at Biddlesden Park and Old Tilehouse Park.Eutrophic Standing Water – Foxcote Reservoir and Wood SSSI. Reedbed – There is a small area of reedbed at Foxcote Reservoir and Wood SSSI. Ponds – There are notable ponds at Foxcote Reservoir and Wood SSSI. There are numerous ponds scattered right across the area. Hedgerows – Much of the area outside the Stowe Parklands is made up of pre-18th century enclosures so these may contain species rich hedgerows.

Access National Trust own Stowe. BBOWT manage Foxcote Reservoir. There is a dense network of rights of way.

Archaeology There are concentrations of ridge and furrow at Akeley, Lillingstone and around Stowe. Stowe (including Old Tilehouse Park) is a registered park and garden. Part of a much larger Mediaeval Hunting Forest.

Targets Lowland Meadows –Management, Restoration, Creation Fen –Management, Restoration Woodland – Management, Restoration Wood Pasture & Parkland – Management, Restoration Eutrophic Standing Water – Management Reedbed – Management Ponds – Management, Restoration, Creation Hedgerows – Management, Restoration

Yardley Chase Biodiversity Opportunity Area Statement

Area Coverage 2700 ha

Number of Designated Sites Local Wildlife Sites 5 SSSI 1

BAP Habitat Lowland Mixed Deciduous Woodland 110 ha Lowland Wood-Pasture & Parkland 93 ha

Two areas of plateau forming the watersheds between the Ouse and Nene. Some of the lower slopes have been included around Hanslope and including Little Linford WoodThis BOA connects with The Ouse Valley.

Joint Character Area Yardley – Whittlewood Ridge (some in Bedfordshire & Cambridgeshire Claylands.

Landscape Types Wooded agricultural land **Geology** Limestone with overlying clay.

Topography The edge of a much larger prominent ridgeline and plateau that continues over the County boundary in Northamptonshire running in a south-west, north-east direction. The ridgeline forms the watershed between the Rivers Ouse to the South and Nene to the north. The Hanslope Plateau sub area is a more obvious plateau landform within the Milton Keynes Council administrative area and forms the watershed between the Ouse and the Tove.

Biodiversity Woodland –The predominantly woodland SSSIs of Salcey Forest and Yardley Chase lie right on the border with, and inside Northamptonshire with only a small area of Yardley Chase in Bucks. There are three LWSs Little Linford Wood, Threeshires Wood and Lavendon Wood north of Lavendon, and an area of BAP woodland at Stokepark Wood near Hanslope. Hedgerows – there is a network of hedgerows connecting the woods many of which are potentially species rich. Ponds – There are many ponds in the area.Wood Pasture & Parkland – There are parkland sites at Hanslope Park.

Access Yardley Chase is managed by Forestry Commission

Archaeology Part of a much larger Mediaeval Hunting Forest

Targets Woodland – Management, Restoration Hedgerows – Management,
Restoration, Creation Ponds - Management, Restoration, Creation Wood Pasture &
Parkland – Management, Restoration

Appendix G

Topic Paper C: Historic Environment – Strategic Opportunities Analysis

Purpose / Scope of Paper

This Historic Environment Topic Paper (C) identifies Historic Environment Opportunity Areas (HEOAs). These are strategic areas of search in a county-wide context for enhancing the management, presentation, accessibility and interpretation of historic environment assets for the benefit of local communities, visitors and businesses, in accordance with regional and local policies, including the South East Plan42, Buckinghamshire County Structure Plan43 and Local Plans44.

Existing Historic Environment

The historic environment zone characterisation process was developed to inform the Milton Keynes and South Midlands Sub-Regional Strategy and developed in parallel with similar techniques of characterisation developed in the Thames Gateway and elsewhere.45

Where full descriptions of Historic Landscape Zones were not yet available, each of the three strands – built heritage, archaeology and historic landscape, has had to be analysed separately.

Built Heritage

The following datasets have been utilised while analysing the built heritage resource:

- Conservation Areas; and
- Listed Buildings

Buckinghamshire County Council Archaeology Service provided these datasets to CBA, on 1st November 2006 and the accompanying notes can be found in Appendix C.1.

Archaeology

The following datasets have been utilised while analysing the archaeological resource:

- Scheduled Ancient Monuments:
- Archaeological Notification Areas;
- Historic transport routes (Roman roads, turnpike roads, canals and railways)

Buckinghamshire County Council Archaeology Service (BCC) provided these datasets to CBA, on 1st November 2006 and the accompanying notes can be found in Appendix C.1.

Historic Landscape

The following datasets have been utilised while analysing the historic environment resource:

- Historic Landscape Characterisation (HLC)¹⁵;
- Historic Landscape Zones (HLZ);
- Registered Parks and Gardens; and
- The historic aspects of 'the landscape plan for Buckinghamshire the landscape character assessment', Buckinghamshire County Council¹⁶

Buckinghamshire County Council Archaeology Service provided these datasets to CBA, on 1st November 2006 and the accompanying notes can be found in Appendix C.1.

Historic Landscape Characterisation (HLC) is a powerful tool that provides a framework for broadening our understanding of the whole landscape and contributes to decisions affecting tomorrow's landscape. The base blocks of HLC are the landscape as it is observed on modern maps and aerial photographs. BCC assigned each piece of land first to a broad 'Landscape Group' and then to a more detailed 'Historic Landscape Type' (HLT). Historic maps were also consulted going back to the early 19th century and in some cases earlier giving a documented "time-depth" of almost 200 years. Special attention was given to fields created by Acts of Parliament in the 18th and 19th centuries as this process is well-documented and affected 37% of the historic county. Some general inferences could also be made about the origins of landscapes pre-dating the earliest county-wide map sources but much more detailed local studies would be required to draw firm conclusions.

Another key element of the project was the analysis and recording of 'morphology'. This involved assessing the shape and pattern of the fields and other places; and trying to interpret their origins and development. The shape of a settlement or the size and pattern of fields can indicate their history, often by analogy with other better-studied areas. Of all the broad landscape types, it is the field systems generically grouped as 'enclosures' that required the most detailed consideration.

Each Historic Landscape Type (HLT) has a distinct form that can be related to its origins and development. Thus regular shaped fields are indicative of surveyed or 'planned countryside' like parliamentary enclosure, whereas fields more irregular in character can be an indicators of much older landscapes. The long roughly parallel lines of 'co-axial' field boundaries found mainly in the Chilterns are probably the oldest of them all.

HLTs are then grouped into Zones (HLZs), which are distinct patterns of landscape character that have a broadly common history and visible heritage. HLZ's are strongly influenced by the HLC study but also take into account other aspects of the historic environment: archaeological sites, historic buildings and documented historic land units such as parishes, townships, Forests and major estates. The draft HLZs for Buckinghamshire are outlined in Appendix C.2. HLZ Descriptions are currently in

Page 176

¹⁵Buckinghamshire County Council, 2006. Buckinghamshire and Milton Keynes Historic LandscapeCharacterisation.http://www.buckscc.gov.uk/bcc/content/index.jsp?contentid=2005089152

¹⁶Buckinghamshire County Council, 2000, The historic aspects of 'the landscape plan for Buckinghamshire – the landscape character assessment. Buckinghamshire County Council: Buckingham

preparation by BCC's Archaeology Service. These descriptions aim to present a concise summary of the local historic environment, a framework for describing local distinctiveness that can be easily used to assess sensitivities and help planners assess capacity for change at a strategic scale.

Work in Surrounding Counties

Green Infrastructure Strategies have been produced for some of the surrounding counties, notably Northamptonshire¹⁷ and Bedfordshire¹⁸. Due to the strategic nature of this topic paper regard has been made of Historic Environment Opportunity Areas identified within other studies that meet with the Buckinghamshire border. These have been outlined within the corresponding Buckinghamshire Historic Environment Opportunity Area and are shown on Figure 4.1

Strategic Historic Environment Opportunities

Using the resources outlined above and professional knowledge, CBA have identified seven broad types of strategic Historic Environment Opportunities Areas which have the potential to contribute to green infrastructure functions (see correlation table below).

For each HEOA identified the key assets have been listed along with the key Management Issues, which are believed to occur within the area. Some of these issues will be specific to the area and others will be more general and based on professional experience i.e. they are presumed or are potential issues that need to be clarified during consultation.

In addition the opportunities for each HEOA are identified. These are separated into four categories, which are outlined and explained below.

- Management Opportunities general opportunities for the improved management of an area or specific site within an area. Many of these are based on professional experience and are therefore presumed or are potential issues. In general terms management opportunities can be sub-divided into conservation of existing assets, restoration or degraded or damaged assets and re-creation of lost assets.
- Presentation Opportunities this section outlines opportunities to improve presentation of an area to the people of and visitors to Buckinghamshire. This links closely with interpretation of an area but can also include the improving the visual appearance of an area.
- Interpretation / Intellectual Access Opportunities Many people enjoy open spaces purely for the sense of openness but the addition of some explanation of what can be seen or why this open space exists, especially if there is a historic reason, can add a further dimension to a visitors experience. In some cases, such as the medieval hunting forests, these may form the greatest opportunities, as it is never likely to be practical or indeed beneficial to recreate the great hunting forests. Some areas also present the opportunity for further research or links with other sites and areas, and these have also been flagged. Interpretation can take many forms both on-site (e.g. interpretation boards) and off-site (education resources, web site) and can include formal education.

Page 177

¹⁷Northamptonshire County Council, 2006, Northamptonshire's Environmental Character and Green Infrastructure Suite

¹⁸Chris Blandford Associates, 2006, Bedfordshire and Luton Strategic Green Infrastructure Plan

 Physical Access Opportunities – as well as outlining the present access opportunities for an area, this section highlights opportunities for improved physical access whether by open access; improvement or extension of rights of way or disabled access.

Figure 4.11 shows the distribution of the 35 HEOA (which include 6 Historic Routeways), which have currently been identified by CBA. These strategic areas are the result of the above research and should be seen in a county-wide context for enhancing the management, presentation, accessibility and interpretation of historic environment assets for the benefit of local communities, visitors and businesses.

The specific opportunities within each of the Historic Environment Opportunity Areas / Routeways are described in the following pages. These are complemented by key strategic themes and opportunities for enhancing the management, presentation, accessibility and interpretation of the historic environment in Buckinghamshire, which can be summarised as:

- Historic routeways e.g. Icknield Way, , Akeman Street Roman Road; canals and railways;
- Designed landscapes and country houses e.g. Stowe, Dropmore, Stoke, Langley, Shardeloes;
- Historic Woodland Landscapes e.g. Chiltern woodlands, Royal Hunting Forests (Whaddon Chase, Whittlewood, Bernwood);
- History of early man e.g. barrows, hillforts and Grims Ditch;
- Rural settlement and abandonment e.g. deserted medieval sites (e.g. Quarrendon), ridge and furrow, historic villages and churches;
- Historic Agricultural Landscapes e.g. Early and Parliamentary enclosure fields; historic farms, allotments, meadows, orchards, downland and commons.
- Historic Military and Industrial Sites e.g. under-used, disused or surplus airfields, hospital etc.

Limitations of HEOA Mapping

There are a number of limitations to the Historic Environment Opportunity Areas Mapping, of which the principle ones are outlined below.

- This is a desk based exercise undertaken by CBA, based on the sources outlined above and on internet research and incorporating comments from Buckinghamshire County Council. More detailed knowledge of individual sites will need to be added through the consultation processes, indeed additional HEOAs may be identified.
- HEOA boundaries, in many cases, should be seen as soft, zones of transition between areas, rather than hard delineations.
- The descriptions are broad and only describe the most prominent elements of the historic environment. Detailed studies of each of the individual areas should be undertaken before any 'programme of works' are implemented in order that the historic environment is as fully understood as possible.

Summary

People have been living in Buckinghamshire for 450,000 years of more, and have left behind a physical record of their lives and stories. The historic environment that covers much of Buckinghamshire comprises landscapes, towns, villages and buildings, and archaeological sites and features. Buckinghamshire's historic environment is distinctive, diverse and fascinating. The area is noted for the richness and variety of its heritage. Important features include: prehistoric and Roman settlement; medieval earthworks; ancient woodlands; large country houses and their historic parks and gardens and the agricultural landscapes, railways; and canal networks largely created from the 17th century onwards. There are a wide range of opportunities for enhancing the management, presentation, accessibility and interpretation of the historic environment in Buckinghamshire as part of Green Infrastructure, which can have major quality of life benefits. The historic environment can also contribute to all of the identified green infrastructure functions. These opportunities should be reflected in the overall proposed Strategic Green Infrastructure Strategy.

HEOA 1 Buckinghamshire and Hertfordshire Icknield Way

Opportunity Theme: Historic Routeway

(Links with Bedforshire HEOA 39 Icknield Way)

Key Assets

- An historic and supposedly prehistoric routeway (fragmented) traversing the Chiltern escarpment
- Links a number of extant prehistoric and medieval earthworks

Management Issues

- Generally in good condition, some visitor erosion addressed by National Trail
 Project but will require ongoing monitoring and maintenance.
- Differential ownership and management

Management Opportunities

The Ridgway National Trail provides a modern version of this historic route.

Presentation Opportunities

- Presentation Audit is recommended in order to ascertain need at various points along the trail.
- Official website at http://www.icknieldwaypath.co.uk/
- The Icknield Way Path. A Walker's Guide New Fifth Edition is a guide to the entire route

Interpretation / Intellectual Access Opportunities

 Preserve and interpret prehistoric and more recent archaeological remains for public benefit.

Physical Access Opportunities

• Largely accessible by well maintained and promoted public footpath

HEOA 2 Rothschild Parkland Landscapes

Opportunity Theme: Designed Landscape

(Link to HEOA6 Quarrendon)

Key Assets

- Waddesdon Manor Grade I listed Park and Garden late 19th century formal gardens with surrounding informal and exotic woodland c.65 hectares within park and agricultural estate (a) Eythrope Grade II listed Park and Garden late 19th century garden and park, surrounding late 19th century house (designed as a day pavilion) overlying 18th century landscape park (b) Hartwell House Park and Garden 18th century landscape park, lake and woodland with 19th century alterations c.100 hectares. This is not a Rothschild property but forms part of grouping for locational reasons (c) Site of medieval Village of Eythrope
- Course of Roman Road between Waddesdon and Aylesbury
- Earthworks west of Lodge Hill
- Concentrations of listed buildings including the Grade I listed: Waddesdon Manor 1874-83, by Hippolyte Alexandre Destailleur, for Baron Ferdinand de Rothschild.
- Lodge and gates at the corner of Waddesdon Hill and the A41 are a distinctive feature
- Waddesdon Estate Village remodelled in distinctive Rothschild style.
- Ex-Air Ministry land transferred to Forestry Commission previously owned by Rothchilds. Has unique historical features linked to the Rothchilds and Air and Ministry ownership.

Management Issues

- Waddesdon Park in National Trust ownership already a major tourist attraction, this designated landscape will need ongoing conservation management
- Hartwell Park is likely to remain a more exclusive venue but should be protected and might have some potential for enhanced access
- Eythrope Park is private with access limited to rights of way
- Need to consider the setting of these assets in identifying directions for future growth and infrastructure at Aylesbury.
- Ensure historic parkland features are not lost within the agricultural landscape

Management Opportunities

- Eythrope Park enhancement
- Restoration of field boundaries
- Restoration of parkland landscape, for example Waddesdon Manor was at its most extensive 1300 hectares
- Encourage the long term management of woodland cover for its visual amenity value
- Maintain the field pattern on the lower slopes which creates the setting for the wooded estate lands
- Encourage the management and replanting of the linear tree belts and avenues that link outlying parts of the estates
- Replant and restore hedgerows
- Conserve historic features beside the river including pollarded willows

- Maintain sympathetic management of Eythrope DMV
- Archaeological survey of parks and Eythrope would be desirable

Presentation Opportunities

- Waddesdon is an established tourist location.
- Eythorpe is privately owned and it is therefore unlikely that there are any short-term presentation opportunities
- Hartwell is an exclusive hotel and spa – and it is therefore unlikely that there
 are any shortterm presentation opportunities

Interpretation / Intellectual Access Opportunities

- Preserve and interpret archaeological remains at Eythrope and parkland archaeology for public benefit.
- Links with other parkland landscapes throughout Buckinghamshire, including links with associated architects, garden/landscape designers, builders, engineers and surveyors.

- Waddesdon House National Trust (a)
- Good network of public rights of way including North Buckinghamshire Way, Midshires Way and Thame Valley Walk

HEOA 3 Stowe Designed Landscape

Opportunity Theme: Designed Landscape

(Link to HEOA 25 Whittlewood)

Key Assets

- Stowe Park and Garden 18th century landscape garden with 18th century architectural features
- Conservation Area
- Stowe Avenue
- Concentrations of listed buildings including the Grade I listed:
 - Stowe School Arches at each end of North Front of The Mansion, circa 1740;
 - Dido's Cave, small stone building possibly 1727 by Gibbs;
 - Equestrian Statue of George I, 1723 by John Van Nost;
 - Lord Cobham's Column attributed traditionally to Gibbs, but known to have been substantially designed by Capability Brown;
 - Queen Caroline's Monument, probably by Vanbrugh c1725;
 - Boycott Pavilions, circa 1728 by Gibbs, altered 1754 by Borra;
 - The Cascade 1760's remodelled early C19;
 - The Congreve Monument circa 1737 perhaps by Kent;
 - The Corinthian Arch 1765 by Thomas Pitt, Lord Camelford; The Doric Arch perhaps designed by Thomas Pitt or Lord Temple, or both in partnership;
 - The Fane of Pastoral Poetry 1727/3 by Gibbs, as The Belvedere;
 - The Gothic Temple 1741 by Gibbs; The Grenville Column c1748;
 - The Hermitage (or Shepherds Cove) pre-1732 by Kent;
 - The Lake Pavilions altered circa 1760 by Borra;
 - The Mansion of 1680 by William Cleare for Sir Richard Temple;
 - The Oxford Bridge:
 - The Oxford Gate, gate piers c1730 by Kent;
 - The Palladian Bridge built 1738;
 - The Queens Temple of c1740 by Gibbs;
 - The Rotondo 1721 by Vanbrugh;
 - The Shell Bridge and Captain Cook's Monument:
 - The Temple of Ancient Virtue 1730's by Kent;
 - The Temple of British Worthies circa 1735 by Kent;
 - The Temple of Concord and Victory 1749 by Earl Temple;
 - The Temple of Friendship 1739 by Gibbs; and
 - The Temple of Venus circa 1732 by Kent; Wolfe Obelisk.
 - Ancient woodland with formal rides and vistas extends beyond area of registered park to north

Management Issues

- Differential ownership and management, notably tensions between school and golf course uses and conservation interest promoted by National Trust.
- Care is needed that the setting and preservation of this nationally important landscape is not harmed in planning for new development around Buckingham.
- Corinthian Arch, Grade I listed, which is currently on the Buildings at Risk register. The Arch has recently been subject to restoration work.

- Stowe Park is in National Trust ownership
- Potential tension with possible development of Silverstone Race Course to north.

Management Opportunities

- Stowe House now restored
- National Trust have acquired the Grade II* listed New Inn Farm adjacent to the Corinthian Arch with a view to restoring this historic entrance to the Park.
- Restoration of field boundaries
- Restoration of parkland landscape, well under-way on National Trust land.
- Conserve and enhance ancient woodlands
- Conservation of the Stowe designed landscape extending beyond the National Trust landholding
- Ensure the conservation and management of existing features such as hedgerow oaks
- Replant and restore hedgerows
- Ensure historic parkland features are not lost within the agricultural landscape

Presentation Opportunities

- There is already significant interpretation on-site, although there may be further potential in the surrounding landscape and/or linked to New Inn Farm Development.
- Stowe is a significant event venue with a cultural appeal wider than the "heritage" sector extending to culture and arts.

Interpretation / Intellectual Access Opportunities

- Stowe is an important educational resource used by local schools, a role which might be further encouraged and supported.
- Preserve and interpret archaeological remains for public benefit.
- Links with other parkland landscapes throughout Buckinghamshire, including links with associated architects, garden/landscape designers, builders, engineers and surveyors.

