A STRATEGIC FRAMEWORK FOR GREEN INFRASTRUCTURE IN GLOUCESTERSHIRE 2015

Gloucestershire is a much cherished English county, renowned for the diversity and scenic beauty of its landscape and wildlife, and the legacy of man's occupation of the land over many millennia.

Gloucestershire Landscape Character Assessment (2006)

Gloucestershire Local Nature Partnership

Gloucestershire Local Nature Partnership Mission Statement

"To improve the prospects for Gloucestershire's natural environment while demonstrating its vital role in our health and well-being, its significant contribution to a thriving economy and to a better quality of life for all".

VISION

That Gloucestershire's green infrastructure is enhanced, extended, promoted and managed to maximise its contribution to our high quality natural and historic environment, our health and well-being, our economy, our resilience to climate change and to a better quality of life for all.

And that sustainable economic growth in the county is strengthened by giving green infrastructure the same consideration as other key county-wide infrastructure issues.

1. WHAT IS GREEN INFRASTRUCTURE?

The National Planning Policy Framework defines green infrastructure as:

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

Examples of green (and blue) infrastructure in Gloucestershire include rivers; cemeteries; canals; sports pitches; orchards; green roofs; parks; open fields and woodland.

Green infrastructure can be considered at a range of scales, from international, such as the Severn Estuary to the local, such as a pond or a meadow created within a new housing development.

2. THE BENEFITS OF GREEN INFRASTRUCTURE

Green infrastructure can provide many social, economic and environmental benefits and plays a key role in delivering ecosystems services.

The key environmental and social benefits have been highlighted as –

- Ensuring a more attractive place for people to live, work and visit
- Giving opportunities for outdoor relaxation, play and access to nature
- Improving health and well-being – lowering stress levels and providing opportunities for exercise
- Helping climate change adaptation, for example by flood alleviation and cooling urban heat islands
- Improving air and water quality
- Giving space for habitats and providing wildlife corridors and linkages
- Providing sustainable transport routes – for cycling and walking
- Enabling local food production - in allotments, gardens and through agriculture

And the key economic benefits (Appendix E) as –

- Attracting inward investment - a more attractive area to business investors and potential residents
- Attracting increased visitor spend - a more attractive area for tourists and visitors
- Generating employment - attracting new businesses and residents to the area, increasing office occupancy rates and increasing the number of jobs in the area
- Saving environmental costs - improving air quality, reducing the urban heat island effect, filtering diffuse pollution, helping to manage flood risk and storing water during droughts
- Providing health benefits - impacts on health through improved air quality and surroundings which encourage activity and improve mental health and well-being
- Promoting food production - enabling increased productivity

The key point is that green infrastructure provides a wide range of benefits simultaneously and from the same area of land.

3. STRATEGIC GREEN INFRASTRUCTURE PRINCIPLES FOR GLOUCESTERSHIRE

A wide range of evidence (Appendix A), including government guidance, policies, research, and local information, as well as professional expertise has been used to develop the following strategic principles for green infrastructure in the county.

- Ensure that there is functional and well-connected strategic green infrastructure across the county. Gaps or missing links in Gloucestershire's strategic green infrastructure on the ground, (as revealed by the Local Nature Partnership's schematic map - Figure 1 and more detailed local analysis) should be addressed.

- Maximise opportunities to improve both strategic green infrastructure and more local green infrastructure, whenever change is being considered – from individual development proposals and open space improvements to landscape scale environmental projects and flood alleviation schemes.

- Continue to work in partnership, involving the Voluntary and Community Sector, local authorities, government organisations, commercial interests (including the development industry) and local communities across Gloucestershire to promote and enhance green infrastructure. The Local Nature Partnership and GFirst LEP (Gloucestershire's Local Enterprise Partnership) should act as the focus for that co-ordinated effort.

- Ensure that the multifunctional benefits of green infrastructure are understood by all stakeholders in the county and that all these benefits are considered when delivering Green infrastructure improvements and change.