- Already a major tourist attraction in the care of the National Trust with potential for "hub" role based on New Inn Farm.
- Good network of public Rights of Way
- Improve public transport and cycle links, especially to Milton Keynes growth area.

HEOA 4 Grand Union Canal - Aylesbury Arm

Opportunity Theme: Historic Routeway

(Links with Bedfordshire HEOA 45 Grand Union Canal)

Key Assets

Historic routeway – product of the Canal and Railway Age

Management Issues

- Significantly under-used resource at present
- Conserve and enhance canals as landscape features

Management Opportunities

- The designation of the canal and its setting as a conservation area should be considered.
- The redevelopment of the canal basin represents an opportunity to reintegrate the canal into the town centre but to retain character the detailed design could be informed by a conservation appraisal.
- Seek opportunities to enhance the interpretation of the industrial heritage associated with the Canal and strengthen associations with key features along the route of the Canal to enhance the enjoyment of users of this key recreational resource.

Presentation Opportunities

 The waterway already provides a distinctive and intimate landscape feature and has potential for wider access. It will be important to protect the canal's distinctive setting, including the late 19th century housing and industrial buildings along it.

Interpretation / Intellectual Access Opportunities

• Preserve and interpret canal heritage for public benefit.

- Towpath
- A rare location in central Bucks for water-based leisure.

HEOA 5 Bernwood Forest (& Wotton Underwood Planned Landscape 5a)

Opportunity Themes

Historic Woodland & Agricultural Landscapes; Designed Landscape; Rural Settlement.

Key Assets

- Brill village, common, windmill and industrial heritage (pottery, tile and brick manufacture)
- Boarstall Tower and Duck-Decoy (NT)
- Long Crendon village and courthouse (NT)
- Claydon House country house and park (NT)
- Ancient / medieval hunting forest
- Wotton Underwood Grade II* listed Park and Garden (5a). Early and mid-18th century park, landscape and woodland, at most extensive c.800 hectares, now in divided use.
- Mill mounds (5a)
- Conservation Area (5a)
- Wotton Underwood was used during the 'Cold War' as a testing centre for weaponry, particularly rocket research.
- Concentrations of listed buildings, including the Grade I listed:
 - Wotton House South Pavilion 1704-14:
 - The Clock Pavilion Wotton House 1704-14; and
 - Wotton House 1704-14, possibly by William Winde, burnt in 1820 and much rebuilt by Sir John Soane.
- Ancient woodland
- Ridge and furrow and medieval settlement earthworks
- Historic village of Ludgershall with its vernacular building, common, the best preserved medieval open field system in Midland England and well preserved parliamentary enclosure field system
- Ridge and furrow and parliamentary enclosure around village of North Marston

Management Issues

- Differential ownership and management
- Wotton Airfield has a number of Cold War structures considered worthy of retention.
- Encourage future replanting of plantations on ancient woodland sites to be with locally
- Occurring native species. Where appropriate natural regeneration should also be considered
- Ensure the conservation and management of existing features such as hedgerow oaks
- Ensure historic parkland features are not lost within the agricultural landscape
- Survey and preserve medieval earthworks
- Further measures to preserve the local distinctiveness and promote public access and awareness would be desirable
- Restoration of Brill windmill (BCC)

Management Opportunities

- Measures of preserve the local distinctiveness (e.g. conservation area designations)
- A largely rural area with a rich historic environment that has recently been promoted by the County Council
- Ancient monuments, historic ponds and routeways could provide foci of interest whilst protecting these valuable assets.
- Conserve and enhance ancient woodlands
- Re-creation of former woodlands?
- Conserve ridge and furrow earthworks.
- Reduce agricultural damage of archaeological monuments by removing from plough

Presentation Opportunities

- Preserve and interpret medieval and more recent heritage for public benefit.
- Bernwood Jubilee Way promoted route and guide
- National Trust properties

Interpretation / Intellectual Access Opportunities

- Links with other parkland landscapes throughout Buckinghamshire, including links with associated architects, garden/landscape designers, builders, engineers and surveyors.
- Further interpretation and investigation of the character of the original medieval hunting forest
- Links with the other hunting forests within Buckinghamshire including Whittlewood Forest, Whaddon Chase and Windsor Forest.
- Significant educational potential for medieval themes through existing "Getting to Know Bernwood" resource and NT properties.

- Further promote public access and awareness
- Good network of public rights of way, specifically Bernwood Jubilee Way
- Challenge is to balance promotion of the area with interests of local residents who often do not wish their villages to become tourist "hot spots".

HEOA 6 Quarrendon Deserted Medieval Villages & Tudor Garden

Opportunity Theme

Rural Settlement

Key Assets

- Quarrendon Scheduled Ancient Monument
- Deserted medieval settlements
- Tudor Garden earthworks, ponds and moat
- St.Peters Church (ruin)
- St Mary's Church (Fleet Marston) disused church link south to Roman Road (Akeman Street) through Aylesbury (present A41)
- Roman settlement ridge and furrow evident within the surrounding fields
- Tudor enclosure meadow systems

Management Issues

- Loss of farm and severance from open countryside by development and link road will make this the largest greenspace within the expanded urban area.
 the monument and its setting will experience increased visitor pressure from the
- MDAs and have great potential for providing a large area of interesting and easily accessible public open space in easy walking distance of the new populations.
- Differential management
- Conserve Scheduled Ancient Monument and its setting
- Visitor erosion
- Potential damage to archaeological remains

Management Opportunities

- Enhancement of Field Boundaries
- Enhancement / bring bank into beneficial / public use of Fleet Marston Church
- Reduce agricultural damage by removing from plough
- Improved public access and conservation
- Maintain setting of nationally important archaeological sites at Quarrendon
- Conserve ridge and furrow and associated remains of deserted settlement
- Reduce agricultural damage of archaeological monuments by implementation of management plan
- Ten-year management plan secured under legal agreement but need to resolve long-term management and funding issues.

Presentation Opportunities

- Preserve and interpret medieval and Tudor archaeological remains for public benefit.
- Protecting the site's setting and rural character will be critical target in future management.

Interpretation / Intellectual Access Opportunities

- Links with other parkland landscapes throughout Buckinghamshire as the best preserved
- Example of an early garden in the county.
- Potential for both on and off-site interpretation and formal education linked to medieval and Tudor periods.

- A study commissioned by Aylesbury Vale District Council estimates the cost of providing sustainable access is approximately £676,700 over a 10 year period50
- Some access via public Rights of Way
- Potential for wider (open?) public access dependant on conservation issues

HEOA 7 Whaddon Chase Planned Landscape

Opportunity Theme:

Historic Woodland

Key Assets

- Ancient / medieval hunting forest cleared in 19th century.
- Some ancient woodland survival
- Whaddon village conservation area
- Whaddon House & Park with veteran trees
- Snelshall Priory earthworks (scheduled ancient monument)

Management Issues

- Development pressure southwest of Milton Keynes
- Differential ownership and management
- Potential damage to archaeological remains
- Fragmentation and isolation of ancient woodland
- Neglect of historic parkland

Management Opportunities

- Village conservation area
- Reinstate as a community park and woodland
- Re-create its pre-19th century form with the replanting of extensive woodland cover for recreational use, and perhaps supplying fuel for sustainable bio-power generation.
- Ancient monuments, historic ponds and routeways could provide foci of interest whilst protecting these valuable assets
- Conserve and enhance ancient woodlands and provide interpretation
- Encourage future replanting of plantations on ancient woodland sites to be with locally occurring native species. Where appropriate natural regeneration should also be considered
- Ensure the conservation and management of existing features such as hedgerow oaks
- Restoration of open heath and common
- Restoration of Whaddon Park
- Restore conifer plantations to native broadleaf woodland.
- Potential for some recreation-based development (e.g. golf) serving MK market.
- Possible local food production linked to Thrift Farm?

Presentation Opportunities

- Preserve and interpret medieval heritage for public benefit.
- Potential for promoted walks.

Interpretation / Intellectual Access Opportunities

- Investigate the character of the original medieval hunting forest and sites within it
- Links with the other hunting forests within Buckinghamshire including Whittlewood Forest, Bernwood Forest and Windsor Forest.

- Reasonable network of public rights of way including North Buckinghamshire Way, Midshires Way and Swan's Way
- Potential for greater permissive or open access making use of historic routes
- Link to Thrift Farm (BCC site) but problem of A421 severance.

HEOA 8 Dropmore Designed Landscape

Opportunity Theme

Designed Landscape

Key Assets

- Dropmore, Grade II listed Historic Park and Garden, late 18th century / early 19th century landscaped garden
- Ornamental woodland, including internationally significant pinetum
- Italian garden
- Former formal garden
- Woodland & agricultural estate
- Concentrations of listed buildings including Grade I listed:
 - Dropmore 1792-5 by Samuel Wyatt for Lord Grenville with alterations 1806-9 by C H Tatham; and
 - Aviary at Dropmore
- Ancient woodland

Management Issues

- An "at risk" site currently the subject of a major restoration program by a private developer to create exclusive residential accommodation
- Previous unsympathetic management

Management Opportunities

- Current restoration of the house, gardens and park will create an attractive environment but scope for public access may be limited
- Restoration of parkland landscape
- Conserve and enhance ancient woodlands

Presentation Opportunities

Preserve and interpret of garden heritage for public benefit.

Interpretation / Intellectual Access Opportunities

- Links with other parkland landscapes throughout Buckinghamshire, including links with
- Associated architects, garden/landscape designers, builders, engineers and surveyors.
- Recording being undertaken as part of current conservation scheme.

Physical Access Opportunities

 Some public rights of way including Hunt's Lane, Brickfield Lane and Chalk Pit Lane.

NB: May not be realistically publicly accessible as Green Infrastructure for foreseeable future as largely private.

HEOA 9 Mentmore Planned Landscape

Opportunity Theme

Designed Landscape

Key Assets

- Mentmore Towers Grade II* listed Historic Park and Garden, 19th century formal gardens and woodland c.34 hectares
- Concentrations of listed buildings including: Mentmore Towers Grade I listed former country house, formerly the British Seat of the World Government of the Age of Enlightenment now under conversion to an exclusive 6-star hotel.

Management Issues

- Surrounding park and agricultural land now in separate ownership and management as golf course
- Previous unsympathetic management
- Ensure historic parkland features are not lost within the golf course landscape

Management Opportunities

Restoration of formal gardens

Presentation Opportunities

Preserve and interpret Rothschild heritage for public benefit.

Interpretation / Intellectual Access Opportunities

 Links with other parkland landscapes throughout Buckinghamshire, including links with associated architects, garden/landscape designers, builders, engineers and surveyors.

Physical Access Opportunities

Good network of public rights of way including The Belt

NB: May not be realistic as Green Infrastructure for foreseeable future as largely private/exclusive benefit.

HEOA 10 Stoke Park Planned Landscape

Opportunity Theme

Designed Landscape

Key Assets

- Stoke Park Grade II listed landscape Park surrounding a country house.
- Concentrations of listed buildings
- Oldest golf course in Buckinghamshire
- Barrow mound in park

Management Issues

- Mostly in ownership of golf course.
- Owners believed to be interested in acquiring further land to reintegrate outlying areas
- Conservation plan in preparation
- The park has been a gold course since 1908
- Unsympathetic management?
- Potential damage to archaeological remains
- Ensure historic parkland features are not lost within the golfing landscape

Management Opportunities

Conservation Plan produced

Presentation Opportunities

- An exclusive venue but may be some potential to increase permissive access
- New circular walk proposed in conservation plan

Interpretation / Intellectual Access Opportunities

 Links with other parkland landscapes throughout Buckinghamshire, including links with associated architects, garden/landscape designers, builders, engineers and surveyors.

Physical Access Opportunities

Good network of public rights of way

HEOA 11 Langley Park Planned Landscape

Opportunity Theme

Designed Landscape

Key Assets

- Langley Park Grade II listed Historic Park and Garden. 18th century landscape park with woodland with 19th century and 20th century plantations
- Medieval and Tudor origins
- Concentrations of listed buildings

Management Issues

- At most extensive 193 hectares, now in divided use and management, c.52 hectares designated country park and open to public
- Lack of maintenance in later 20th century
- Langley House on long-term private lease
- Buckinghamshire County Council owned

Management Opportunities

Restoration of parkland landscape proposed under Heritage Lottery Bid

Presentation Opportunities

Preserve and interpret parkland heritage for public benefit as part of HLF project.

Interpretation / Intellectual Access Opportunities

 Links with other parkland landscapes throughout Buckinghamshire, including links with associated architects, garden/landscape designers, builders, engineers and surveyors.

- Good public access with routes within park to be improved by HLF project
- Good network of public rights of way including Colne Valley Trail & SUSTRANS route
- Poor interconnection between Black and Langley Parks and bus access (?)

HEOA 12 Gerrards Cross & Bulstode Park

Opportunity Themes

Designed Landscape, Early Man

Key Assets

- Bulstrode Park Grade II* listed Historic Park and Garden (a) late 17th century formal gardens landscaped in 18th century with 19th century woodland & exotic development estate
- Gerrards Cross Common
- Bulstrode Camp (Scheduled Ancient Monument) owned by parish council
- Concentrations of listed buildings

Management Issues

- Differential ownership and management, with much of the outer estate returned to agriculture.
- At most extensive c300 hectares. Gardens and woodland around house now c.15 hectares
- Unsympathetic management?
- Potential damage to archaeological remains
- Ensure historic parkland features are not lost within the agricultural landscape
- Encroachment of gardens onto hillfort ramparts

Management Opportunities

- Replant and restore hedgerows
- Restoration of parkland landscape
- Retention and restoration of Common?

Presentation Opportunities

 Preserve and interpret prehistoric and more recent archaeological remains for public benefit.

Interpretation / Intellectual Access Opportunities

- Interpretation of hillfort?
- Links with other parkland landscapes throughout Buckinghamshire, including links with associated architects, garden/landscape designers, builders, engineers and surveyors.

Physical Access Opportunities

Good network of public rights of way including Gerrards Cross railway station

HEOA 13 Buckinghamshire's Railway Heritage

Opportunity Theme

Historic Routeway

Key Assets

- Disused railway
- Buckinghamshire Railway Centre
- Civil War battery S of railway

Management Issues

- Differential ownership and management
- Unsympathetic management?
- The former industrial site has been colonised by secondary woodland and is now listed on the Buckinghamshire Records Centre as a county wildlife site containing a diverse flora and fauna.

Management Opportunities

 Establish an agreed ownership and management plan ensuring that owners are aware of their duties and responsibilities

Presentation Opportunities

 Preserve and interpret prehistoric and more recent archaeological remains for public benefit.

Interpretation / Intellectual Access Opportunities

- Limited or no interpretation in most parts
- The disused railway provides a distinctive landscape feature and has potential for wider access for the people of the town.
- There are opportunities to promote green infrastructure on other sites along the disused railway, particularly bordering the Stowe Fringe as another 'Railway Walk'

- Good network of public rights of way including Buckingham Railway Centre station.
- N.B. The routes shown are being promoted as new East-West rail so may not be viable for long distance walk/cycle.

HEOA 14 Latimer Park Designed Landscape

Opportunity Theme

Designed Landscape

Key Assets

- Latimer Park Grade II listed Historic Park a of 213 hectares, on which Lancelot Brown may have advised, forming the setting of a country house.
- Remains of Latimer Church
- Remains of Roman Villa
- Latimer Conservation Area
- Chenies Tudor Mansion & Conservation Area
- River Chess & associated structures, e.g. wiers, water meadows etc.
- Concentrations of listed buildings

Management Issues

- Differential ownership and management
- Unsympathetic management?
- Ensure historic parkland features are not lost within the agricultural landscape
- Potential damage to archaeological remains

Management Opportunities

- Replant and restore hedgerows
- Restoration of parkland landscape
- Reduce agricultural damage of archaeological monuments by removing from plough

Presentation Opportunities

 Preserve and interpret prehistoric and more recent archaeological remains for public benefit.

Interpretation / Intellectual Access Opportunities

 Links with other parkland landscapes throughout Buckinghamshire, including links with associated architects, garden/landscape designers, builders, engineers and surveyors.

Physical Access Opportunities

Good network of public rights of way including Chess Valley Walk

HEOA 15 Shardeloes Designed Landscape

Opportunity Theme

Designed Landscape

Key Assets

- Shardeloes Grade II* listed 18th century landscape park and woodland
- Chesham Bois Common Conservation Area
- War Memorials Chesham Bois & Penn Street
- River Misbourne
- Castle Tower Motte & Bailey
- Concentrations of listed buildings, including Grade I listed: Shardeloes built by William Drake in 1758-66 on site of earlier house

Management Issues

- Differential ownership and management
- A remarkably well-preserved Repton landscape with surrounding areas of parkland largely returned to agriculture.
- Unsympathetic management?
- Potential damage to archaeological remains
- Ensure historic parkland features are not lost within the agricultural landscape

Management Opportunities

- Replant and restore hedgerows
- Restoration of parkland landscape
- Retention of Common?
- Reduce agricultural damage of archaeological monuments by removing from plough

Presentation Opportunities

 Preserve and interpret prehistoric and more recent archaeological remains for public benefit.

Interpretation / Intellectual Access Opportunities

 Links with other parkland landscapes throughout Buckinghamshire, including links with associated architects, garden/landscape designers, builders, engineers and surveyors.

Physical Access Opportunities

 Good network of public rights of way including South Bucks Way and Mop End Lane.

HEOA 16 Halton House & Boddington Hill

Opportunity Theme

Designed Landscape; Woodland Landscape; Early Man

Key Assets

- Halton House Grade II listed late 19th century formal gardens and woodland, 6.5 hectares,
- Within estate of 240 hectares now the officers' mess for RAF Halton
- Boddingtons Hillfort (Scheduled Ancient Monument)
- Icknield Way
- Upper Icknield Way
- All Saints' Church, renowned for its fine 14th century wall paintings
- Almshouses in Ellesborough Road are shown on Bryant's 1825 map of Buckinghamshire
- Ancient woodland have significant environmental and recreational value attracting large numbers of visitors
- Numerous and rich array of woodland heritage including boundary banks, hollow ways, industrial sites, sawpits, chalk/flint pits, historic land parcels and veteran and garden landscape trees.
- Concentrations of listed buildings
- Schedule Ancient Monument Boddington Hillfort (SM19085) in a prominent position overlooking the Vale of Aylesbury.

Management Issues

- Differential ownership and management now used for varied agricultural, forestry, sports and institutional purposes.
- Former unsympathetic management
- Woodland is managed by Forestry Commission
- Halton House in the ownership of the Defence Estates
- Potential damage to archaeological remains from forestry and military operations and tree damage.
- Balancing of social (education, health and wellbeing, physical activity), economic (timber production, leisure activities and tourism) and environmental (elements if Ancient Woodland, heritage and woodland ecology) aspects to ensure local, regional and national delivery objectives.
- MoD has produced assessment for their estate. Wider partnership working with numerous public, private and voluntary sector organizations to meet management objectives.

Management Opportunities

- Woodland clearance of the Hillfort the large Scheduled Ancient Monument lies on the scarp,
- The monument has the potential to be a cultural attraction for visitors to Wendover, but much of the monument is obscured and endangered by tree cover and is not easily visible or understandable from the ground.
- Scrub clearance of the Hillfort
- Replant and restore hedgerows

- Enhancement of Halton House parkland landscape
- Restoration of parkland landscape
- Conserve and enhance ancient woodlands. Encourage future replanting of plantations on Ancient woodland sites to be with locally occurring native species. Where appropriate natural regeneration should also be considered
- Protect ancient lanes which cut down through the scarp face
- Reduce agricultural damage of archaeological monuments by removing from plough
- Increase the recreational carrying capacity of the core site by better design of existing footprint to reduce impact on heritage, tranquil and environmental assets.
- Restructuring of woodland ecology, landscaping and heritage assets (hill fort and other elements) in line with fully consulted and agreed Forestry Commission 'Forestry Design Plan'.

Presentation Opportunities

- Improvements made to footpaths, scrub and woodland clearance and adding interpretation and signage would contribute to the monument's conservation and give the hillfort greater Prominence as a local cultural asset.
- Preserve and interpret prehistoric and more recent archaeological remains for public benefit.
- Promote links to delivering local services in partnership with numerous organizations
- Prominence as social, economic and environment asset.

Interpretation / Intellectual Access Opportunities

- Links with other parkland landscapes throughout Buckinghamshire
- An archaeological survey of the ancient woodlands is recommended.

- Good network of public Rights of Way including part of Ramblers walk already (http://www.bucks-wmiddx-ramblers.org.uk/walks/lk-pr.html)
- Haltom House although not open to the public should be protected and might have some
- Potential for enhanced access, especially if it were to be declared surplus to requirements.
- Aylesbury Environs: Countryside Access Gateways G3 Wendover Woods
- Aylesbury Environs: Access Link L4 Aylesbury to Wendover Woods/Bacombe and Coombe Hills and L5 Tring to Wendover Woods.

HEOA 17 Hall Barn

Opportunity Theme

Designed Landscape

Key Assets

- Hall Barn Grade II* listed late 17th century and early 18th century landscape park and woodland c.260 hectares around central gardens of 32 hectares
- Concentrations of listed buildings

Management Issues

- Differential ownership and management
- Unsympathetic management
- Potential damage to archaeological remains
- Ensure historic parkland features are not lost within the agricultural landscape

Management Opportunities

- Replant and restore hedgerows
- Restoration of parkland landscape
- Reduce agricultural damage of archaeological monuments by removing from plough

Presentation Opportunities

 Preserve and interpret prehistoric and more recent archaeological remains for public benefit.

Interpretation / Intellectual Access Opportunities

 Links with other parkland landscapes throughout Buckinghamshire, including links with associated architects, garden/landscape designers, builders, engineers and surveyors.

Physical Access Opportunities

Limited network of public Rights of Way

HEOA 18 Chequers Designed Landscape, Barcombe Hill and Great Kimble

Opportunity Themes

Designed Landscape; Early Man

Key Assets

- Chequers Grade II landscape Park and woodland c.400 hectares with late 19th century /early 20th century formal gardens 1 hectare (a)
- Chequers Grade I listed Mansion built 1565 for William Hawtrey, possibly incorporating remains of earlier building and given to the nation by Sir Arthur Lee 1917 as a country residence for the Prime Minister
- Tumulus (x2) Bacombe Hill
- White leaf Cross (b)
- Cross dykes
- Cymerline's Castle (Motte and Bailey)
- Moats
- Upper Icknield Way
- Concentrations of listed buildings

Management Issues

- Differential ownership and management
- Unsympathetic management at Chequers
- Ensure historic parkland features are not lost within the agricultural landscape
- Potential damage to archaeological remains

Management Opportunities

- The Heritage Lottery Fund funded Whiteleaf Project demonstrates the potential of the historic environment to contribute to their management, including encouraging public participation.
- Bacombe Hill has cultural and recreational value, containing two nationally important archaeological monuments and an important historic routeway of the Upper Icknield Way, which traverses the area.
- Replant and restore hedgerows
- Restoration of parkland landscape
- Protect ancient lanes which cut down through the scarp face
- Reduce agricultural damage of archaeological monuments by removing from plough

Presentation Opportunities

- Work has recently been undertaken by Buckinghamshire County Council to clear scrub around the Bacombe Hill monuments and promote the landscape to visitors.
- Preserve and interpret prehistoric and more recent archaeological remains for public benefit.

Interpretation / Intellectual Access Opportunities

- Links with other parkland landscapes throughout Buckinghamshire, including links with associated architects, garden/landscape designers, builders, engineers and surveyors.
- New education and interpretation resources in preparation for Whiteleaf Hill

- Whiteleaf Hill owned by County Council (b)
- Good network of public rights of way including Cradle Footpath
- Security considerations at Chequers.

HEOA 19 Roman Road 1

Opportunity Themes

Historic Routeway

Key Assets

- Line of Roman Road, Fleet Marston to Thornborough
- Medieval highway from Aylesbury to Buckingham replaced by turnpike via Winslow.

Management Issues

- Differential ownership and management
- Invisible in parts
- Visitor erosion
- Potential damage to archaeological remains

Management Opportunities

- Reduce agricultural damage of archaeological monuments by removing from plough
- Establish an agreed ownership and management plan ensuring that owners are aware of their duties and responsibilities

Presentation Opportunities

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Interpretation / Intellectual Access Opportunities

- Limited off-site interpretation
- Archaeological investigation

Physical Access Opportunities

 Parts currently a public right of way, minor road and disused railway would need feasibility study to determine if viable long distance link Aylesbury/Quarrendon/ Waddesdon to Buckingham/Thornborough

HEOA 20 Roman Road 2

Key Assets

Line of Roman Road

Management Issues

- Differential ownership and management
- Invisible in parts
- Visitor erosion
- Potential damage to archaeological remains

Management Opportunities

- Reduce agricultural damage of archaeological monuments by removing from plough
- Establish an agreed ownership and management plan ensuring that owners are aware of their
- Duties and responsibilities

Presentation Opportunities

- Preserve and interpret prehistoric and more recent archaeological remains for public benefit.
- Interpretation / Intellectual Access Opportunities
- Limited or no interpretation in most parts
- Archaeological investigation

- Parts currently a public right of way
- N.B. This is the creation of an entirely new route that has limited visible heritage features

HEOA 21 West Wycombe Planned Landscape, Hugenden Manor & Naphill Common

Opportunity Themes

Designed Landscape, Early Man

Key Assets

- Hughenden Manor Grade II listed mid 19th century formal garden & woodland walk 2 hectares within park (a)
- Naphill Common
- Grim's Ditch and other earthworks
- Concentrations of listed buildings including Grade I listed: Hughenden Manor 1738 core, extended late C18, remodelled c.1860 by E.B. Lamb for Benjamin Disraeli. Earl of Beaconsfield
- Ancient woodland
- West Wycombe Hill Cave
- Fort
- West Wycombe Park Grade I listed 18th century landscape park of 18.5 hectares within larger landscape of c.150 hectares (a)

Management Issues

- Differential ownership and management
- Unsympathetic management?
- Ensure historic parkland features are not lost within the agricultural landscape
- Hughenden Park in National Trust ownership
- Potential damage to archaeological remains
- Associated with agricultural estate of c.1600 hectares now in divided ownership
- West Wycombe Park in National Trust ownership

Management Opportunities

- Replant and restore hedgerows
- Restoration of parkland landscape at most extensive Hugenden Manor c.60 hectares including woodland and agricultural land
- Conserve and enhance ancient woodlands. Encourage future replanting of plantations on ancient woodland sites to be with locally occurring native species. Where appropriate natural regeneration should also be considered
- Reduce agricultural damage of archaeological monuments by removing from plough

Presentation Opportunities

 Preserve and interpret prehistoric and more recent archaeological remains for public benefit.

Interpretation / Intellectual Access Opportunities

- Links with other parkland landscapes throughout Buckinghamshire, including links with
- Associated architects, garden/landscape designers, builders, engineers and surveyors.

- National Trust ownership (Hughenden Manor)
- Common
- Good network of public rights of way including parking and picnic site

HEOA 23 Broughton Medieval Manors

Opportunity Themes

Rural Settlement

(link to HEOA 4 Grand Union Canal – Aylesbury Branch)

Key Assets

- Broughton Hamlet
- Mooted sites at Broughton and Vatches Farm Scheduled Ancient Monument
- Associated ridge & furrow
- Concentrations of listed buildings
- Parliamentary Enclosure

Management Issues

- Broughton Aisled Barn Grade II listed building register as at risk
- The scheduled medieval moat and listed aisled barn sit alongside one-another, although in different ownership, adjacent to the Aston Clinton MDA. Ideally, the two sites, and their immediate settings, would be brought together as 'green infrastructure' in public use, perhaps linking to a green corridor along the nearby canal.
- Potential damage to archaeological remains and their settings arising from development
- Pressure or related neglect.

Management Opportunities

- Broughton Scheduled Ancient Monument potential for buried archaeology
- Management Plans secured through related developments.
- Enabling development to restore Broughton Barn.

Presentation Opportunities

Preserve and interpret archaeological remains for public benefit.

Interpretation / Intellectual Access Opportunities

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- Open access to Broughton moat as part of new "country park"
- New community or commercial use for Broughton Barn

HEOA 24 Gawcott

Opportunity Theme

Rural Settlement

Key Assets

- St Rumbold's Well Scheduled Ancient Monument and associated remains
- Parliamentary Enclosure field patterns
- Gawcott Conservation Area
- Ridge and furrow
- Concentrations of listed buildings

Management Issues

- Potential damage to archaeological remains
- Differential ownership and management
- Unsympathetic management?

Management Opportunities

- Replant and restore hedgerows
- Restoration of parkland landscape
- There could be potential in enhancing the area around the Scheduled Ancient Monument as it provides excellent view over the town.
- Recently received funding grant from the Local Heritage Initiative to preserve and restore the well and its conduit house.
- Reduce agricultural damage of archaeological monuments by removing from plough

Presentation Opportunities

 Preserve and interpret prehistoric and more recent archaeological remains for public benefit.

Interpretation / Intellectual Access Opportunities

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- The Buckingham Society who are managing the restoration project, are aiming to create access, interpretation and information.
- There could be potential in promoting the area around the Scheduled Ancient Monument as it provides excellent view over the town.

HEOA 25 Whittlewood Ancient Hunting Forest

Opportunity Themes

Historic Woodland Landscape; Historic Agricultural Landscape

Key Assets

- Ancient / medieval hunting forest
- Ancient woodland
- Villages and dispersed settlement
- Historic field patterns

Management Issues

- A largely rural area with a rich historic environment that has been researched by the University of Leicester.*
- Potential damage to archaeological remains
- Further measures to preserve the local distinctiveness would be desirable
- Continuing damage to and reduction of Ancient Woodland
- Differential ownership
- Unsympathetic management?

Management Opportunities

- Ancient monuments, historic ponds and routeways could provide foci of interest whilst protecting these valuable assets
- Encourage future replanting of plantations on ancient woodland sites to be with locally occurring native species. Where appropriate natural regeneration should also be considered
- Ensure the conservation and management of existing features such as hedgerow oaks
- Reduce agricultural damage of archaeological monuments by removing from plough

Presentation Opportunities

Preserve and interpret medieval heritage for public benefit.

Interpretation / Intellectual Access Opportunities

- Limited or no interpretation in most parts
- Investigate the character of the original medieval hunting forest
- Links with the other hunting forests within Buckinghamshire including Bernwood Forest, Whaddon Chase and Windsor Forest.

Physical Access Opportunities

HEOA 26 Thornborough

Opportunity Themes

Agricultural Landscape; Industry, Early Man

Key Assets

- Medieval bridge
- Two substantial Roman Barrows
- Site of Roman temple
- Publicly accessible quarry containing a lime-kiln
- Well-preserved parliamentary enclosure field system
- Historic farm buildings

Management Issues

- Potential damage to archaeological remains
- Further measures to preserve the local distinctiveness would be desirable
- Differential ownership
- Unsympathetic management?

Management Opportunities

- Replant and restore hedgerows
- Reduce agricultural damage of archaeological monuments by removing from plough

Presentation Opportunities

 Preserve and interpret prehistoric and more recent archaeological remains for public benefit.

Interpretation / Intellectual Access Opportunities

Additional interpretation of quarry and lime-kiln

Physical Access Opportunities

HEOA 27 Tythorp Designed Landscape

Opportunity Theme

Designed Landscape

Key Assets

- Tythorp House Grade I listed Country house. Early C17 E-plan house, remodelled by 1680
- Tythorp Park
- Prehistoric ring ditch (Scheduled Ancient Monument)
- Concentrations of listed buildings

Management Issues

- Tythorp House and Park in private ownership
- Ensure historic parkland features are not lost within the agricultural landscape
- Potential damage to archaeological remains

Management Opportunities

- Replant and restore hedgerows
- Restoration of parkland landscape
- Conservation of meadows and the former duck decoy and restoration of Tythorp Park might be promoted through Environmental Stewardship
- Reduce agricultural damage of archaeological monuments by removing from plough

Presentation Opportunities

 Preserve and interpret prehistoric and more recent archaeological remains for public benefit.

Interpretation / Intellectual Access Opportunities

Links with other parkland landscapes throughout Buckinghamshire

Physical Access Opportunities

HEOA 28 Grand Union Canal – Wendover Arm with Turville Reservoir

Opportunity Theme

Historic Routeway

Key Assets

- Historic routeway Product of the Canal and Railway Age the reservoir was originally created at the end of the 18th century as part of the works for the Grand Union canal.
- Turville Reservoir constructed in 1795 to supply water to the Wendover Arm of the Grand Union Canal
- Site of Special Scientific Interest designated 1986

Management Issues

- The Wendover Arm Trust was formed in February 1989 as a voluntary body, set up to promote the restoration of the Wendover Arm of the Grand Union Canal.
- This lake is now a strong focus for recreation and green infrastructure, including coarse fishing, sailing and ornithology.
- Conserve and enhance canals as landscape features

Management Opportunities

- Seek opportunities to enhance the interpretation of the industrial heritage associated with the Canal and strengthen associations with key features along the route of the Canal to enhance the enjoyment of users of this key recreational resource
- Conserve and enhance canals as landscape features
- Reduce agricultural damage of archaeological monuments by removing from plough

Presentation Opportunities

Preserve and interpret archaeological remains for public benefit.

Interpretation / Intellectual Access Opportunities

Limited or no interpretation in most parts

Physical Access Opportunities

 The footpath is well maintained along most of its length, especially within the Parish borders

N.B. HEOA 29 is unused.

HEOA 30 RAF Halton

Opportunity Theme

Military

Key Assets

 RAF training camp at Halton in the Chilterns. This site in the grounds of Halton House comprises a Royal Flying Corps airfield, inter-war RAF training base and hospital.

Management Issues

- Increasing pressures on existing sites owned by the MoD. The end of the Cold War has seen the mothballing and downsizing of military establishments.
 Former MoD land is regarded as suitable for new housing.
- Although this type is often derelict, any proposed changes should include assessment of historic interest.
- Potential damage to archaeological remains
- Loss of this type and period of use within the landscape

Management Opportunities

- Recognition of the role that Buckinghamshire airfields have played and some interpretation to be provided even if the structures and space is lost.
- Potential use of buildings as natural habitats i.e. pillboxes as bat-boxes

Presentation Opportunities

- Operational military sites tend to be off limits. However, disused or reused sites can be evocative due to their strong historical associations.
- Preserve and interpret prehistoric and more recent archaeological remains for public benefit.

Interpretation / Intellectual Access Opportunities

- Due to the secretive and sensitive nature of these sites it is not always possible to undertake historical or archaeological work. However, when sites are declassified investigations that audit the historical infrastructure of military sites should be undertaken.
- Understanding a military site's interaction with the surrounding landscape.
- The role of military airfields in Buckinghamshire and Milton Keynes during World War II has been understated. Unlike the front line airfields of East Anglia/South East, or the RAF bomber stations in Lincolnshire, the majority of Buckinghamshire airfields were satellite stations or training centres for bomber crews (Brook 1998). Further examination of role and impact on the landscape could be undertaken.
- Historic building recording especially buildings at risk

Physical Access Opportunities

N.B. HEOA 31 is unused.

HEOA 32 South Buckinghamshire Common Land

Opportunity Theme

Historic Woodland Landscape; Early Man

Key Assets

- Burnham Beeches
- Relict and former commons and heaths.
- Moat and hillfort in Burnham Beeches
- Taplow Court: Saxon princely barrow set in disused churchyard on site of hillfort.
- Taplow Court: Historic House and Park
- Dorney Rowing Lake: site of major prehistoric excavations and some reconstructions.

Management Issues

- Differential ownership and management
- Further loss and deterioration of condition of ancient woodlands
- Potential damage to archaeological remains

Management Opportunities

- Burnham Beeches managed by Corporation of London
- Dorney Rowing Lake is significant attraction
- Taplow Court owned by Buddhist group.
- Encourage future replanting of plantations on ancient woodland sites to be with locally occurring native species.
- Further measures to preserve the local distinctiveness and promote public access and awareness would be desirable
- Reduce agricultural damage of archaeological monuments by removing from plough
- Where appropriate natural regeneration should be considered

Presentation Opportunities

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Interpretation / Intellectual Access Opportunities

- Preserve and interpret archaeological remains for public benefit.
- Educational resource pack produced for Dorney.

Physical Access Opportunities

HEOA 33 Rammamere Heath and Stockgrove Country Park

Opportunity Theme

Early Man

(Links with Bedfordshire HEOA 30 – Historic woodland)

Key Assets

- Stockgrove County Park
- Rammamere Heath
- Ancient woodland

Management Issues

- Decreasing area and condition of ancient woodland
- Decreasing area and condition of Heathland?
- Differential ownership and management

Management Opportunities

- Where appropriate natural regeneration should be considered
- Encourage future replanting of plantations on ancient woodland sites to be with locally occurring native species.
- Further measures to preserve the local distinctiveness and promote public access and awareness would be desirable

Presentation Opportunities

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Interpretation / Intellectual Access Opportunities

Limited or no interpretation in most parts

Physical Access Opportunities

Good network of public rights of way including Greensand Ridge Way

HEOA 34 Continuation of Grovebury Sand Quarries in Ouzel Valley

Opportunity Theme

Early Man

(Links with Bedfordshire HEOA 32 - Grovebury sand quarries in Ouzel Valley)

Key Assets

- Extraction led to excavation of manorial and monastic centre at Grove, Bedfordshire
- Grand Union Canal (links to)
- Meadows along river
- Grove Church

Management Issues

Differential ownership and management

Management Opportunities

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Presentation Opportunities

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Interpretation / Intellectual Access Opportunities

Limited or no interpretation in most parts

Physical Access Opportunities

Good network of public rights of way including Grand Union Canal Towpath

HEOA 35 Ashridge/Ivinghoe Downland

Opportunity Themes

Historic Agricultural and Woodland Landscapes; Early Man

(Links with Bedfordshire HEOA 33 & 34 – Whipsnade Zoo and village centre and Ashridge Park (Herts))

Key Assets

- Archetypal Chilterns landscape of downland, commons and woods
- Ivinghoe Beacon hillfort, barrows and related earthworks
- Icknield Way
- Pitstone windmill nearby (NT)

Management Issues

Extensive National Trust landholdings at Pitstone/Ivinghoe

Management Opportunities

- Restoration of chalk downland
- Reduce agricultural damage of archaeological monuments by removing from plough

Presentation Opportunities

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Interpretation / Intellectual Access Opportunities

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- Good network of public rights of way including lcknield Way
- Extensive open access land

HEOA 36 Hambleden Valley

Opportunity Themes

Historic Agricultural and Woodland Landscapes; Early Man

Key Assets

- Ancient woodland and field patterns
- Woodland archaeology
- WW1 trench system
- Dispersed settlement
- Hillforts along Thames

Management Issues

Differential ownership and management

Management Opportunities

- Where appropriate natural regeneration should be considered
- Encourage future replanting of plantations on ancient woodland sites to be with locally occurring native species.
- Further measures to preserve the local distinctiveness and promote public access and awareness would be desirable

Presentation Opportunities

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Interpretation / Intellectual Access Opportunities

- Limited or no interpretation in most parts
- Preserve and interpret archaeological remains for public benefit.