- Ensure that green infrastructure principles are embedded in policies that guide change in the county, for example local plans; water catchment plans; economic plans etc
- Work with partners outside the county to ensure that the strategic green infrastructure of Gloucestershire links across administrative boundaries

- Secure funding to deliver improvements to strategic green infrastructure and for individual green infrastructure projects, for example through grant bids; section106 agreements; CIL and by embedding green infrastructure principles in all development and land management initiatives.

- Record, store and evaluate data that will add to our understanding of the role and importance of green infrastructure in the county, to enable an evaluation of different green infrastructure initiatives and to ensure that the green infrastructure evidence base is appropriate, robust and up-to-date

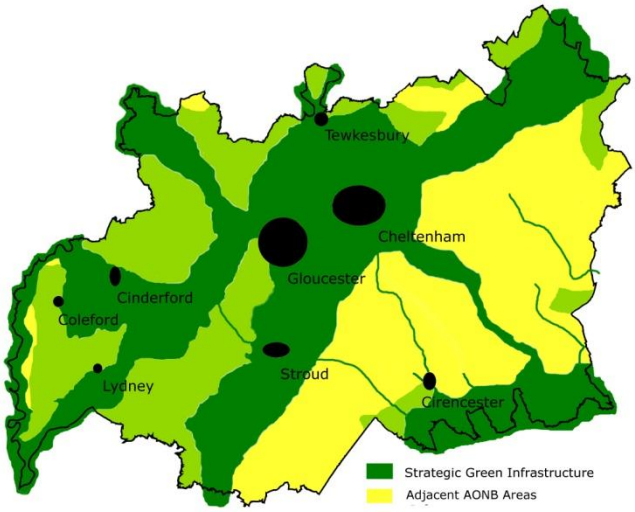
4. IDENTIFYING THE STRATEGIC GREEN INFRASTRUCTURE OF GLOUCESTERSHIRE

An evidence base (Appendix A) has been used to produce a series of maps showing the key areas of existing and potential green infrastructure in the county (Appendix B). This has informed the development of a schematic map (Figure 1) showing a vision for the strategic green infrastructure of the county – both existing and where it needs to be created or enhanced, focusing on

- those areas with the highest concentration of environmental assets
- key linkages between urban and rural areas
- main watercourses, catchments and floodplains
- significant landscape scale biodiversity and community projects (Appendix D)
- important sustainable transport routes (cycling and walking)
- key urban settlements and areas identified for large scale new development

In rural areas, it is difficult to draw up clear boundaries for strategic GI and the map is very much a schematic approach and should not imply that other areas of the county do not have significant GI attributes and benefits

FIGURE 1 – SCHEMATIC DIAGRAM OF STRATEGIC GREEN INFRASTRUCTURE FOR GLOUCESTERSHIRE



5. DELIVERING STRATEGIC GREEN INFRASTRUCTURE FOR GLOUCESTERSHIRE

There are a wide range of delivery mechanisms that will help to deliver the aspirations of this strategic framework. The current priorities include –

- Increasing green infrastructure delivery and awareness of its multifunctional benefits amongst the development industry and decision makers, for example by directly promoting the economic benefits of green infrastructure to developers.

- Ensuring that the potential for green infrastructure improvements is exploited within flood and catchment management, including European Water Framework Directive compliance initiatives.

- The inclusion of appropriate policies (which comply with this strategic framework) within local, mineral and waste plans

- Securing adequate funding and support for the existing landscape scale biodiversity and community projects (including Nature Improvement Areas)

- Consideration of how the Community Infrastructure Levy can be used to enable green infrastructure improvements (Local authorities should consider the principles and spatial elements of this strategic framework in developing their Community Infrastructure Levy policies and charging schedules.)

- Ensuring that green infrastructure is included in the agenda for action of the GFirst LEP.

- Enabling local communities to engage in the enhancement and creation of green infrastructure in their area.

6. BACKGROUND

6.1. PURPOSE OF THE FRAMEWORK

- To provide a starting point for more detailed green infrastructure work, for example - promotion to specific audiences, such as the development industry and mapping and policy work at the local level

- To ensure a co-ordinated approach to and a shared vision for green infrastructure across the county and beyond

- To bring together relevant stakeholders to engage in green infrastructure issues

- To identify the strategic green infrastructure for Gloucestershire on a schematic and spatial basis.