Physical Access Opportunities

HEOA 37 Chiltern Ancient Fields

Opportunity Themes

Historic Agricultural and Woodland Landscapes; Early Man

Key Assets

- Ancient "co-axial" field system of the Chilterns with distinctive pattern of ancient lanes
- Grims Ditch
- Cholesbury hillfort
- Commons and dispersed historic settlement
- Species-rich old hedgerows

Management Issues

Differential ownership and management

Management Opportunities

- Reduce agricultural damage of archaeological monuments by removing from plough
- Encourage future replanting of hedgerows to be with locally occurring native species.
- Further measures to preserve the local distinctiveness and promote public access and awareness would be desirable

Presentation Opportunities

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Interpretation / Intellectual Access Opportunities

- Limited or no interpretation in most parts
- Preserve and interpret archaeological remains for public benefit.

Physical Access Opportunities

HEOA 38 Wing and Ascott

Opportunity Themes

Historic Agricultural and Woodland Landscapes; Early Man

Key Assets

- Historic village with Saxon church
- Norman motte
- Garden earthworks and link to Ascott park set within fairly well preserved parliamentary enclosure landscape

Management Issues

Differential ownership and management

Management Opportunities

- Reduce agricultural damage of archaeological monuments by removing from plough
- Further measures to preserve the local distinctiveness and promote public access and awareness would be desirable

Presentation Opportunities

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Interpretation / Intellectual Access Opportunities

Preserve and interpret archaeological remains for public benefit.

Physical Access Opportunities

Scheduled Ancient Monuments: These areas are Buckinghamshire County Council's interpretation of the areas defined by English Heritage and are indicative only. Refer to English Heritage for the definitive schedules, descriptions and mapping.

Registered Parks and Gardens: These areas are Buckinghamshire County Council's interpretation of the areas defined by English Heritage and are indicative only. Refer to English Heritage for the definitive schedules, descriptions and mapping.

Archaeological Notification Areas: Areas defined by Buckinghamshire County Council's County Archaeological Service to indicate areas where there is specific evidence held on the County Sites and Monuments Record (SMR) for the presence of important archaeological remains. Refer to the SMR for further information. The maps do not show all known archaeological sites or important historic landscapes of areas of potential for as yet undiscovered sites.

Historic Landscape Characterisation: Data held in the data tables is abbreviated an this dataset should therefore be used in conjunction with the legend supplied as an .avl file. The HLC methodology and supporting information is supplied as Appendices 1 –10; please note that Appendices 4 –7 are still being finalised and final versions will be forwarded when complete.

Historic Landscape Characterisation Zones: Please note that this dataset is provisional.

Conservation Areas: These datasets are supplied by the District Councils and may not be up-to-date.

Listed Buildings: These datasets are supplied by the District Councils and may not be up-to-date. The data supplied by Wycombe District Council includes buildings recorded on Local Lists (currently without statutory status).

Draft Historic Landscape Zones

- 1 Olney Planned Landscape
- 2 Yardley Chase Border
- 3 Salcey Forest Border
- 4 Newton Blossomville Assarted Landscape
- 5 Ouse Valley
- 6 Hanslope
- 7 Sherrington Zone
- 8 Moulsoe
- 9 North Crawley Planned Landscape
- 10 Milton Keynes
- 11 Wavenden Woburn Sands
- 12 Calverton & Whaddon
- 13 Brickhill Clayland Fringe
- 14 Beachampton & Thornton
- 15 The Brickhills
- 16 Whaddon Chase
- 17 Newton Longville
- 18 Salden Manor
- 19 Turweston to Tingewick
- 20 Whittlewood Forest
- 21 Stowe Landscapes
- 22 Buckingham Hinterland
- 23 North Buckinghamshire Planned Landscape
- 24 Chetwold
- 25 Bernwood Planned Landscapes
- 26 Upper Bernwood Forest
- 27 Winslow Planned Landscape
- 28 Stewkley Wing
- 29 Ridgeland landscape
- 30 Wescott Dispersed Planned Landscape
- 31 Lower Bernwood Forest
- 32 Winchendon/Chearsley Dispersed Landscape
- 33 Rothschild Parkland Landscapes
- 34 Quarrendon/Fleet Marston Enclosures
- 35 Weedon & Wingrave Planned Landscape
- 36 Pitscone Planned Landscape
- 37 Haddenham/Long Crndon Nucleated Settlements
- 38 Icknield Belt Dispersed Settlement
- 39 Aylesbury
- 40 South East Alyesvbury Landscape
- 41 Ashridge Ivinghoe Downland
- 42 Wendover Valley
- 43 Risborough Saunderton
- 44 Ellenborough/Hampden Woodland
- 45 The Missendens Irregular Landscape
- 46 Chiltern Coaxial Landscape
- 47 Lewknor Sinuous Landscape
- 48 Hughenden Cownley Assarts
- 49 Amersham Valley

- 50 Chenies Parkland landscape
- 51 Wycombe
- 52 Beaconsfield
- 53 Penn Woodland Landscape
- 54 Chalfornt Coaxial Landscape
- 55 Colne Valley
- 56 Chess Valley Landscape
- 57 Hambledon Valley Sinuous Landscape
- 58 Marlow
- 59 Taplow
- 60 Dorney
- 61 Woodland Commonland
- 62 Colne Valley Landscape
- 63 Hambledon Valley
- 64 Boddington Upland

Appendix H

Landscape - Strategic Opportunities Analysis

Purpose / Scope of Paper

This Landscape Topic Paper (D) summarises the strategic priorities (opportunities) for conservation, enhancement and management of Landscape Character Zones identified by the Landscape Plan for Buckinghamshire – Part 1 (Landscape Character Assessment)51.

Existing Landscape Character

At the strategic level, variations in the character of Buckinghamshire's landscapes are reflected in the Landscape Plan for Buckinghamshire - Part 1 (Landscape Character Assessment), which identifies and describes 13 Landscape Character Zones (Figure 4.12). Each zone has an identifiable character although there are variations within zones and the edges in particular may be less characteristic. The Landscape Character Zones are:

- Z1 Valley Farmlands
- Z2 Clayland Villages
- Z3 Greensand Ridge
- Z4 Whittlewood Ridge
- Z5 Northern Clay Vale
- Z6 Southern Clay Vale
- Z7 Midvale Ridges
- Z8 Escarpment and Foothills
- Z9 River Valleys
- Z10 Incised Dip Slope
- Z11 Valley Floodplain
- Z12 Colne Valley
- Z13 Wooded Plateau

The key features and distinctive character of each Zone is described in the Plan, including an evaluation of current trends influencing landscape character.

Aylesbury Vale District Landscape Character Assessment

The County Council's objective is to undertake 'district level' landscape character assessment for the whole county as a refinement of the County wide Landscape Character Assessment that was published in 2000. This will provide a key information layer for the Buckinghamshire Environmental Character System and will inform processes like green infrastructure planning at a detailed level. The County Council is looking to work in partnership with the District Councils in order to achieve this objective.

Work is in progress (December 2006 through to May 2007) on District level Landscape Character Assessment in Aylesbury Vale as joint work by the County Council and Aylesbury Vale District Council. The project and its timescale is in large part driven by the AVDC LDF timetable

The methodology for the Landscape Character Assessment takes into account habitat data and historic characterisation data. Both sets of data are used to refine the Landscape Character Assessment zone boundaries developed through the standard Landscape Character Assessment methodology and will be in built into the Landscape Character Assessment zone descriptions and condition/sensitivity analysis to give an Landscape Character Assessment enriched with ecological and historic environment information.

Landscape Character Zone Priorities in Buckinghamshire

Z1 - Valley Farmlands

- Encourage less intensive farming along river corridor and positive management of grasslands.
- Reintroduce traditional riverside management techniques, such as pollarding of willows.
- Improve integration between Buckingham and the valley landscape.
- Enhance recreational routes from Buckingham along the Ouse valley.
- Encourage the establishment of medium to large deciduous or mixed woodland on the upper valley sides.
- Improved hedgerow management and establishment of new hedgerow trees.
- Development of a strategy to improve landscape quality on the edge of Bletchley including establishing large new woods with public access.
- Conservation of medieval landscape features and patterns.

Z2 - Clayland Villages

- Develop design guidelines for both the villages and landscape.
- Establishment of new hedgerow trees.
- Establish small to medium sized woodland within field pattern, targeted at reducing the impact of intrusive elements.
- Encourage small community woodlands close to settlements.
- Conserve the historic remnants of Whaddon Chase and provide interpretation.

Z3 – Greensand Ridge

- Develop design guidance to conserve the landscape and built character.
- Minimise landscape impact of plantation felling and where appropriate encourage the replanting of plantations with Scots pine.
- Reduce the impact of the A5, especially in views from the west.
- Produce guidance on hedgerow and grassland management for horse owners.

Z4 - Whittlewood Ridge

- Establish new woodland which is not detrimental to existing landscape or nature conservation value.
- Investigate the character of the original medieval hunting forest.
- Ensure the conservation and management of existing features such as hedgerow oaks.
- Encourage future replanting of plantations on ancient woodland sites to be with locally occurring native species. Where appropriate, natural regeneration should also be considered.

- Encourage less intensive farming and the improvement of hedgerows.
- Encourage positive management of grasslands and protection of ridge and furrow fields systems.
- Conservation of the Stowe designed landscape extending beyond the National Trust landholding.

Z5 - Northern Clay Vale

- Management and new planting of black poplars.
- Establish medium and large areas of new woodland.
- Enhance the landscape on the northern edge of Aylesbury
- Reduce the impact of pylon lines
- Improve the management of hedgerows.
- Maintain setting of nationally important archaeological sites at Quarrendon.
- Conserve ridge and furrow and associated remains of deserted settlements.

Z6 – Southern Clay Vale

- Management and new planting of black poplars
- Maintain high quality views to Chiltern escarpment
- Enhance landscape between Aylesbury and Wendover
- Promote the management of existing orchards and encourage creation of new community orchards especially containing locally distinctive varieties such as Aylesbury Plum
- Conserve and enhance canals as landscape features
- Management of existing woodland and the establishment of similar new ones
- Reduce the impact of intrusive elements

Z7 – Midvale Ridges

- Prioritise the zone for the encouragement of less intensive farming
- Replant and restore hedgerows
- Establish new hedgerow trees
- Establishment of small community woods adjacent to settlements
- Conserve ridge and furrow and associated remains of deserted settlements

Z8 – Escarpment and Foothills

- Prioritise the zone for the promotion of less intensive farming.
- Enhance transition between new housing and the countryside, including the creation of smaller fields, strong hedgerows and small woods with public access.
- Support initiatives to maintain and, where appropriate, restore downland.
- Encourage restoration of mineral extraction site.
- Protect ancient lanes, which cut down through the scarp face.
- Ensure conservation of character of scarp face and skyline.
- Promote woodland management.
- Preserve and interpret the prehistoric and more recent archaeological remains for public benefit.

Z9 – River Valleys

- Develop strategy to reduce impacts of existing and new development and limit impact of increasing recreation and transportation pressures.
- Conserve features of ancient countryside.

- Encourage less intensive farming especially in river corridors.
- Encourage sensitive woodland management.
- Ensure historic parkland features are not lost within the agricultural landscape.
- Encourage conservation of remnant orchards and establish community orchards adjacent to settlements.
- Promote and support conservation of chalk stream habitats and features and alleviate low flows.
- Encourage a more natural river system in the Chess valley restoring sections which have become deepened, widened or canalised.

Z10 - Incised Dip Slope

- Encourage less intensive farming and improved hedgerow management to retain hedgerow patterns.
- Encourage conservation of remaining orchards and establish community orchards.
- Promote sensitive woodland management.
- Within existing landscape patterns establish small areas of woodland and community woodland adjacent to settlements.
- Investigate, conserve and interpret the remnants of historic landscape patterns.
- Reduce impact of major roads.
- Resist proposals that threaten to suburbanise the landscape

Z11 – Valley Floodplain

- Conserve historic features beside the river including pollarded willows.
- Establish and manage meadow and pasture adjacent to the river.
- Develop proposals to enhance the setting of Marlow.
- Enhance existing and restored mineral extraction sites.
- Encourage new woodland on the steeper upper slopes.
- Encourage sensitive woodland and hedgerow management.
- Reduce impact of major roads.

Z12 – Colne Valley

- Reduce visual impact of urban edges and intrusive elements.
- Continue to improve watercourse management.
- Improve hedgerow management.
- Establish new woodland.
- Improve restoration of poorly restored mineral workings.
- Restore lost landscape structure.

Z13 - Wooded Plateau

- Increase woodland cover on fringes especially to restore mineral extraction sites and reduce impact of main roads.
- Promote the planting of English oak as the primary hedgerow tree.
- Support the continuation and expansion of traditional woodland management.
- Manage derelict hedgerows.
- Increase heathland cover as opportunities arise.
- Improve landscape adjacent to Slough Arm of the Grand Union Canal.

Appendix I Action Plans

Action Plan for GI delivery in Priority Action Area 1: North Aylesbury Vale

Project Profile	Proposing Agencies	Delivery Agencies	Dates	Funding	Cost
Project Profile North Aylesbury Vale; Strategic Open Space and Access Links Project The provision of new natural Green Infrastructure, the enhancement of existing Green Infrastructure, associated public visitor facilities and countryside access links in the Whaddon, Newton Longville, Stoke Hammond/Great Brickhill area's and between Milton Keynes, Buckingham and Winslow. Whaddon Chase forms two distinct historic landscape areas around Milton Keynes: Whaddon Chase and Salden Manor. Whaddon Chase is characterised through the preservation of the former hunting chase landscape, with rides, ponds and boundaries. Areas of ancient woodland including College Wood are in the present in Whaddon Chase. Both areas are identified as highly sensitive landscapes with significant	Buckinghamshire County Council Aylesbury Vale District Council			Funding Combination of public and Private	£11.9 Million
landscapes with significant potential for restoration and Green Infrastructure provision for communities in North Buckinghamshire and Milton Keynes.					

Project Profile	Proposing Agencies	Delivery Agencies	Dates	Funding	Cost
The Whittlewood Forest Project A project to develop a landscape-scale approach to habitat management, restoration and creation and enhancing the management, presentation, accessibility and interpretation of the Forest's historic environment assets linked to Stowe Park.	The National Trust BBOWT		Priority for implementat ion 2021-26	Feasibility study needed	
The Ouse Valley Regional Park A developing cross-boundary project with Milton Keynes and Northamptonshire that could provide a framework for co-ordinating management of the landscape, waterscape, nature conservation resources and facilities for countryside recreation along the Ouse Valley.	Buckinghamshire County Council Northamptonshire County Council	Buckinghamshire County Council Northamptonshire County Council Milton Keynes Council Buckinghamshire and Milton Keynes Biodiversity Partnership	Priority for Implementa tion 2011-16	Feasibility study needed	
The Ouzel Valley Park Project An existing project delivering a strategy for the river canal corridor. The project involves the restoration of sand-pots and development of Green Infrastructure around Leighton-Linslade in Bedfordshire. Opportunity for cross boundary links with projects in Buckinghamshire exists.	The Ouzel Valley Park Partnership Local Councils	The Ouzel Valley Park Partnership Local Councils British Waterways Sustrans Environment Agency The Greensand Trust Buckinghamshire and Milton Keynes Biodiversity Partnership	Priority for Implementa tion 2007-16	Combination of public and private	

Project Profile	Proposing Agencies	Delivery Agencies	Dates	Funding	Cost
The Whaddon Chase Initiative Proposal	Buckinghamshire County Council	Buckinghamshire County Council	Priority for implementat		
A potential project to provide substantial new natural Green		Aylesbury Vale District Council	ion 2007-26	proposed	
Infrastructure and access links between Milton Keynes, Buckingham and		Milton Keynes Council			
Winslow (and between Milton Keynes and Leighton-Linslade). Based on the reinstatement of		Parish Councils within and around the Chase			
the former medieval hunting forest of Whaddon Chase as a community		English Partnerships			
parkland and woodland, involving restoration of the		Natural England			
area its pre-19th century form with the replanting of		English Heritage			
woodland cover for recreational use and for supplying bio fuels for		Forestry Commission			
renewable power generation. High quality		BBOWT			
landscapes, Ancient monuments, historic ponds and routeways provide a focus of interest.		Buckinghamshire and Milton Keynes Biodiversity Partnership			
		The Woodland Trust			
		Milton Keynes Parks Trust			

Project Profile	Proposing Agencies	Delivery Agencies	Dates	Funding	Cost
Upper River Ray Living Landscape Project This project to target a 42km2 area of the Upper River Ray to: Restore and create a wildlife-rich landscape that will offer opportunities for wildlife to spread out from the isolated pockets that they now inhabit. Help create a sustainable landscape delivering more environmental services to the people. Create a landscape that will provide a huge increase in scope for the local people and visitors from farther a field. Support the development of sustainable economic opportunities for local people such as agrienvironment schemes, organic farming, local farm shops, local accommodation for visitors etc. Wetland Project – looks at conserving wetland habitats across the three counties.	BBOWT	BBOWT FWAG RSPB Buckinghamshire and Milton Keynes Biodiversity Partnership	2008-38		Conservation Management a) river restoration - £20,000 b) Pond restoration/creation - £25,000 Visitor Centre £300,000 Associated road signage, leaflets & other publicity: £6,000 Public Access: Raised hide - £15,000 Orientation and interpretation signage - £3,500 £1.05million

Project Profile	Proposing Agencies	Delivery Agencies	Dates	Funding	Cost
Greensand Ridge Gateway Project	Bedfordshire County Council	Ouzel Valley Park Partnership: • Local Councils			
The Bedfordshire proposal provides for a new area of open space and access links to the west of Leighton-Linslade as a part of green infrastructure provision for major new development and communities adjacent to the town.		 British Waterways Environment Agency Sustrans The Greensand Trust 			
The proposal has cross-boundary implications/benefits and provides key linkages between the Leighton-Linslade Green Wheel and Ouzel Valley Park projects and the emerging green infrastructure development in eastern Aylesbury Vale. It would link the O6 Quainton-Wing Hills area in Priority Action Area 2, the adjacent development of the historic landscapes around Wing and Mentmore, the Wing/Stewkley area and the access corridors of the Aylesbury Arm of the Grand Union canal, to the Ouzel Valley Project and the L6 Leighton-Linslade to Stockgrove Country Park in Priority Action Area 1, so creating a Gateway from Aylesbury, through to the Greensand					

Action Plan for GI delivery in Priority Action Area 2: Aylesbury and environs

Project Profile	Proposing Agencies	Delivery Agencies	Dates	Funding	Cost
Quarrendon Leas is an 83 ha site and provides the largest urban edge Green Infrastructure opportunity for Aylesbury. The site has been secured using s106 funding provided by the new housing areas of Berryfields and Weedon Hill. This Green Infrastructure Project will further support the creation and development of this new strategic Green Infrastructure provision and will improve facilities and increase site management needs to support higher visitor numbers expected from new housing allocations. Key Outputs 1) To enhance access and conservation of Quarrendon Leas, an important Scheduled Ancient Monument. 2) Develop programme of access and interpretation works. 3) Project will be managed by Buckinghamshire Conservation Trust (BCT)	Buckinghamshire Conservation Trust Buckinghamshire County Council Aylesbury Vale District Council Aylesbury Vale Advantage	Buckinghamshire Conservation Trust	2010-11	GAF III s106	£99,000
Grand Union Triangle Project This proposal looks at upgrading the Rights of Way Network and access points relating to the periurban edge of Aylesbury. The project will support and help deliver new opportunities for strategic Green Infrastructure access linking to Aylesbury growth.	Buckinghamshire County Council Aylesbury Vale District Council British Waterways Aylesbury Vale Advantage		2010-14	GAF III	£78,000

Project Profile	Proposing Agencies	Delivery Agencies	Dates	Funding	Cost
National Cycle Route Project A project to complete the National Cycle Route 50 in Buckinghamshire is proposed.	Sustrans	Sustrans			National Cycle Route Proposed costs Aylesbury to Bishopstone £50,000 Loudwater to Bourne End £300,000 Bourne End to Cookham £200,000
Wendover Woodland Park Serving the recreational needs of the expanded Aylesbury population and addressing current Green Infrastructure deficiencies across the district. Focussing on and meeting District ANGSt deficiencies and requirements for the provision of 500ha of strategic Green Infrastructure.	Forestry Commission/ Enterprise Buckinghamshire County Council	Buckinghamshire County Council Forestry Commission/Ent erprise National Trust Chilterns Conservation Board Buckinghamshire and Milton Keynes Biodiversity Partnership	2007-21	Combination of Public and Private	£2.6 Million

Project Profile	Proposing Agencies	Delivery Agencies	Dates	Funding	Cost
A project that seeks to raise awareness of the heritage of the ancient royal hunting forest of north west Buckinghamshire and to promote its protection and enhancement. The project involves habitat management, restoration and creation in the Bernwood and Brill area, and encompasses ongoing work by BBOWT to deliver a landscape-scale approach to nature conservation in partnership with local landowners in the Upper Ray. Enhancing the management, presentation, accessibility and interpretation of the Forest's historic environment assets. Creation of new areas of accessible greenspace to address identified shortfall in provision for communities in Winslow.	Buckinghamshire County Council	Buckinghamshire County Council AVD Buckinghamshire and Milton Keynes Biodiversity Partnership	2016-26		
Forestry Commission Plantations on Ancient Woodland Sites (PAWS) in the Bernwood area to help conserve and enhance relict features of the ancient woodland	Forestry Commission	Forestry Commission Buckinghamshire County Council The Woodland Trust			

Project Profile	Proposing Agencies	Delivery Agencies	Dates	Funding	Cost
The River Thame: Aylesbury – Thame A number of issues have been identified which are restricting the River, the coarse fish population and its potential as a recreational fishery. A strategic habitat enhancement plan identifying these issues with corresponding solutions is currently being developed. The main issues highlighted include: Severe dredging in the past, causing over deep channels and removal of gravel spawning material. Weed choked channels. Lack of backwater spawning areas.	Environment Agency	Environment Agency		Landowner agreement and project funding is required	
Plans and proposals have either been made or are in construction currently. These include:					
 The creation of riffles and redressing existing riffles. Selective herbicide treatment. The creation of off river support units (ORSU) and the clearance of entrances to already existing backwaters. 					

Action Plan for GI delivery in Priority Action Area 3: Wycombe South and South Bucks

Project Profile	Proposing Agencies	Delivery Agencies	Dates	Funding	Cost
Marlow Gravel Pits A project to improve the accessibility, quality and quantity of greenspaces in the Little Marlow Gravel Pit area. The existing greenspace provision and connectivity should be enhanced through habitat management, restoration and creation, and through improved links to the Thames Path and Marlow.	Buckinghamshire County Council Wycombe District Council	Buckinghamshire County Council Wycombe District Council Environment Agency Chiltern Society River Thames Alliance Partnership? Buckinghamshire and Milton Keynes Biodiversity Partnership		Public source S106 funding	
South Bucks Heaths and Woodlands Project A potential project to develop a strategic landscape-scale approach to habitat management, restoration and creation to more effectively enhance, link and buffer existing sites of nature conservation value in the longer term. The project includes promotion of sustainable energy use and production through the use of woodfuels, provision of opportunities for creating sustainable waste management facilities and encouragement of local produce and food production. It also involves creation of new access links between accessible greenspaces, and enhancing the management, presentation, accessibility and interpretation of the area's historic environment assets focusing on the area's history as a former royal hunting forest.		City of London Corporation South Bucks District Council Buckinghamshire and Milton Keynes Biodiversity Partnership	2011-26	Combination of Public and Private	

Project Profile	Proposing Agencies	Delivery Agencies	Dates	Funding	Cost
Colne Valley Access and Environmental Enhancement Projects A package of existing and new projects designed to deliver strategic landscape enhancement, access improvements and nature conservation benefits at key locations within the Regional Park. The project includes the creation of a major area of countryside access gateways focussed on the Little Britain area involving the co-ordinated development of existing facilities, access arrangements, promoted routes and other access links.	London Borough of Hillingdon Colne Valley Regional Park Partnership	Groundwork Thames Valley South Bucks District Council Buckinghamshire and Milton Keynes Biodiversity Partnership	2007-26	Combination of Public and Private	
	1		I		
River Thames Corridor Strategy An existing project to promote a strategic approach to the coordinated protection and management of the River Thames corridor as a whole to help secure the continued delivery of significant landscape, nature conservation, access and recreational benefits.	The River Thames Alliance Partnership		2007-26	Combination of Public and Private	

Project Profile	Proposing Agencies	Delivery Agencies	Dates	Funding	Cost
River Wye and Hughenden Stream – Chalk Stream Project A project to improve the two chalk streams in respect to biodiversity, access and recreation. Campaign to be launched called "Revive the River Wye" 2008 Hughenden stream restoration project. Lead by the Chiltern Chalk Streams project in partnership with the National Trust and Environment Agency. Funded by Fisheries.	AONB Chalk Stream Officer Environment Agency Chiltern Society Wycombe Wildlife Group Buckinghamshire and Milton Keynes Biodiversity Partnership		Ongoing	TBC	
Stoke Common Small-scale improvements including; fencing repairs, path upgrading, conservation tasks, restoration work.	City of London			Applying for Higher Level Scale Funding	
Burnham Beeches Information to come	City of London				

Project Profile	Proposing Agencies	Delivery Agencies	Dates	Funding	Cost
Bucks Country Parks Self-funding parks management Buckinghamshire Country Parks offer acres of woodland, heathland and parkland with lakes and rivers. Black Park country park is 530 acres of woodland, grassland and heathland with a lake in the centre. Denham country Park is 69 acres with access to bridleways, footpaths and cycle ways. Langley Park country park is historic parkland of 130 acres of woodland, heathland, wetland and grassland. Thorney Country Park is a 50 acre old mineral site. The site is part water and part landscaped grassland. Projects include: Children's Play Area High Ropes Trail Heathland Restoration Improved Access New Facilities – toilets, sales point, cycle hire Corporate Volunteering Community events & Volunteering Sustainable woodland management	Buckinghamshire County Council		SBDC Pinewood Studios Timberland UK Groundwor k Thames Valley Colne Valley Regional Park Partnership	Annual	£450k / annum
Gravel Extraction Sites Denham/Iver Heath (proposed) – present Green Infrastructure opportunities when they cease extraction operations.	Information to come				
Improvements to public access to the Thames Path and Jubilee River Information to come	Information to come				

Project Profile	Proposing Agencies	Delivery Agencies	Dates	Funding	Cost
Landfill Sites A40 between Beaconsfield and Gerrards Cross – will present opportunities for Green Infrastructure when they cease operations and revert to landscape use.	Buckinghamshire County Council				
River Rye and Holywell Mead emerging management plan Fisheries improvement plan on the Dyke in the River Rye	Wycombe District Council Fisheries	Wycombe District Council Fisheries			
Rye Dyke access and habitat enhancement project. Aim of the project is to improve aquatic vegetation and marginal habitats on the Dyke. Improve angling access on the Dyke, for able bodied and disabled anglers. Promote fishing on the Dyke through the use of fishing events, improved signage and information.					
Gomm Valley	Buckinghamshire	Buckinghamshire			
To link the areas of BAP priority habitat in the Gomm Valley. Priority	& Milton Keynes Biodiversity Partnership	& Milton Keynes Biodiversity Partnership			
habitats are Calcareous Grassland, hedgerows and lowland deciduous		BBOWT Wycombe District			
woodland		Council			
		National Trust			
	B. Italian Italia				<u> </u>
Commons around Lane End	Buckinghamshire & Milton Keynes Biodiversity	Lane End Parish Council			
Management of BAP priority habitat on commons and adjacent	Partnership	BCC Woodland Trust			
sites and on-site interpretation materials for visitors on accessible greenspaces					

Whaddon Chase

Green Infrastructure Plan

March 2010





Working in partnership with







Whaddon Chase Green Infrastructure Plan

Contents

		Page
	Foreword	3
1.0	Introduction	3 4 5
2.0	Whaddon Chase Parish Council Involvement	4
3.0	Background to GI, Local Level GI Planning	5
4.0	Methodology and Links to Parish Plans	_
4.0	Whaddon Chase Context	7
5.0	Statement of Community Involvement	13
6.0	The GI Plan – Map and Aspirations	14
7.0	GI Aspiration Priorities	17
8.0	GI Aspiration Clusters	18
9.0	Draft Action Plan	22
Appendix 1	Definition of GI	27
Appendix 2	Community GI Planning Methodology	28
Appendix 3	FAQ's about the Whaddon Chase Community Gl Plan	44
Figure 1	Delivering GI aspirations in Bedfordshire	6
Figure 2	Whaddon Chase Statement of Significance Map	8
Figure 3	Whaddon Chase Green Infrastructure Map	14
Figure 4	GI Aspiration 'Clusters'	
Table 1	Whaddon Chase Statement of Significance Summaries	9
Table 2	South East Plan Policy identifying Strategic Development Area	12
Table 3	Specific aspirations identified for the project area	15
Table 4	Key priorities for the project area	17
Table 5	Priority GI Aspirations outside of the Whaddon Chase boundary	18
Table 6	Draft Action Plan for the delivery of GI aspirations for Whaddon Chase	22

Whaddon Chase Green Infrastructure Plan

Foreword by Natural England

Natural England is here to conserve and enhance the natural environment, for its intrinsic value, the wellbeing and enjoyment of people and the economic prosperity that it brings. Never before has the environment been under so much pressure (driven by rising populations) and never before has it been subject to so much change (driven by climate) as it is today. The natural environment is not a luxury for society - it critically underpins and delivers a wide range of goods and services, from food to water, to flood defence and carbon storage. The natural environment is essential for the well being of people, so decisions made today must safeguard our natural resources.

Within its broad remit, Natural England recognises the value of the work undertaken in the Whaddon Chase area and see this it as a valuable approach to engaging local communities in Green Infrastructure Planning that meets the sustainable needs of existing and future residents. The approach, to getting the community to fully engage in identifying, valuing, enhancing, conserving and planning of local Green Infrastructure, is a new one and provides an important pilot approach for a process that should be rolled-out to a much wider area.

Natural England support the way this approach works with interested parties to look at their local environment. Such work complements, and adds a finer grain of information, to the strategic approach taken at county, sub-regional and regional levels by a wide range of organisations focused on safeguarding the natural environment.

1.0 Introduction

This Community Green Infrastructure (GI) Plan has been produced with the support of interested individuals and parties in conjunction with Buckinghamshire Green Infrastructure Consortium (GIC), Bedfordshire Rural Communities Charity (BRCC), Buckinghamshire Community Action (BCA) and Buckinghamshire County Council (BCC).

This Plan sits below and complements the Buckinghamshire Green Infrastructure Strategy. Covering a smaller geographic area and including a degree of local public consultation, the Whaddon Chase Community Green Infrastructure Plan provides more locally derived detail and identifies more specific priorities, aspirations and projects than the more strategic county-wide approach.

The Whaddon Chase area was chosen as the subject for a locally derived GI Plandue to its:

- high and sensitive environmental and landscape importance
- potential for new Green Infrastructure provision and improvement

position as an area subject to growth related discussions, plans and applications

This Plan indicates aspirations for the future provision and management of environmental assets within the Whaddon Chase area. As such, stakeholders, including the Local Authorities, Buckinghamshire GIC members, Parish Councils and other community groups are invited to help support the implementation of this pilot project by developing project ideas, formalising local agreement, securing funds and delivering identified aspirations. This process is the beginning of establishing a more robust approach to mapping and implementing a high quality Green Infrastructure network for the existing and future residents and wildlife for local areas.

Green Infrastructure planning is considered a 'live process' that evolves over time. It is therefore essential that the decisions, aspirations and priorities eluded to in this Plan also evolve and change. Thus, the document should be seen as a 'snapshot' of those thoughts and proposals put forward by individuals and groups at the time of consultation. In order to keep-up with local change the document, and the proposals it contains, should also be subject to future review and any implementation of projects held within the document will need to be developed and programmed with local representatives and relevant partners.

It is likely that not all of the aspirations that come from such a consultation will be supported by all partners, stakeholders or other local, regional or national priorities. However, the value of this Plan is that it has been guided and developed at a local level and, as such, all aspirations identified through the process have been included.

The Buckinghamshire Green Infrastructure Consortium would like to express its sincere thanks to all of those Parish Councils, interested parties and individuals that have taken time to help support this process.

2.0 Whaddon Chase Parish Council Involvement:

The seven Parish Councils forming the Whaddon Chase area were invited to take part in the creation of this Plan and to help develop a locally-based consultation process.

The Parish Councils of Great Horwood, Little Horwood, Nash, Mursley and Shenley Church End have expressed their support for the approach taken in creating this Plan have agreed to endorse the process with the following statement:

We recognise the need to provide a framework for Green Infrastructure provision in the local area to meet the needs of existing and new residents and help create sustainable communities. The production of this local-level GI Plan for the Whaddon Chase complements and gives added detail to the Buckinghamshire GIC produced Buckinghamshire GI Strategy (April 2009). This GI Plan can be used by our Council in considering development proposals and assisting with the provision of green infrastructure assets.

3.0 Background to Green Infrastructure

Green Infrastructure (GI) is a strategically planned and managed network of accessible green spaces, access routes, landscapes, biodiversity and heritage which will meet the needs of existing and new communities. A fuller definition of GI is given in Appendix 1.

The need for GI Planning has been identified at all levels, from central government, through regional bodies (the Milton Keynes and South Midlands Sub-Regional Strategy), to County and District levels. The values of GI planning are recognised by many organisations such as; The Campaign to Protect Rural England (CPRE), Farming and Wildlife Advisory Group (FWAG), Country Land Association, The Wildlife Trust and the National Trust.

In April 2009 the Buckinghamshire GIC produced the Buckinghamshire Green Infrastructure Strategy, which:

- provides a vision for strategic Green Infrastructure in Buckinghamshire
- identifies issues for existing Green Infrastructure posed by housing allocations and other policies set out in the South East Plan
- establishes the extent of existing Green Infrastructure provision and assets
- establishes measures to enhance and protect existing Green Infrastructure in the County
- identifies areas that have the potential for delivering new accessible Green Infrastructure provision
- describes potential funding opportunities
- encourages a partnership approach to Green Infrastructure planning
- provides a plan for the ongoing long-term management and maintenance of Green Infrastructure assets
- provides a strategic multi-functional Green Infrastructure Network map for Buckinghamshire.

One of the areas identified as having the potential to deliver new accessible Green Infrastructure was Whaddon Chase. To progress from the Strategy towards implementation, the Buckinghamshire GIC identified the need for more localised GI planning, involving individuals from the local community in order identify specific aspirations and projects.

3.1 Local Level GI Planning Methodology

A methodology for the production of locally derived GI Plans was developed in 2007/08 in Bedfordshire on behalf of the Bedfordshire & Luton Green Infrastructure Consortium. The project has been highly successful and there are many examples of the wider environmental and community benefits that have resulted as a result of developing local GI Plans.

The methodology used in the Bedfordshire was adopted by Buckinghamshire GIC in 2008 with the idea of testing the process through a pilot project covering the area of the historic Whaddon Chase. The methodology used in this pilot project is held Appendix 2

Figure 1: Delivering GI Plan aspirations in Bedfordshire

Case study: Harlington, Bedfordshire

Following the publication of an agreed Harlington GI Community Plan a number of focus groups were formed to help facilitate delivery of priorities and actions. Three groups were established and tasked with progressing a number of priority actions identified in the Plan. Each group developed and led specific projects through the formation of specific project themed groups such as 'The Bottoms Group' (a possible Quiet Lanes initiative), 'The Chalk Springs Project' (a habitat creation/restoration initiative) and the 'Village Pond Group' (to resolve the contentious issue of the management of the local pond). Specialist outside advice was sought to help guide proposals and to establish local consensus on the works needed.

The Parish Council also found that they were able to use their GI Plan in order to apply for local grants to help support specific projects. The Harlington Chalk Streams Project and the Harlington Volunteers Project were able to secure sufficient funds to support environmental enhancements. Project activities also included detailed surveys of the project areas, several work parties to improve the amenity (and biodiversity) value of the areas, work on the long term restoration projects at the village pond and at the ancient hedgerows, raising awareness through a wildlife talk and articles in the Parish Magazine and on village notice boards.

All activities were devised by the established focus groups with the support of the Parish Council. Professional support enabled the groups to identify the steps to project delivery and was critical in ensuring that aspirations identified in the Parish GI Plan were delivered successfully. Additional grants provided by the Chalk Arc Community Grant Scheme were key to ensuring the delivery of a wide number of aspirations identified in the GI Plan.





In addition to the aspirations identified through this GI consultation process, it is acknowledged that a number of related actions have already been assessed and recorded by local communities through the Parish Plan process. This Plan recognises the significant value of Parish Plans and seeks to complement them.

The Parish Plans for Great Horwood, Little Horwood and Mursley all contain 'environmental' actions, some of which relate to Green Infrastructure and some which relate to wider environmental issues. Of these it has only been possible to include those Parish Plan actions which relate directly to Green Infrastructure and which can be easily mapped in a GI Plan.

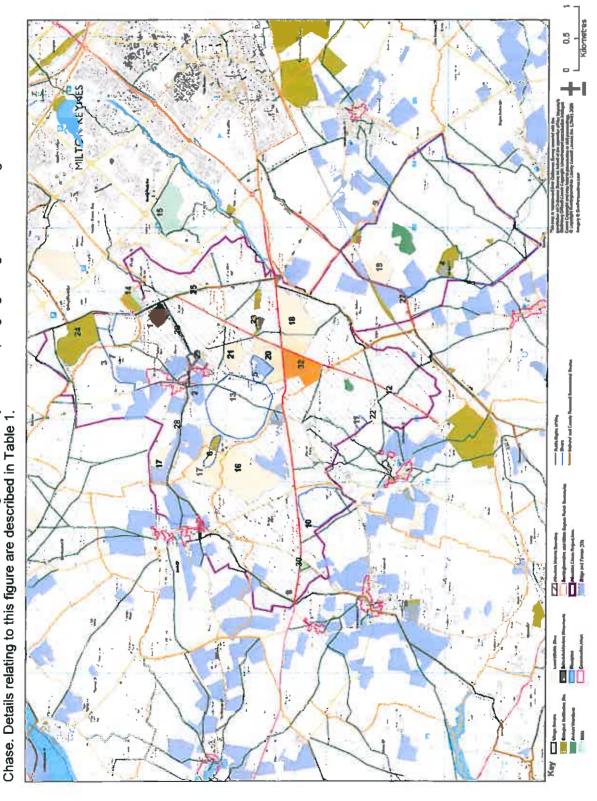
Further information on Town and Parish Plans in Buckinghamshire can be gained from Buckinghamshire Community Action by contacting: Tel 01296 421036 E-mail: bca@bucks-comm-action.org.uk

A directory of Parish Plans, with all environmental (and other) actions, is held on the South East Rural Community Councils' Community Led Plans website: www.clp-se.org.uk

4.0 Whaddon Chase Context

Green Infrastructure consists of five core themes; historic environment, landscape, access, biodiversity and open spaces. The most significant features falling within these themes in the Whaddon Chase area are outlined in Figure 2 and Table 1.