- To ensure that the multi-functional benefits of green infrastructure are fully recognised and exploited.

- To provide a strategic green infrastructure framework that can form part of the evidence base for local and other plans and which informs future policy formulation and implementation.

- To provide an overview on the delivery of Gloucestershire's green infrastructure which can help to support and prioritise funding bids, landscape scale projects etc.

The framework does not provide –

- A field by field guide to the location of green infrastructure in Gloucestershire

- Guidance on implementing green infrastructure within new developments

6.2. STATUS OF FRAMEWORK

This strategic framework for green infrastructure has been endorsed by the Board of the Gloucestershire Local Nature Partnership (LNP) (Appendix C) and has the widespread support of the partner organisations within the LNP. Some of those organisations have or will also formally endorse the strategic framework through their own internal processes.

The framework has been prepared using the relevant information sources and has benefited from the input of a wide range of green infrastructure professionals. The strategic framework is therefore a sufficiently robust document to form part of the evidence base for local plan production and other projects.

6.3. PRODUCTION, CONSULTATION, ENGAGEMENT AND MONITORING

Work was undertaken prior to the LNP's formation on green infrastructure as part of the Strategic Infrastructure Delivery Plan for Gloucestershire. Although it was not fully completed, a wide range of relevant data was collated and mapping information prepared.

The Gloucestershire Local Nature Partnership (LNP) was established in 2013 and the production of a green infrastructure strategy for the county was quickly established as one of its priorities.

In early 2014 a group of local authority officers and Natural England met to discuss how this issue could be progressed and a draft strategic green infrastructure framework was produced.

With the agreement of the Members of the LNP Board the draft framework was the subject of consultation with the wider partnership and other interested parties, including neighbouring LNPs and local authorities. Comments were received and incorporated into the framework, where appropriate.

Formal public consultation has not been undertaken, but the framework will be tested as part of the local plan process.

The Framework was formally approved by the LNP Board on 8th April 2015.

The Board of the Local Nature Partnership will monitor the success of the Framework, for example –

- By assessing whether green infrastructure policies have been included in local plans
- By reviewing development proposals, and in particular section 106 and CIL contributions.
- By evaluating the long-term success and viability of the main landscape scale biodiversity projects
- By assessing the targeting of any agri-environment schemes

APPENDICES

Appendix A: Evidence base used in the development of the Framework

Guidance

Nature Map & Strategic Nature Areas (SNAs)	http://gloucestershirebiodiversity.net/actionplan/nature-map.php
Planners Guide to Nature Map	http://gloucestershirebiodiversity.net/images/naturemap/Nature_Map_Glos_DevPlans_Guidance_Mar2013.pdf
NE's Green Infrastructure Resources including GI Guidance 2009 and the MEBIE Review 2012	http://www.naturalengland.org.uk/ourwork/planningdevelopment/greeninfrastructure/default.aspx http://publications.naturalengland.org.uk/publication/32031?category=7005

Plans and Policies

Strategic Infrastructure Delivery Plan	http://www.gloucestershire.gov.uk/extra/article/107553/Gloucestershire-Strategic-Infrastructure-Delivery-Plan-SIDP SIDP Phase 2 GI section http://www.gloucestershire.gov.uk/extra/CHttpHandler.ashx?id=41639&p=0 SIDP Phase 2 Appendices (see App 3 and 4): http://www.gloucestershire.gov.uk/extra/CHttpHandler.ashx?id=41646&p=0
Strategic Planning by LPAs	http://www.cheltenham.gov.uk/homepage/174/planning_policy http://www.cotswold.gov.uk/residents/planning-building/planning-policy/ http://www.fdean.gov.uk/ngcontent.cfm?a_id=6468 http://www.gloucester.gov.uk/resident/planning-and-building-

	control/planning-policy http://www.stroud.gov.uk/docs/planning/planning_strategy.asp http://www.stroud.gov.uk/info/plan_strat/stroud_idp.pdf http://tewkesbury.gov.uk/index.aspx?articleid=1683 http://www.gloucestershire.gov.uk/extra/planningpolicy http://www.gct-jcs.org/
AONB Management Plans	http://www.cotswoldsaonb.org.uk/management_plan/ http://www.malvernhillsaonb.org.uk/management_plan.html http://www.wyevalleyaonb.org.uk/index.php/management-plan-2014-2019/

Mapping Data

Gloucestershire Nature Map	http://gloucestershirebiodiversity.net/images/naturemap/NatureMap-Dec2011.png
National character areas	http://www.naturalengland.org.uk/publications/nca/southwest.aspx
Landscape character assessments	http://www.gloucestershire.gov.uk/extra/article/109519/Landscape-Character-Assessments
Stroud Landscape Sensitivity Appraisal (2013)	http://www.stroud.gov.uk/info/plan_strat/Landscape_Sensitivity_Appraisal.pdf

Other Local Initiatives

Local Nature Partnership	http://gloucestershirebiodiversity.net/partnership/about.php
Emerging Natural Environment Delivery Partnerships	http://gloucestershirebiodiversity.net/delivery/index.php
Forest of Dean greenways	http://www.fodgreenways.co.uk/

Other evidence

Strategic foot and cycle paths for Gloucestershire	http://www.nationaltrail.co.uk/ (Appendix 4) of the SIDP Report at http://www.gloucestershire.gov.uk/extra/CHttpHandler.ashx?id=41646&p=0

Green Infrastructure Initiatives in surrounding areas

A Green Infrastructure Strategy for Swindon	http://www.swindon.gov.uk/ep/ep-planning/forwardplaning/ep-planning-localdev/Documents/green_infrastructure_3_main_report%5B1%5D.pdf
Worcestershire Green Infrastructure Strategy	http://www.worcestershire.gov.uk/cms/strategic-planning/planning-green-infrastructure.aspx
West of England Strategic Green Infrastructure Framework	http://www.westofengland.org/media/216918/gi%20framework%20020611.pdf
Valuing people, place and nature – a Green Infrastructure Strategy for Bath and North-East Somerset	http://www.bathnes.gov.uk/services/environment/green-infrastructure/green-infrastructure-strategy
South Gloucestershire	GI policy - https://consultations.southglos.gov.uk/consult.ti/CoreStrategy/viewCompoundDoc?docid=441908&partId=442644&sessionid=&voteid=
Interim West Oxfordshire Green Infrastructure Study	http://www.westoxon.gov.uk/media/299975/Interim-green-infrastructure-study-June-2011.pdf
Monmouthshire Countryside Access	http://access.monmouthshire.gov.uk/
Wales coast path	http://www.walescoastpath.gov.uk/explore_by_area/south_wales_coast__severn_est.aspx
Vale of White Horse	Audit - http://www.whitehorsedc.gov.uk/sites/default/files/VoWH%20GI%20Report%20FINAL%20040213.pdf mapping - https://consult.southandvale.gov.uk/events/18402/popimage_d858801e5819.html
Stratford on Avon	District Green Infrastructure Study https://www.stratford.gov.uk/planning/green-infrastructure--district.cfm
Warwickshire paths and trails	http://www.warwickshire.gov.uk/pathsandtrails
Warwickshire, Coventry & Solihull Sub-Regional Green Infrastructure Study	http://www.warwickdc.gov.uk/NR/rdonlyres/9F9EEFFD-3AA7-45F0-823A-833DD4E78DB6/0/SubRegionalGIStudyFinal_Report_26072011FINAL.pdf
Herefordshire	https://www.herefordshire.gov.uk/media/268530/Herefordshire_gre

	en_infrastructure_strategy.pdf
Wiltshire	http://www.wiltshire.gov.uk/wiltshire-core-strategy-draft-topic-paper-13-green-infrastructure-2011-june.pdf http://www.wiltshire.gov.uk/wiltshire-core-strategy-topic-paper-11-green-infrastructure-feb-2012.pdf

Appendix B - Maps used to determine the strategic green infrastructure for Gloucestershire

Gloucestershire Nature Map
Gloucestershire Strategic Infrastructure Delivery Plan