4.1



4.2 Whaddon Chase Statement of Significance Summaries

Table 1: A summary of significant existing GI features within the Whaddon Chase project area. This Table should be read in conjunction with Figure 2.

istoric Environment Significance	Key sites/features showr in figure 1
 Whaddon Chase was a medieval hunting forest that in the 13th Century extended across about 9,000 hectares of north east Buckinghamshire incorporating 	Snelshall Priory – 13 th century priory
the parishes of Whaddon, Nash, the Horwoods and	2) Whaddon Mill mound
the Shenleys with a landscape of woodland, heath, commons and enclosures. By the 19 th Century much of the forest had been lost to parliamentary enclosure but a core area of around 1407 hectares remained and is clearly shown on a map of that period. Today the landscape has significant areas of in-tact and relict landscape features which relate to its previous management. In some areas there are irregular shaped fields created as 'assarts' cleared in the forest, whilst other areas show an intact system of Parliamentary enclosed fields, the layout of which has	Whaddon House and parkland
to parliamentary enclosure but a core area of around	4) Salden Manor
map of that period.	5) Coddimoor Hermitage
 Today the landscape has significant areas of in-tact and relict landscape features which relate to its previous management. In some areas there are irregular shaped fields created as 'assarts' cleared in the forest, whilst other areas show an intact system of Parliamentary enclosed fields, the layout of which has preserved the former forest rides and woodland boundaries as part of the hedgerows. There are significant remnants of former wildwood forest (including some areas of ancient woodland) such as College Wood, Thickbare Wood, Thrift Wood, Broadway Wood, and Oakhill Wood. Long established 'woodland units' e.g. College Wood, provide evidence of former wood-pasture with an interrelated mosaic of habitats (woodland, grassland, common land). Relict features relating to the distinctive heritage of the Chase landscape are the Scheduled Ancient Monument of Snelshall Priory, a probable windmill mound, fishpond earthworks and the site of Coddimoor Hermitage. Salden Manor is an area of rare surviving field 	6) Medieval Fishponds - earthworks
the forest, whilst other areas show an intact system of	7) Fox Coverts
preserved the former forest rides and woodland	8) A421 Roman Road
boundaries as part of the hedgerows. There are significant remnants of former wildwood forest (including some areas of ancient woodland) such as College Wood, Thickbare Wood, Thrift Wood, Broadway Wood, and Oakhill Wood. Long established	9) Tudor hedgerows
	10) Relict woodland boundary
of former wood-pasture with an interrelated mosaic of habitats (woodland, grassland, common land).	11) Norbury Iron Age Enclosure
the Chase landscape are the Scheduled Ancient Monument of Snelshall Priory, a probable windmill	12) Former Woodland Chase rides
Coddimoor Hermitage.	13) Site of Elizabethan Queen's Park
construction of kennels and fox coverts (plantations such as Oldland Covert) that extend across the area.	

Biodiversity Significance

- The project area includes part of a recognised 'Biodiversity Opportunity Area'. At over 3062 ha in total, the area is important due to the presence of the following Biodiversity Action Plan (BAP) habitats:
 - Lowland Wood-Pasture and Parkland: There is a large parkland site at Whaddon. Relicts of this habitat occur elsewhere in the landscape.
 - Woodland: The majority of the remaining woods are situated to the south of Nash and Whaddon
 - Lowland Meadows & Fens: An important complex of grassland and fen habitat exists to the south east of Nash. Several small isolated meadows including Oxley Mead are also present.
 - Aged and Veteran Trees: examples are found throughout the Chase with notable concentrations at Whaddon Hall and Park and College Wood
 - Species Rich Hedgerows: Pre-18th Century enclosures around Little Horwood, Nash and Salden which may contain species rich hedgerows.
 - Ponds: The area is known to have ponds with the potential to be of BAP priority.

Key sites/features cont...

Local Wildlife Sites

- 16) College Woods* classified as Ancient Woodland, mostly conifer and woodland plantation. Woodland Trust owned and full public access.
- 17) Barnhill Farm Fields & Bushey Close Spinney complex* Fen and grassland habitat (*potentially interrelated woodpasture complex)
- 18) Broadway and Thrift Wood complex
- 19) Salden Woods Complex
- 20) Hogpound Wood
- 21) Thickbare Wood
- 22) Norbury Coppice (woodland)
- 23) Woodpond Farm Woodland and medieval fishpond complex
- 24) Oakhill Wood large woodland complex, ancient woodland, remnant of historical Chase landscape.

Key sites/features in Figure 1

14) Oxley Mead Site of Special Scientific Interest One of only 2 SSSIs in Milton Keynes, Oxley Mead is an ancient hay meadow. This rare grassland community has been maintained at Oxley Mead by continuous traditional management involving a late annual hav cut followed by stock grazing, with no fertiliser or herbicide applications. A stream which runs through the middle floods the field regularly in winter which maintains habitat. There are issues regarding long-term management of this site and the impact of near-by development on the site's hydrology

15) Howe Park Wood
SSSI. Just adjacent to the project area and under the management of The Parks Trust. Howe Park is a seminatural ancient woodland situated in the north east of Tattenhoe grid square. It includes veteran trees, ponds, coppiced woodland and good recreational access.

Access & Open Space Significance

- A number of historic footpaths and bridleways pass through Whaddon Chase, providing valuable, quiet public countryside recreational opportunities and routes for commuting between villages and to the edge of Milton Keynes.
- 25) Swan's Way (regional route)
- 26) Mid Shires Way (regional route)

- Well-established long distance promoted routes cross through the area.
- There are three village greens providing open access in Whaddon (1) and Great Horwood (2).
- The network requires significant improvements with new strategic links and appropriate enhancements to existing paths. Routes tend to be long and linear between settlements, with a lack of shorter circular routes 'close to home' for villagers and those on the edge of Milton Keynes.
- There are a number of missing links in the footpath network, particularly bridleways.
- Additional routes are also needed to improve access to publicly accessible sites such as College Wood.

27) National Cycle Network Route 51

28) North Bucks Way

29) The Recreation Ground, Whaddon -Village Green No. 101

30) **The Green, Great Horwood** - Village Green
No. 69

31) The Recreation Ground, Great Horwood -Village Green No. 101

32) Thrift Farm

Landscape Significance

- Despite its proximity to the urban area of Milton Keynes, the Chase retains a strong rural character.
- The area has a rolling topography and its pattern of hedgerows and presence of trees and woodlands represent a landscape in relatively good condition.
- The topography of the landscape is distinctive, in particular Whaddon Village which stands on higher ground above the surrounding valleys of the Chase, and characterised by steep valleys and streams.
- There are a few detracting features in this landscape.
 Urban expansion has occurred and is increasing on the lower ground to the east of the Chase. The visual impact of the urban area is part protected as a result of the topography and tree cover.
- The cultural and ecological integrity of the area although modified remains relatively intact in comparison to other landscape zones around Milton Keynes where modern agricultural practices have removed field patterns, reduced wildlife habitats and where the impacts of development are more evident.
- Traditional land-management by grazing has declined with more land becoming cultivated. Some hedgerows are in decline and much of the ancient woodland has been planted with conifers.
- There is a lack of connection between the urban edge of Milton Keynes and the rural area of Whaddon Chase. This boundary lies within the project area.
- The landscape is considered to be in very good condition and possesses a high degree of sensitivity

33) Surviving ridge and furrow field systems

4.3 Future Development Proposals in the Whaddon Chase area

The North East Aylesbury Vale Strategic Development Area (promoted by developers as 'Salden Chase') has been proposed in the South East Plan to accommodate 5,390 homes by 2026. The development will be accompanied by required infrastructure to support employment, local services and facilities, transport and Green Infrastructure. This area covers an area of agricultural land of approximately 279 hectares to the west of housing in Far Bletchley. The northern boundary of the development area is marked by the A421 and the southern boundary is marked by the disused railway line.

Table 2: South East Plan Policy identifying Strategic Development Areas (South East Plan, 2009 - South East England Regional Assembly)

Policy MKAV1: Housing distribution by district 2006-2026

Within Milton Keynes Unitary Authority, provision will be made for 41,360 dwellings between 2006 and 2026 from the following sources:

- 34,160 dwellings in and around the Milton Keynes urban area including sites identified in the adopted local plan and additional sites to be found through strategic housing and land availability assessments
- ii. 4,800 dwellings as part of a development of 10,400 dwellings to the south-east of Milton Keynes (leaving a balance of 5,600 dwellings to be found in Bedfordshire subject to assessment through the East of England RSS review)
- iii. 2.400 dwellings in the rural area/rest of Milton Keynes.

Within Aylesbury Vale District, provision will be made for at least 26,890 dwellings between 2006 and 2026 from the following sources

- ii. 5,390 dwellings as an urban extension to the south-west of Milton Keynes
- iii. 16,800 dwellings in and around the Aylesbury urban area, including urban extensions
- iv. 4,700 dwellings in the rural/rest of Aylesbury Vale.

5.0 Statement of Community Involvement

The Plan has been guided by a number of consultation events in 2009. In total, seven consultations were undertaken over the period July to November:

July: 3 workshops open to all residents of the Whaddon Chase and surrounding area held at Whaddon, Little Horwood and Great Horwood

Sept: 3 workshops open to all residents of the Whaddon Chase and surrounding area held at Whaddon, Little Horwood and Mursley

Nov: 1 Seminar open to representatives of the seven Parish Councils forming the Whaddon Chase area

A total of 58 local residents attended the above workshops and contributed to the production of this Plan.

40% of workshop consultees were from the parish of Whaddon

The ratio of males to females was found to be 45% to 55%.

Half of those attending the consultations were in the 55-65 age group.

A total of eighteen Parish Councillors attended the Parish Council Seminar.

All seven Parish Councils were invited to submit additional aspirations and comments to further inform the drafting of the Plan.

In addition to the consultation process the project was also able to take on-board natural environment and access proposals and actions already identified within existing local Parish Plans and identified in 3.2. The information held within current Parish Plans has already been identified through a rigorous consultation exercises and community participation.

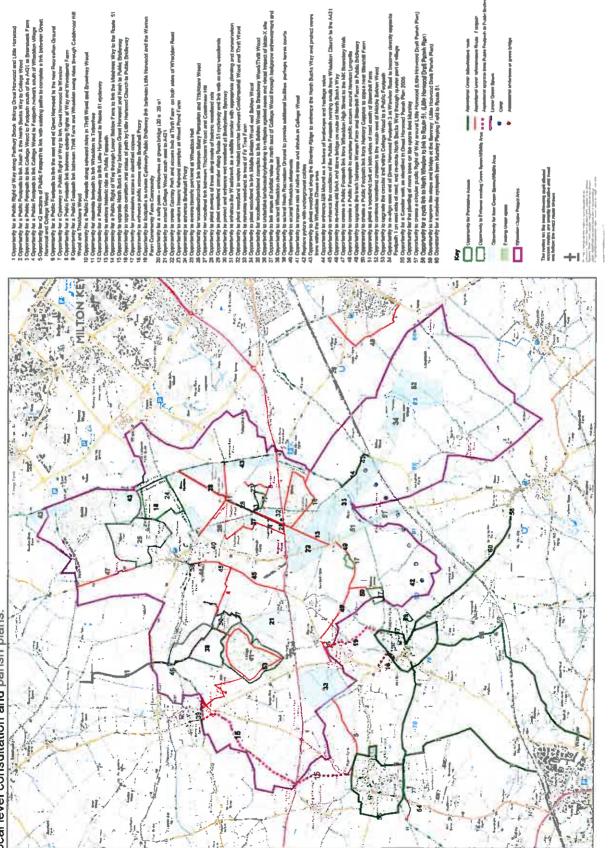


Table 3: Specific aspirations identified for the project area. Each numbered feature in Figure 3 map relates to an aspiration identified in the following table. Aspirations 1 – 54 were submitted at the consultation workshops. Aspirations 55 – 60 were submitted by Parish Councils following the Parish Council Seminar, and/ or have been taken from relevant Parish Plans.

Ref	Aspiration		
1	Opportunity for a Public Right of Way along Padbury Brook, linking Great Horwood and Little Horwood		
2	Opportunity for a Public Footpath to link Nash & the North Bucks Way to College Wood		
3	Opportunity for a Public Footpath to link College Wood to Footpath south of the A421 at Briarsbank Farm		
4	Opportunity for a Public Footpath to link College Wood to Footpath network south of Whaddon Village		
5	Opportunity for 2 sections of Public Footpath to link with existing paths to complete a link between Great Horwood and College Wood		
6	Opportunity for a Public Footpath to link the east end of Great Horwood to the new Recreation Ground		
7	Opportunity for a Cycleway or Public Right of Way to link Great Horwood to Winslow		
8	Opportunity for a Public Footpath link between existing Rights of Way and Woodpond Farm.		
9	Opportunity for a Public Footpath link between Thrift Farm and Whaddon using rides through Coddimoor Hill Wood and Thickbare Wood		
10	Opportunity for a Public Footpath along selected rides in Thrift Wood and Broadway Wood		
11	Opportunity for roadside footpath to link Whaddon to Tattenhoe		
12	Opportunity for a Public Bridleway to link Little Horwood to Route 51 cycleway		
13	Opportunity to restore historic ride as Public Footpath		
14	Opportunity for a Public Right of Way through Lower Salden Farm to link the Midshires Way to the Route 51 cycleway		
15	Opportunity to upgrade North Bucks Way between Great Horwood and Nash to Public Bridleway		
16	Opportunity to upgrade condition and status of path by Little Horwood Church to Public Bridleway		
17	Opportunity for permissive access in identified copses		
18	Opportunity to enhance public access within Snelshall Priory		
19	Opportunity for footpath upgrades to create Cycleway/Public Bridleway link between Little Horwood and the Warren Farm community		
20	Opportunity for a safe pass – undercross or green bridge (20 e, 20 w)		
21	Opportunity to extend College Wood south east to A421		
22	Whaddon Road		
23	Opportunity to restore historic fishpond complex at Wood Pond Farm		
24	Opportunity to enhance Snelshall Priory		
25	Opportunity to restore historic parkland at Whaddon Hall		
26	Opportunity for woodland/orchard link between Briary Plantation and Thickbare Wood		
27	Opportunity for woodland link between Thickbare Wood and Coddimoor Hill		
28	Opportunity to plant avenue of trees along route of historic woodland ride		
29	Opportunity to plant woodland corridor along Route 51 cycleway and link with existing woodlands		

30	Opportunity to protect and enhance wet woodland at Bushyclose Spinney
31	Opportunity to enhance the Washbrook as a wildlife corridor with appropriate planting
	and conservation headlands
32	Opportunity to plant woodland to widen habitat corridor between Coddimoorhill Wood and Thrift Wood
33	Opportunity to reinstate woodland to west of Fir Tree Farm
34	Opportunity to plant woodland to link Middle Salden Wood and Salden Wood
35	Opportunity for woodland/parkland complex to link Salden Wood to Broadway Wood/ Thrift Wood.
36	Opportunity to undertake landscaping/ planting to mitigate against noise and visual impact of Moto-X site
37	Opportunity to link areas of habitat value to north east of College Wood through hedgerow enhancement and planting
38	Opportunity to extend Whaddon churchyard
39	Opportunity to extend Nash Recreation Ground to provide additional facilities, perhaps tennis courts
40	Opportunity to extend Whaddon allotments
41	Opportunity to improve mix of native trees and shrubs in College Wood
42	Replace pylons with underground cables
43	Opportunity to plant woodland along the Shenley Ridge to enhance the North Bucks Way and protect views from within the Whaddon Chase area
44	Opportunity to enhance Mill Mound as a feature of landscape and heritage value
45	Opportunity to enhance the condition of the Public Footpath running south from Whaddon Church to the A421
46	Opportunity to re-instate old brick and stone bridge on route of North Bucks Way
47	Opportunity to create a Public Footpath link from Whaddon High Street to the MK Boundary Walk
48	Opportunity to create a Public Footpath to increase public access around Newton Longville
49	Opportunity to upgrade the track between Warren Farm and Stearthill Farm to Public Bridleway
50	Opportunity to create a Public Footpath link from Norbury Coppice to copse near Stearhill Farm
51	Opportunity to plant a woodland belt on both sides of road south of Stearthill Farm
52	
53	Opportunity to upgrade the circular trail within College Wood to a Public Footpath
54	Opportunity to re-align east end of Great Horwood Footpath 3 at Winslow Road to become directly opposite Footpath 1 on east side of road; and re-route North Bucks Way through quieter part of village
55	Opportunity for a Circular walk as identified in Great Horwood Parish Plan 2006
56	Opportunity for the planting of more trees on the sports field Mursley.
57	Opportunity to create a circular public Right of Way around Little Horwood (Little Horwood Draft Parish Plan)
58	Opportunity for a cycle link to North Winslow to link to Route 51. (Little Horwood Draft Parish Plan)
59	Opportunity to improve the steps and bridge at the Spinney. (Little Horwood Draft Parish Plan)
60	Opportunity for a roadside cyclepath from Mursley Playing Field to Route 51

7.0 GI Aspiration Priorities

At the second phase of consultation events held in September, participants reviewed all of the proposals and aspirations identified in the previous phase of workshops. Participants were then asked to consider which of the aspirations originally put forward should be considered as being local priorities.

The following aspirational priorities were identified, with the most popular listed first:

7.1 **Over-riding aspiration**: Whilst many of the individual aspirations identified through the process had merit, the over-riding aspiration agreed for the local area should be:

To protect the integrity of the whole Whaddon Chase area, including views into and out of the area, from the encroachment of Milton Keynes.

7.2 **Key priorities for the project area**: the aspirations shown in Table 4 were identified as key priorities at the three workshops held:

Table 4: Key Priority aspirations within the Whaddon Chase boundary, identified at the Community Workshops in September 2009

Ref		
	To protect the integrity of the whole Whaddon Chase area, including views into	
	and out of the area, from the encroachment of Milton Keynes.	
25	Restore historic parkland setting at Whaddon Hall	
28	Plant avenue of trees along route of historic woodland ride	
35	Opportunity for woodland/ parkland complex to link Salden Wood to Broadway	
	Wood/ Thrift Wood.	
36	Undertake landscaping/ planting to mitigate against noise and visual impact of	
	Moto-X site	
In addition	on to the priorities which achieved general consensus above, consultees from	
Whaddo	n identified an additional local priority:	
24	Enhance Snelshall Priory	

7.3 **Proposed opportunities for on and beyond the proposed project boundary**: The consultation process also identified a number of proposals falling on or beyond the project boundary that was being considered (see Table 5). Whilst these are included in this plan it is recommended that future development and agreement of these projects will need further engagement with associated representatives and that this may also lead to further or different aspirations and the identification of different priorities.

Table 5: Priority Aspirations outside of the Whaddon Chase boundary identified at the Community Workshops in September 2009

Ref	
1	Opportunity for a Public Right of Way along Padbury Brook, linking Great
	Horwood and Little Horwood
12	Opportunity for a Public Bridleway to link Little Horwood to Route 51 cycleway
19	Opportunity for footpath upgrades to create Cycleway/Public Bridleway link
	between Little Horwood and the Warren Farm community
31	Enhance the Washbrook as a wildlife corridor with appropriate planting and
	conservation headlands

8.0 Gl Aspiration 'Clusters'

Whilst many aspirations identified in this process have a high value in their own right, many, if grouped together with other aspirations, are able to support the delivering of wider benefits. A review of individual aspirations identified in this Plan has allowed the 'clustering' of aspirations in accordance to theme or geographical area. Such groupings may offer broader benefits and or may attract external funding associated with the planning and delivery of Green Infrastructure assets across Whaddon Chase.

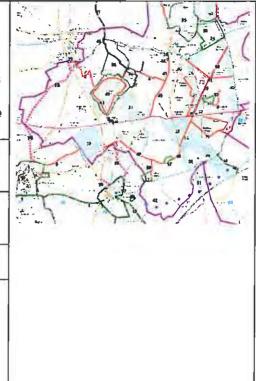
Ref	Aspiration	Map extract
8.1 Historic Ride Restoration/ Enhancement Access, landscape and habitat enhancements along heritage feature 13 Restore historic ride as a Public Footpath		Whadon Whateham Parthum 18 Ends A 19 Person Process A 19 Person Pr
28	Plant avenue of trees along route of historic woodland ride	45 Codemon 27 Form Creden grin Weed 32 Weed 18 Wood 18 Form 18

8.2 Creation of Whaddon Chase Circular Rides

Linking new, upgraded and existing access routes with short road sections to give circular route options for horse-riders and cyclists.

(Subject to agreeing status of some of the aspirational routes identified.)