Appendix C: Structure and aims of LNP

Gloucestershire Local Nature Partnership - objectives

- Promote understanding of the benefits that protecting and enhancing Gloucestershire's natural environment can deliver to people, businesses, communities and wildlife
- Connect partners and communities to encourage more people to spend more time in green spaces being active to improve health and wellbeing
- Encourage and facilitate more businesses to realise opportunities to make a positive contribution to the natural environment through their business activities
- Ensure that relevant strategic plans contribute to delivering the LNP mission
- Support and foster inclusive geographic and thematic partnerships – existing and new – to help remove barriers to landscape scale delivery

The LNP has a strategic Board consisting of partners covering various sectors and concerns with an interest or influence focused on the natural environment at a county level. In addition to the Board it has been agreed that 'on the ground local delivery' is to be via a suite of emerging geographic delivery partnerships, who would strive to deliver a strategic ecological network for the county.

Appendix D: Existing landscape scale biodiversity and community projects

Wye Valley and Forest of Dean
Lower Leadon Vale
Severn Vale
Cotswold Scarp Nature Improvement Area
Cotswold Valleys Nature Improvement Area
Cotswold Water Park

Appendix E:

Economic Benefits of Green Infrastructure diagram

Extract from Green infrastructure and Economic Growth Logic Chains (Defra 2013) http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Module=More&Location=None&Completed=0&ProjectID=19056#Description

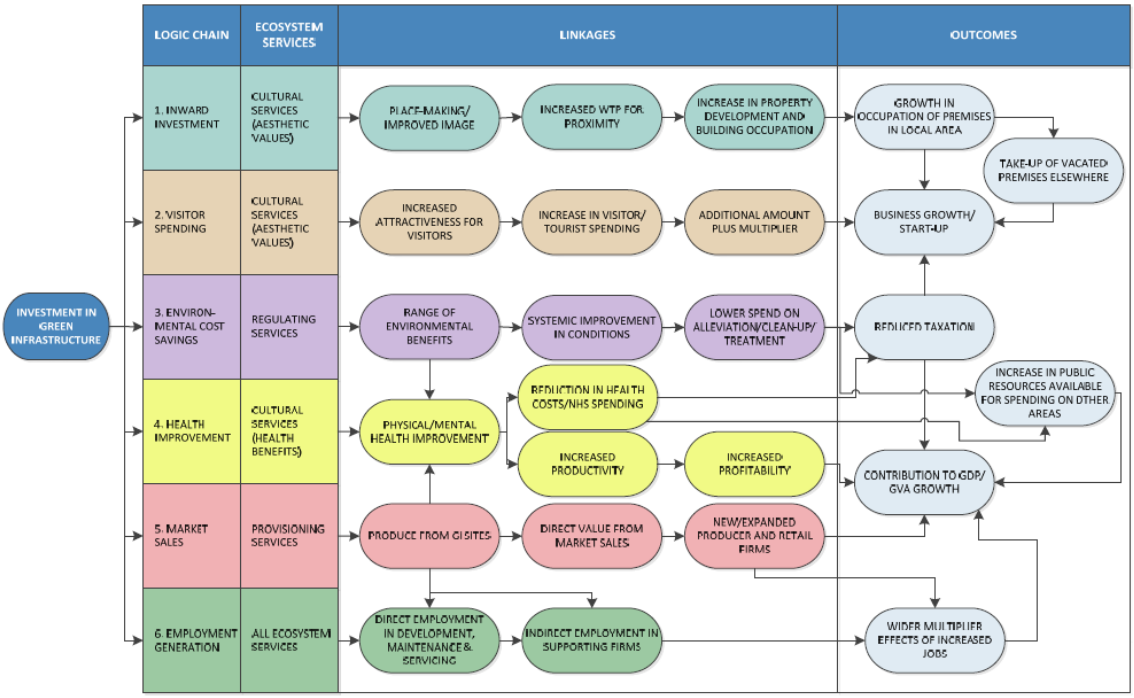



Figure 2.2: Green Infrastructure and Economic Growth Logic Chains