- Opportunity for a Public Right of Way along Padbury Brook, linking Great Horwood and Little Horwood
- 12 Opportunity for a Public Bridleway to link Little Horwood to Route 51 cycleway
- Opportunity to restore historic ride as a Public Footpath
- Opportunity to upgrade North
 Bucks Way between Great
 Horwood and Nash to Public
 Bridleway



8.3 College Wood Enhancement Project

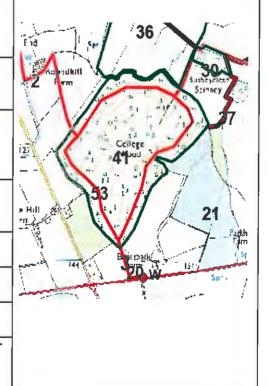
Access and wildlife enhancements through the extension and improvement of the woodland and providing links to wider Rights of way network

- 2 Opportunity for a Public Footpath to link Nash & the North Bucks Way to College Wood
 - Opportunity for a Public Footpath to link College Wood to Footpath south of the A421 at Briarsbank Farm
- 4 Opportunity for a Public Footpath to link College Wood to Footpath network south of Whaddon Village
- 20w Opportunity for a safe pass –
 undercross or green bridge

 21 Opportunity to extend College
 Wood south east to A421

 41 Improve mix of native trees and
- shrubs in College Wood

 53 Opportunity to upgrade the circular trail within College Wood to a Public Footpath



8.4 Busheyclose Spinney and Washbrook Wildlife Project Enhance, link & buffer watercourse & associated habitats for wildlife benefit Opportunity for a Public Footpath to link College Wood to Footpath network south of Whaddon Village 30 Opportunity to protect/ enhance wet woodland at Bushyclose Spinney Opportunity to enhance the 31 Washbrook as a wildlife corridor with appropriate planting and conservation headlands 36 Opportunity to undertake landscaping/ 36 planting to mitigate against noise and visual impact of Moto-X site 37 Opportunity to link areas of habitat value to NE of College Wood through hedgerow enhancement & planting 8.5 Whaddon Chase Woodland Linkage Project Undertake major woodland restoration/ linkage to create significant wildlife corridor, landscape feature and buffer against urban fringe Opportunity to create Country Park 22 and access hub at Thrift Farm, on both sides of Whaddon Road 26 Opportunity for woodland/orchard link between Briary Plantation and Thickbare Wood 27 Opportunity for woodland link between Thickbare Wood and Coddimoor Hill 32 Opportunity to plant woodland to widen habitat corridor between Coddimoorhill Wood & Thrift Wood 34 Opportunity to plant woodland to link Middle Salden Wood and Salden Wood 35 Opportunity for woodland/parkland complex to link Salden Wood to Broadway Wood/ Thrift Wood.

Crea exter	Thrift Farm Country Park' te a visitor attraction through the nsion and enhancement of existing scape, habitat and access assets Opportunity for Public Footpath link	Thebbert Wood 28 43
	between Thrift Farm & Whaddon using rides through Coddimoor Hill Wood & Thickbare Wood	Cooding 19 9000pmd Farm 17 Process of Farm 19 Proce
10	Opportunity for a Public Footpath along selected rides in Thrift Wood and Broadway Wood	Breadway Breadway Bee
13	Opportunity to restore historic ride as a Public Footpath	d farm
20e	Opportunity for a safe pass – undercross or green bridge	49 35 Bird 35
22	Opportunity to create Country Park and access hub at Thrift Farm, on both sides of Whaddon Road	42/11
32	Opportunity to plant woodland to widen habitat corridor between Coddimoorhill Wood & Thrift Wood	
35	Opportunity for woodland/parkland complex to link Salden Wood to Broadway Wood/ Thrift Wood.	
	Snellshall Priory Enhancement	Ske sammaning
Proje Acces	ect ss, landscape and habitat	one licing learned 2191 2
enhar	ncements within area of heritage interest	4dor 18
18	Enhance public access within Snelshall Priory	24
24	Enhance Snellshall Priory	ennels British Performance British

9.0 Draft Action Plan

An Action Plan is a key component to the delivery of GI projects. Table 6 is to be regularly updated and reviewed as stakeholder organisations identify and develop the aspirations which meet their own plans and programmes. Local stakeholder organisations, including GIC members and Parish Councils, are invited to consider which aspirations they wish to be involved in developing and implementing.

The Buckinghamshire GIC will be responsible for coordinating, updating and reviewing and the Action Plan and reporting progress on the Plan's implementation.

To register an interest in developing any of the identified aspirations, contact: Buckinghamshire County Council Green Infrastructure Support on 01296 382389.

Table 6: Draft Action Plan for the delivery of Gl aspirations for Whaddon Chase

Ref	Aspirations	Partners to be involved in implementation	Estimated timescales and costs
1	Opportunity for a Public Right of Way along Padbury Brook, linking Great Horwood and Little Horwood		
2	Opportunity for a Public Footpath to link Nash & the North Bucks Way to College Wood		
3	Opportunity for a Public Footpath to link College Wood to Footpath south of the A421 at Briarsbank Farm		
4	Opportunity for a Public Footpath to link College Wood to Footpath network south of Whaddon Village		
5	Opportunity for x2 sections of Public Footpath to link with existing paths to complete a link between Great Horwood and College Wood		
6	Opportunity for a Public Footpath to link the east end of Great Horwood to the new Recreation Ground		
7	Opportunity for a Cycleway or Public Right of Way to link Great Horwood to Winslow		
8	Opportunity for a Public Footpath link between existing Rights of Way and Woodpond Farm.		
9	Opportunity for a Public Footpath link between Thrift Farm and		

		<u> </u>
	Whaddon using rides through	
1	Coddimoor Hill Wood and	
	Thickbare Wood	
10	Opportunity for a Public Footpath	
	along selected rides in Thrift	
	Wood and Broadway Wood	
11	Opportunity for roadside footpath	
	to link Whaddon to Tattenhoe	
12	Opportunity for a Public Bridleway	
	to link Little Horwood to Route 51	
	cycleway	4
13	Opportunity to restore historic ride	
	as Public Footpath	
14	Opportunity for a Public Right of	
	Way through Lower Salden Farm	
	to link the Midshires Way to the	
	Route 51 cycleway	
15	Opportunity to upgrade North	
	Bucks Way between Great	
	Horwood and Nash to Public	
	Bridleway	
16	Opportunity to upgrade condition	
	and status of path by Little	
	Horwood Church to Public	į į
	Bridleway	
17	Opportunity for permissive access	
	in identified copses	
18	Opportunity to enhance public	
	access within Snelshall Priory	
19	Opportunity for footpath upgrades	
	to create Cycleway/Public	
	Bridleway link between Little	
	Horwood and the Warren Farm	
	community	
20	Opportunity for a safe pass –	
	undercross or green bridge (20 e,	
	20 w)	
21	Opportunity to extend College	
	Wood south east to A421	
22	Opportunity to create Country	
	Park and access hub at Thrift	
	Farm, on both sides of Whaddon	
	Road	
23	Opportunity to restore historic	
	fishpond complex at Wood Pond	
	Farm	
24	Opportunity to enhance Snelshall	
	Priory	
25	Opportunity to restore historic	
	parkland at Whaddon Hall	
26	Opportunity for woodland/orchard	
	link between Briary Plantation	
	and Thickbare Wood	

07	0 1 1 1 1 1 1 1	
27	, , ,	
	between Thickbare Wood and	
	Coddimoor Hill	
28	Opportunity to plant avenue of	
	trees along route of historic	
	woodland ride	
29	Opportunity to plant woodland	
23		
	corridor along Route 51 cycleway	
	and link with existing woodlands	
30	Opportunity to protect and	
	enhance wet woodland at	
	Bushyclose Spinney	
31	Opportunity to enhance the	
	Washbrook as a wildlife corridor	
	with appropriate planting and	
	conservation headlands	
32	Opportunity to plant woodland to	
32	widen habitat corridor between	
	Coddimoorhill Wood and Thrift	
	Wood	
33	Opportunity to reinstate woodland	
	to west of Fir Tree Farm	
34	Opportunity to plant woodland to	
	link Middle Salden Wood and	
	Salden Wood	
35	Opportunity for	
	woodland/parkland complex to	
	link Salden Wood to Broadway	
	Wood/ Thrift Wood.	
36	Opportunity to undertake	
	landscaping/ planting to mitigate	
	against noise and visual impact of	
	Moto-X site	
37	Opportunity to link areas of	
	habitat value to north east of	
	College Wood through hedgerow	
	enhancement and planting	
38	Opportunity to extend Whaddon	
30	churchyard	
20		
39	Opportunity to extend Nash	
	Recreation Ground to provide	
	additional facilities, perhaps	
	tennis courts	
40	Opportunity to extend Whaddon	
	allotments	
41	Opportunity to improve mix of	
	native trees and shrubs in	
	College Wood	
42	Replace pylons with underground	
42	cables	
40		
43	Opportunity to plant woodland	
	along the Shenley Ridge to	
	enhance the North Bucks Way	

	and protect views from within the Whaddon Chase area	
4.4		
44	, , ,	
	Mound as a feature of landscape	
	and heritage value	
45	Opportunity to enhance the	
	condition of the Public Footpath	
	running south from Whaddon	
	Church to the A421	
46	Opportunity to re-instate old brick	
	and stone bridge on route of	
	North Bucks Way	
47	Opportunity to create a Public	
	Footpath link from Whaddon High	
	Street to the MK Boundary Walk	
48	Opportunity to create a Public	
	Footpath to increase public	
	access around Newton Longville	
49	Opportunity to upgrade the track	
73	between Warren Farm and	
	Stearthill Farm to Public	
F0	Bridleway	
50	Opportunity to create a Public	
	Footpath link from Norbury	
	Coppice to copse near Stearhill	
	Farm	
51	Opportunity to plant a woodland	
	belt on both sides of road south of	
	Stearthill Farm	
52	Opportunity to continue woodland	
	creation to the south east of	
	Middle Salden Wood	
53	Opportunity to upgrade the	
	circular trail within College Wood	
	to a Public Footpath	
54	Opportunity to re-align east end	
	of Great Horwood Footpath 3 at	
	Winslow Road to become directly	
	opposite Footpath 1 on east side	
	of road; and re-route North Bucks	
	Way through quieter part of	
	village	
	Opportunity for a Circular walk as	
	identified in Great Horwood	
55	Parish Plan 2006	
J	Opportunity for the planting of	
EC	more trees on the sports field	
56	Mursley.	
57	Opportunity to create a circular	
	public Right of Way around Little	
	Horwood (Little Horwood Draft	
	Parish Plan)	
58	Opportunity for a cycle link to	

Whaddon Chase Community Green Infrastructure Plan

	North Winslow to link to Route 51.		
	(Little Horwood Draft Parish Plan)		
59	Opportunity to improve the steps	_	
	and bridge at the Spinney. (Little		
	Horwood Draft Parish Plan)		
60	Opportunity for a roadside		
	cyclepath from Mursley Playing		
	Field to Route 51		

Appendix 1

Green Infrastructure - A Definition

The following definition has been endorsed by the Buckinghamshire Green Infrastructure Consortium and Aylesbury Vale District Council and forms the basis of Green Infrastructure analysis, planning and delivery in the county:

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, acknowledging its multifunctional benefits for economy, wildlife and health and well being of local people and communities.

Appendix 2

The methodology below was provided to the consultant by the Buckinghamshire GIC to direct the production of the Whaddon Chase Green Infrastructure Plan.

Community Green Infrastructure Planning in Buckinghamshire:
Parish Green Infrastructure Plans/ Town Green Infrastructure Plans

METHODOLOGY

1 Background

This document outlines a proposed methodology and format for the undertaking of local level community-based Green Infrastructure Planning in Buckinghamshire. It is proposed that the methodology be supported by the Buckinghamshire Green Infrastructure Consortium and form the basis of local Green Infrastructure working within the County and allow the standardisation of a cross-boundary/County approach to local Green Infrastructure Planning. The basic methodology outlined below has been recently endorsed by the Bedfordshire Green Infrastructure Consortium.

2 Introduction

The following methodology is based on the community level Green Infrastructure planning work that is currently being undertaken in Bedfordshire. The work has been developed by the Bedfordshire Chalk Arc Initiative Steering Group (funded by DCLG through GAF) with mapping support provided by the Bedfordshire Recording and Monitoring Centre.

The method is expected to continue to evolve as skills are developed, technology is advanced and resourcing of professional input and advice is increased. It will need to be adapted on a parish-by-parish basis to reflect differences in parish size, environmental assets and opportunities and the preferences of Parish and Town Councils. The name of the plans (as either Parish Green Infrastructure Plans or Town Green Infrastructure Plans) will also need to adapted to suit local circumstances.

3 What is Green Infrastructure?

Green Infrastructure is a planned network of multifunctional greenspaces and interconnecting links designed, developed and managed to meet the environmental, social and economic needs of communities. It is set within and contributes to a high quality natural and built environment and is required to enhance the quality of life for both present and future residents and visitors.

Successful Green Infrastructure networks will incorporate a strategic approach to enhancing wildlife networks and sustaining and improving biodiversity in urban and rural areas, in the face of climate change and development.

It is linked to a wide range of functions and benefits. Not least is its ability to:

- provide opportunities for recreation and enjoyment
- provide important linkages, networks and gateways
- help preserve heritage and culture
- support and enhance habitat and biodiversity

- · support economics, food production and green produce
- address both local and national issues relating to sustainable flood risk water management and impacts of climatic change.

The following definition has been endorsed by the Buckinghamshire Green Infrastructure Consortium and forms the basis of Green Infrastructure analysis, planning and delivery in the county:

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, acknowledging its multifunctional benefits for economy, wildlife and health and well being of local people and communities.

Green infrastructure assets include:

- Accessible Greenspace
- Allotments
- Cemeteries
- Children's play space
- Country parks
- Formal sports facilities
- Habitats for wildlife including nature reserves, Sites of Special Scientific Interest and County Green corridors
- · Historic parks and gardens and historic landscapes
- Public rights of way and cycleways
- Scheduled Ancient Monuments Urban parks and gardens
- Waterways and water bodies, including flooded guarries
- Wildlife Sites.

4 Aims and objectives

Aim of the Community GI Plan

To identify the key existing natural, historic, cultural and landscape assets, accessible greenspaces and rights of way; and to plan new features that will provide a network of green infrastructure for the benefit of present and future generations.

Objectives

- To protect, and where possible, enhance the landscape, biodiversity and the historic environment
- Improve access and links for people and wildlife
- To provide a multi functional green infrastructure network
- To provide a source of information and guidance for planners, landowners and developers in formulating land use plans.
- To identify projects and produce an action plan to implement projects at a local level
- · To engage and promote community involvement.

5 Policy and technical documents

The South East Plan

The Plan sets out a long-term spatial vision and development strategy for the region up to 2026, and provides the regional and sub-regional development context for Buckinghamshire. It proposes major growth for Buckinghamshire within the Aylesbury Vale and Milton Keynes sub-region and allocates proposed growth in Wycombe District as part of the Western Corridor and Blackwater Valley Sub- Region. Outside of these sub-regions, lower levels of growth are envisaged. Whilst the southern parts of the county are significantly constrained by the Chiltern AONB and Metropolitan Green Belt designations there will be increasing growth pressures from neighbouring areas.

The Green Infrastructure concept is key to the Plan's recognition that provision of all types of infrastructure and services to support future growth is a critical requirement. Importantly, Policy BE1 requires that Green Infrastructure should accompany new development. Furthermore, the commitment to delivery of Green Infrastructure is embedded in the Interim Implementation Plan. Policy CC5 (Infrastructure and Implementation) states that 'the scale and pace of development will be dependent on there being sufficient capacity in existing infrastructure to meet the area's current needs and the provision of new infrastructure to meet the needs of new development...the funding for this infrastructure will require substantial contributions from central Government. In addition, partnerships between central Government, local government and the private sector have the capacity to lever in additional funding.'

Milton Keynes and South Midlands Sub-Regional Strategy

Buckinghamshire forms part of the Milton Keynes and South Midlands (MKSM) Growth Area, an area identified as one of the four major growth areas by the Government's Sustainable Communities Plan. The MKSM area has a key role in accommodating the growth required to address the strategic challenges facing London and the South East. These challenges include increasing housing supply, making home ownership more available, tackling transport and other infrastructure issues, addressing issues concerning skills and the labour market, and tackling deprivation and the need for urban renewal.

The strategy recognises that growth needs to contribute to an improved environment, by requiring high standards of design and environmental construction, protecting and enhancing environmental assets (including landscape and biodiversity), and providing green space and related green infrastructure. It states that 'the provision of green infrastructure needs to be addresses in planning development throughout the Sub-Region so as to ensure a net gain to meet the needs generated by growth and, where relevant, help to address existing deficiencies. This may take the form of enhancement, protection or extension of existing resources or the provision of new or replacement facilities. ... A network of multifunctional green spaces in urban areas, the countryside in and around towns, and the wider countryside needs to be established. It will also be important to ensure that the character of the wider countryside is protected and, wherever possible, enhanced.

Draft Buckinghamshire Green Infrastructure Strategy

The strategy has been produced by the Buckinghamshire Green Infrastructure Consortium following a three-year process of professional consultation and analysis undertaken by Chris

¹ A Clear Vision for the South East: The South East Plan (Interim) Implementation Plan – Draft Plan for Submission to Government (SEERA, March 2006)

Blandford Associates. It sets out to ensure a clear vision and direction for Green Infrastructure in Buckinghamshire and aims to ensure that pressures on the county's important natural and historic Green Infrastructure assets are minimised, and that opportunities to enhance these assets for the benefits of people and biodiversity are maximised.

The strategy examines strategic Green Infrastructure assets across the board, incorporating accessible greenspace, biodiversity, heritage, access routes and landscapes on an equal basis and integrating these themes to provide plans for a multi-functional accessible green network. Coordinating with plans and strategies of surrounding authorities, it sets out to ensure a clear vision and direction for Green Infrastructure in Buckinghamshire identifying strategic level opportunities and constraints and establishes priorities for delivery.

It provides a key reference for professionals with an interest in Green Infrastructure management and planning in Buckinghamshire. It provides a strategic level approach to Green Infrastructure that will link, guide and underpin the production of locally produced Green Infrastructure Plans and Greenspace Strategies. Along with a suite of other key documents it will act as part of the evidence base required for planning decisions, for the preparation of the Local Delivery Frameworks, and for the delivery of green growth.

6 Methodology

Following the work undertaken in Bedfordshire seven key components or stages have been identified as being common to producing parish GI plans and allowing flexibility to adapt the process to the specific local situation:

- 6.1 Partnership building
- 6.2 Collation of baseline information
- 6.3 Community consultation Phase 1 (development of GI plan)
- 6.4 Processing information (creation of draft GI map)
- 6.5 Community consultation Phase 2 (review of draft GI map)
- 6.6 Amendments to draft plan (create final GI plan)
- 6.7 Support and implementation

Each of these components is discussed in detail below.

6.1 Partnership Building

The aim of this stage is to share information with the Parish/Town Council, and build relationships between the Council, local groups and organisations facilitating the production of the Parish GI plan. This stage will also involve discussions on the state of the Parish Plan (if one exists), and how the GI plan will integrate with the Parish Plan process. It is intended that the GI plan will be adopted by the Parish/Town Council.

6.2 Collation of baseline information

This consists of information held on Local and Statutory Authority systems on designated areas and routes and areas identified through surveys and other publicly available databases.

Baseline information is mapped for 5 key themes:

- Landscape
- Biodiversity
- Historic Environment

- Public Open Space
- Access

Other relevant information may be added into these themes, such as detailed landscape or historic environment characterisation work and biodiversity studies and records. Information on development proposals in the area may also be relevant. See appendix A for detail about the contents of baseline maps.

These maps with an explanatory text are made available to the local community together, with an amalgamated base map, at the Phase 1 community consultation exercises. See Appendix B.

6.3 Community Consultation - Phase 1 (development of GI plan)

This phase enables the local community to be introduced to the concept of GI and the aims and objectives of the Plan. Those in attendance are asked to split up into small groups with each group presented with identical mapping information in A1 or A0 format. The participants are asked to check and add to the information on existing GI assets and plan the future GI network.

Workshops have been the standard approach to this stage of community consultation, but the approach can be tailored to suit local needs as described in Table 1.

TABLE 1

Workshops

Generally the community consultation is been done through a workshop that involves inviting residents, through flyers, posters, and the parish magazine. The workshop involves:

- An introduction talk outlining the principles of Green Infrastructure and the aim of GI planning for the parish
- Annotation of a map showing a composite of the information held on the project area. Locally important environmental features, and green infrastructure assets and opportunities will be identified. These will be developed into project ideas
- · Discussion and feedback on project ideas, and important local features
- An overview of the next steps in developing a parish GI plan

Working groups

Local working groups may already exist or may wish to develop in response to the local GI planning process. Groups may already exist or develop in areas as a response to intense development pressure, when local opinions on environmental matters are very strong, or/and the local planning situation complicated. A more detailed approach may be needed in these cases as requirements may not be met through a single workshop. A local council may decide to develop a group as a means to better facilitate the process locally. In such instances the council could issue an open invitation to people to join a working group but also try to ensure that members had a spread of expertise and areas of interest. The activities undertaken by a working group will be the same as those outlined above for the workshops but outside expertise may need to be drawn in specific themed work such as landscape and biodiversity.

Encouraging as much participation as possible is important to ensure community ownership of the final GI plan. Workshops similar to Phase 1 have been used extensively but 'drop in sessions' (Table 2) can also been used successfully to achieve this.

TABLE 2

Drop in sessions

These allow for wider community involvement, as participation does not require such a time commitment. The scope for discussion is limited requiring future consensus building discussions / workshops to be held to ensure identified aspirations are agreed and owned by the community and not a list of individual's pet projects. Participants are able to annotate maps with project ideas, and add any local information they feel is relevant. These sessions enable wider endorsement of information and ideas that have already been generated.

Drop in sessions can also 'piggy back' on other community events. For example, a drop in session for a parish GI plan was held at the same time as a drop in session for the consultation on a district level planning document. This meant that more people became aware of the parish GI planning work, and that information from outside the parish, but that impacted on the parish's GI network was incorporated.

6.4 Processing Information

During the previous Community Consultation Phase 1, participants will have added information to maps, and provided other, textual information. Information may include any aspirations for improvements, any information about environmental features, and other information, for example, areas where green space may be or have been misused.

Community input from the workshops is collated and any conflicting issues noted for future discussion. Any relevant projects from the Strategic and District GI Plan are also incorporated at this stage.

This information will be considered to ensure that any information or project ideas that go forward are within the scope of Green Infrastructure, and that any project ideas are backed up by evidence of need, and are deliverable aspirations. The information is then digitised, and is used to form the basis of the initial draft GI map.

6.5 Community consultation - Phase 2. Review of draft GI plan.

This second phase allows the local community the opportunity to confirm the results from the first workshop, confirm projects from the more strategic GI plans and resolve any conflicts that have been identified. If any project ideas or opportunities have been removed, this will be discussed at this stage. Project ideas will be prioritised, a plan of action identified and the plan as a whole will be approved.

The parish GI plan includes a map of the parish, identifying green infrastructure assets and opportunities. Ways to enhance and extend the GI network will be identified through project ideas, supported by information about how to take these ideas forward.

6.6 Implementation

The GI Plan should be adopted by the Parish Council as a 'Parish Planning Document'. The Action Plan should clearly identify where action can be most effectively achieved including, wherever possible, integration of the proposals with the District GI Plan. An example of a GI Action plan with targets can be found in Appendix C.

The mechanisms for delivering GI projects will vary with the nature of the projects, and the amount of time and expertise available at the parish level. Thus the level of input from external organisations supporting the development of GI will be variable. Where local community action is required a clear responsibility for achieving progress should be indicated.

The use of Focus Groups (see Table 3) can be useful at this stage, especially in resolving contentious issues about how projects should be taken forward. Groups that can take on this role may already exist, for example, at Aspley Guise, a number of proposals relating to Rights of Way have been proposed and the more detailed work on the feasibility of these is being taken forward by the local P3 Group.

The status of the parish GI plan, as a working document with an annual monitoring and updating procedure, must be established.

TABLE 3

Focus groups

Where interest in the Parish GI plan has been very high, and staff resources are available, focus groups have been set up to develop specific themes or projects. The need and role of these focus groups has been identified through the workshop/ working group process. These groups have identified the importance of local features, and have identified ways of enhancing these green infrastructure assets through both short and long term project proposals.

The focus groups enable the community to develop the project ideas and work towards implementation. They can make the task of delivering aspirations identified in the parish GI planning process less daunting and the process develops the capacity within the community to take forward a range of other projects.

Focus groups are particularly useful when there are issues that come out of the GI plan that are too broad to form specific actions. A key advantage of focus groups is that they put the responsibility of the ideas and delivery for GI in the hands of the community. They can make the task of delivering aspirations identified in the parish GI planning process less daunting, as they break down actions into themes, and can be used to identify mechanisms to deliver projects across these themes.

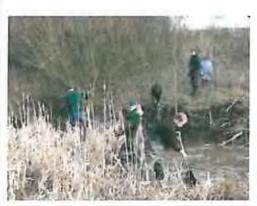
TABLE 4

Case study: GI delivery in Harlington, Bedfordshire

In Harlington a number of focus groups were formed in response to the GI planning process. Each group was tasked with progressing particular actions identified at the Phase 2 workshop. Focus groups included a: 'Woodland Group', 'Rights of Way Group', and 'Landscape Group', and groups to progress specific GI projects such as; 'The Bottoms Group' (a possible Quiet Lanes initiative), 'The Chalk Springs Project' (a habitat creation/restoration initiative) and the 'Village Pond Group' (to resolve the contentious issue of the management of the local pond). During discussion it became clear that there were widely differing views on the actions needed. The focus group brought in specialist outside advice that enabled the group to come to a consensus on what work was needed.

The Parish Council were able to apply for a grant for the Harlington Chalk Spring and Streams project and for the Harlington Volunteers project. These projects focussed on the chalk spring / streams, and on the village pond. Project activities included detailed surveys of the project areas, several work parties to improve the amenity (and biodiversity) value of the areas, work on the long term restoration projects at the village pond and at the ancient hedgerows, raising awareness through a wildlife talk and articles in the Parish Magazine and on village notice boards.

These activities were devised by the focus groups, supported by the parish council. Professional support enabled the groups to identify the steps to project delivery. This enabling support was a critical element in ensuring that aspirations identified in the parish GI plan were delivered, and the availability of this professional support was important in encouraging people to lead focus groups. Grant availability through the Chalk Arc community grant scheme was also a key factor in enabling aspirations identified in the GI plan to be delivered.





7 Learning points

Through the work carried out through the parish GI planning pilot project, several issues emerged, and these are discussed below.

Parish GI plans and development proposals

In areas where there is significant development planned, local residents may feel that the parish GI plan is an opportunity to oppose development proposals. While the GI plan may identify important GI assets or opportunities that need to be protected from any negative impacts of development, the primary purpose of the GI plan is to ensure that the green infrastructure resource is planned and designed with the interests of new and existing communities in mind, and it provides a robust environmental network to meet the needs of people and the environment.

Ways that the GI plan can add information that will help shape development proposals in a positive way include:

- Identifying the environmental character of the parish
- Identifying key GI features that should be enhanced through the development proposals
- Identifying where GI should be improved on a wider level to ensure that the GI
 network is sufficiently robust to meet the needs of an increasing local population.

Thus a generic response to the development proposals are needed in terms of how the GI network should be developed to meet the needs of the local population, providing both social and environmental benefits.

Incorporating detailed environmental information in community GI planning

Using environmental professionals in community consultation

Environmental information, for example, biodiversity surveys, historic maps, and landscape characterisation information is often available for the study area. However, this information can be difficult to understand from outside the professional discipline. The use of environmental professionals in interpreting and explaining this information can help in ensuring that the parish GI plans utilise the information available.

Environmental professionals can either be involved in the community consultation itself, able to explain information and answer questions, or they can brief those coordinating the community consultation work about the information, and any pertinent points about the local area.

Using environmental information in the Parish GI plan

The parish GI plan includes the baseline information used, and any information added from the community consultation. This information is grouped around 5 themes;

- Landscape
- Biodiversity
- Historic Environment
- Public Open Space
- Access

These maps can be usefully interpreted by text provided by environmental professionals, discussing what information the maps include, and what they show about the study area. In addition, any other information such as background historical information about the area, information about the character of the landscape, any biodiversity study work, and important views that cannot be mapped can be added to the final document to help local residents understand the information about their local area.

Ensuring that GI plans are delivered

Regular encouragement and professional support have been found to be essential in ensuring that projects and opportunities identified through the community GI planning work are delivered. This is required to help maintain the momentum, support community leaders, and to ensure that community groups have all the up to date knowledge they need. This may be information and support on developing funding bids, or information on how to manage projects.

Appendix A - Information provided for community consultation stage

Existing GI information for parish is collated, and a "Living Networks" map pack is provided.

To date, the pack contains the following maps: Context; Landscape; Biodiversity; Historic Environment; Open space and rights of way. For more details on the contents of these maps, see Appendix A.

If funding is available, the map pack can be be enhanced by the inclusion of geology and first edition OS maps and the upgrading of the landscape and biodiversity maps to contain more, and more meaningful, information.

The majority of the mapping work has been undertaken by BRMC, who ask for a minimum of 3 weeks notice prior to the maps being required for the workshops.

Map pack cover to follow the 'Living Networks' design and be titled 'A Parish Green Infrastructure Plan for X'.

The map packs to include:

- Aims & Objectives of the plan, including a statement on what it does and does not seek to achieve.
- A paragraph or 2 outlining the methodology (compilation of maps, consultation workshops etc). This will be similar in all PGIPs, with minor local variations.
- A paragraph or 2 provided by the BRMC introducing the various maps in the pack.

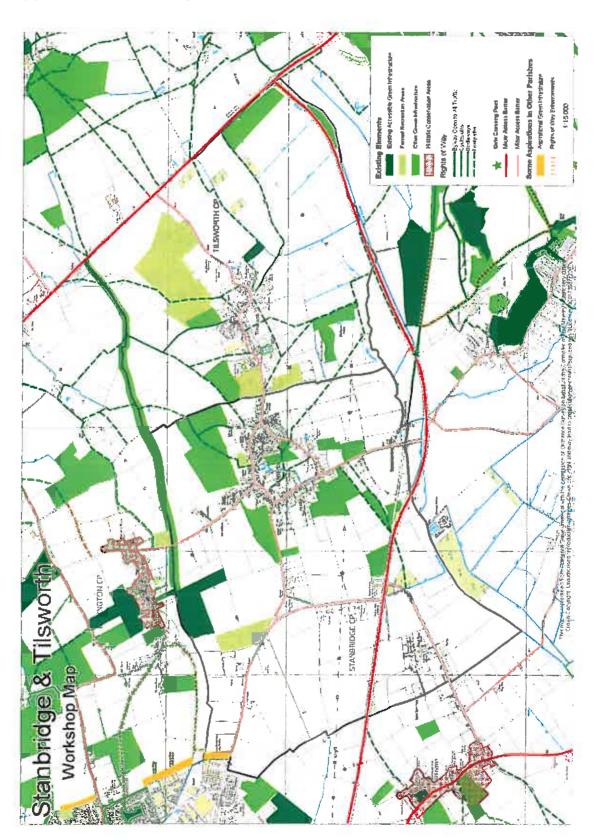
Information included on the Living Networks Map

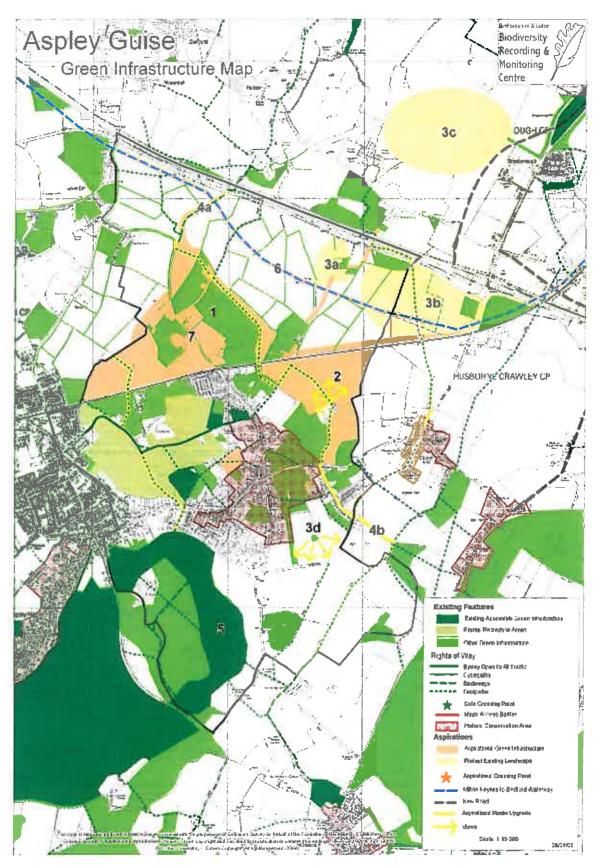
- 1. Context Map
 - o 1:10,000 O.S. Map
 - o Parish Boundary
- 2. Landscape Map
 - o 5m Contours
 - Elevation Map (where appropriate) Environment Agency's Indicative Flood Map
 - o 1:10,000 O.S. Map
 - Parish Boundary
- 3. Historic Map
 - Historic Conservation Areas
 - Historic Environment Record Features (Archaeological Notification Areas and Other Features)
 - Listed Buildings
 - Medieval Settlement Cores
 - o 1:10,000 O.S. Map
 - Parish Boundary
- 4. Biodiversity Map
 - Sites of Special Scientific Interest (if present)
 - Local Nature Reserves (if present)
 - o County Wildlife Sites (if present)
 - Roadside Nature Reserves (if present)
 - o Woodlands (including Woodland Grant Schemes)
 - Permanent Grasslands (from recent surveys where available or from aerial photographs/1988 Phase 1 survey)

- o Hedgerows (where available)
- Notes to highlight important biodiversity in the parish
- o 1:10,000 O.S. Map
- o Parish Boundary
- 5. Open Space, Access & Recreation Map
 - o Recreational Open Spaces

 - Recreational Open Spaces (small sites)Formal Recreation Areas (including Golf Clubs)
 - o Other Green Infrastructure
 - o Rights of Way
 - Safe Crossing Points
 - Major Access Barriers
 - Minor Access Barriers
 - o 1:10,000 O.S. Map
 - o Parish Boundary

Appendix B – Community GI Plans





Appendix C - GI Action Plans

EXAMPI	EXAMPLE: Aspley Guise Green Infrastructure Action Plan	ion Plan			
Proposal	Action	Action	Other partners	Timescale	Cost/funding
1 and 2		MBDC Planning			
	of the railway line to include sustainable management proposals.	200	Developers, BCC;		
ო	Ensure sensitive landscapes are taken into consideration in any development proposals.	MBDC Planning	Developers,		
	Ensure the long term sustainability of the Clump through discussions with landowner.	S		Winter 2008/9	
4	Investigate the feasibility of upgrading footpaths to bridleways and/or cycleways Identify local people's favourite walks	P3	GST, BCC		
വ	of Aspley Woods	GST	BCC, MKC, Bedford Estate		
9	Bedford to MK Waterway Park - obtain more details on route, widths and other GI opportunities	B&MKWT			
7	p	Planners/ Highways			
ω	ntal records for the Parish. t are needed. e in Aspley Guise	GST GST GST	BRMC	Autumn 2008	
თ	Guise uld be a circular ntal and historical	GST P3	BCC GST	Autumn 2008 Winter	
	Interest. Create a leaflet for the trail.			2008/9	

GST – Greensand Trust MKC – Milton Keynes Council P3 – Local volunteer group 'People Projects Partnerships' B&MKWT – Bedford & Milton Keynes Waterways Trust

BCC – Bedfordshire County Council
MBDC – Mid Bedfordshire District Council
PC – Aspley Guise Parish Council

Appendix 3

FAQ's about the Whaddon Chase Community GI Plan

The process of Community Green Infrastructure Planning, and the creation of a local Green Infrastructure Plan is an extremely positive process with valuable outcomes.

However, the approach is new to many and, as a result, can lead to a number concerns and questions from local individuals and also others with a vested interest in the surrounding area.

In order to address the types of questions that typically come up through this process it is hoped that the following is useful:

Questions and answers

Q Why limit this project to the area chosen?

A The area chosen for undertaking this type of work is typically based on an historic area or parish boundary.

The 'Green Infrastructure Plan for Whaddon Chase' is simply that ... a plan that relates to the historical bounds of the historic Whaddon Chase. In addition to this known boundary the project has also been able to include an extension of the projects scope to include land that falls within the local Biodiversity Action Area (as described by the Bucks & Milton Keynes Biodiversity Partnership) and the local Historic Landscape Character Zone (as described in the Buckinghamshire and Milton Keynes Historic Landscape Characterisation).

Q Why choose Whaddon Chase?

A The Whaddon Chase area was chosen due to its high sensitive environmental and landscape importance. The potential impacts to this important landscape due to a close proximity to the urban fringe and growth of Milton Keynes needs also to be considered.

Q How can we roll the project out over a wider area?

A The process of Living Networks is a very new experience in Buckinghamshire.

The Whaddon Chase GI Plan is to act as a 'Pilot Project' that will hopefully be able convince others to support the continuation of this community process and to help fund continued work over a wider area.

The project is very much supported by Natural England and we are currently in discussion to see if there are opportunities to support this wider work.

Q How can the plan be used?

A The Living Network Plan has a wide range of uses and much of the evidence for this comes from the similar work undertaken in Bedfordshire. Experience has shown that the important values relating to the plan are:

- * The plan aims to put a real community value on greenspaces, access and wildlife areas.
- * Similar to Parish Plans, Living Networks Plan provides a 'statement of community involvement' in relation to the local environment.
- * Similar to Parish Plans, Living Networks Plan should be considered by the local Planning Authority as part of their Evidence Base.
- * The plan can also be used to justify local values and the Importance of local features in relation to other threats (including developer proposals).
- * In addition the Plan identifies aspirations and local projects
 That the community have in order to help protect, improve, and enhance a valued landscape.
- * In the face of development, the Pan will be used to inform the decision making processes and can help to provide important mitigation opportunities that might not otherwise be delivered through development.
- * The plan can also be used by local landowners as evidence for securing higher level agricultural based funding to carry out environmental projects and enhancements. The community, highlighting the value of private land, can potentially increase potential land value and offer the landowner additional options in terms of land management and current landuse.

Q How did the project originate?

A The process of 'Living Networks' was developed and agreed by the Buckinghamshire Green Infrastructure Consortium The Consortium has been set up to protect, plan for and invest in Green infrastructure in Buckinghamshire. Much of the Consortiums work is undertaken through the Buckinghamshire Green infrastructure Strategy. This document sets out to ensure a clear vision and direction for Green Infrastructure in the county - identifying opportunities, constraints and priorities for delivery. In line with these objectives, the consortium agreed that a Whaddon Chase would provide a good opportunity to test the process in the form of a Pilot Project.

Q Could promoting public access to certain locations impact on wildlife and current land management methods?

A Yes, certainly. Putting people in the wrong place, even at certain times, can lead to issues for wildlife and the management of the land in question. However, it is hoped that by identify both opportunities and restraints through the Living Networks process, considerations can be given as to whether some proposals should be discarded, or by looking for alternative

Whaddon Chase Community Green Infrastructure Plan

proposals and suggestions, other opportunities could be developed.

Q Could the plan be used for the benefit of developers?

A It is wrongly considered that plans of this nature originate with the support of developers. This is not how the planning system works and large development proposals arrive on the basis of a very broad range of considerations and many years of planning that have to be fully justified in a court of law. However, it is hoped that developers will be able to take into consideration the values of local communities in locally derived plans and in the case of a Living Network plan, important landscapes, wildlife designations and community values and aspirations.