# A strategic framework for green infrastructure in Gloucestershire

Putting nature at the heart of decision-making for the benefit of Gloucestershire's society, economy and wildlife.



# Vision & introduction



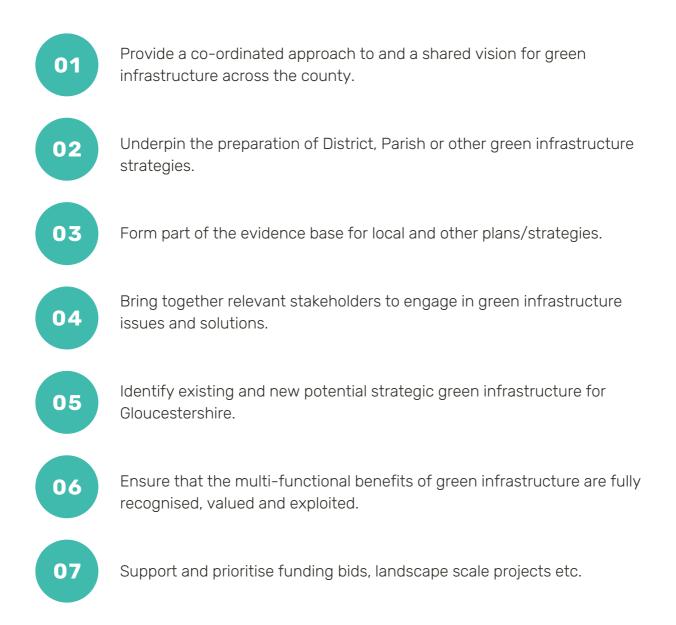
Our vision is that green infrastructure in Gloucestershire is optimised to deliver sustainable growth, reverse the ecological emergency, provide ecosystems services and improve societal health and wellbeing, whilst increasing Gloucestershire's resilience to climate change through nature-based solutions.

> The first edition of the Framework was produced in 2015 by the Gloucestershire Local Nature Partnership<sup>[i]</sup> and has been used to guide green infrastructure work across the county, for example in preparing local plan policy, grant bids etc.

> This edition updates the 2015 version to incorporate changes in national and local legislation, policy and guidance; new initiatives such as nature recovery and natural capital; additional data and the impacts of the COVID19 pandemic.

It has been drafted in advance of the completion of the Natural England Green Infrastructure Framework<sup>[ii]</sup>, although that framework has been used to inform the Gloucestershire Framework where appropriate, for example the principles<sup>[iii]</sup> in the national framework align closely with those in the Gloucestershire Framework.

# Purpose of the framework



#### THE FRAMEWORK DOES NOT PROVIDE

A field by field guide to the location of existing or potential green infrastructure in Gloucestershire.

Detailed guidance on implementing green infrastructure within new developments or regeneration projects.

# What is green infrastructure?

#### THE NATIONAL PLANNING POLICY FRAMEWORK (2021) DEFINES GREEN INFRASTRUCTURE AS:

A network of multi-functional green and blue spaces and other natural features, urban and rural, which is capable of delivering a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities and prosperity.

#### **EXAMPLES OF GREEN (AND BLUE) INFRASTRUCTURE**

These include rivers; cemeteries; canals; sports pitches; orchards; hedgerows; 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.

The concept of Green Infrastructure can bring together other environmental approaches, such as Natural Capital, Ecosystems Services, Nature Recovery and Nature-based Solutions. They are simply different ways in which we can view the natural world and the benefits it brings to people and the environment.

High quality, well-located and well-managed Green Infrastructure can be seen as a collection of connected natural capital assets managed to provide ecosystem services and benefits for people, while delivering nature recovery through nature-based solutions.

## Definitions

#### NATURAL CAPITAL<sup>[iv]</sup>

Refers to the elements of the natural environment which provide valuable goods and services to people. For example, a woodland can be regarded as a natural capital asset, from which flows valuable benefits, or ecosystem services, such as flood risk reduction and carbon capture.

Natural capital<sup>[v]</sup> can be defined as the world's stocks of natural assets which include geology, soil, air, water and all living things.

#### **ECOSYSTEMS SERVICES** <sup>[vi]</sup>

"The benefits people derive from ecosystems". Besides provisioning services or goods (like food, wood and other raw materials), plants, animals, fungi and micro-organisms provide essential regulating services (such as pollination of crops, prevention of soil erosion and water purification), and a vast array of cultural services, (like recreation and a sense of place).

#### NATURE-BASED SOLUTIONS [vii]

Nature-based solutions (NbS) involve working with nature to address societal challenges, providing benefits for both human well-being and biodiversity. NbS are defined by IUCN<sup>[viii]</sup> as "actions to protect, sustainably manage, and restore natural or modified ecosystems, that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits".

#### NATURE RECOVERY NETWORK<sup>[ix]</sup>

A national or local network of wildlife-rich places designed and managed to increase and restore nature. These networks will:

- Enhance existing and create new wildlife-rich places, habitats, corridors and stepping stones that will help wildlife populations to grow and move
- Improve the landscape's resilience to climate change
- Reinforce the natural and cultural diversity of our landscapes, and protect our historic natural environment
- Enable everyone to enjoy and connect with nature benefiting health and wellbeing

# The benefits of green infrastructure

#### THE KEY ENVIRONMENTAL AND SOCIAL BENEFITS INCLUDE:



Ensuring a more attractive place for people to live, work and visit.



Improving health and wellbeing including through access to and an appreciation of nature.



Helping mitigate and adapt to climate change, for example by carbon sequestration, urban cooling and flood alleviation.



Improving air and water quality.



Creating, enhancing and connecting habitats to deliver biodiversity net gains and nature recovery.



Providing sustainable and active travel routes.



Enabling local food production – in allotments, gardens, community orchards and through agriculture.

# The benefits of green infrastructure

#### THE KEY ECONOMIC BENEFITS INCLUDE:



Attracting inward investment by enhancing places for investors and potential residents (as shown in Gfirst LEP's 2019 youth survey<sup>[x]</sup>).



Generating employment by attracting new businesses and residents to an area (as identified by Gfirst LEP's Draft Local Industrial Strategy <sup>[xi]</sup>.



ncreased visitor spend - a more attractive county for tourists and visitors



Saving environmental costs – for instance by diffusing and reducing pollution, helping to manage flood risk plus storing water during droughts.



Providing health benefits – for example through providing access to high quality green space, better air quality, improved mental health and wellbeing, and also encouraging community cohesion



Promoting sustainable and increased local food production.



Supporting the post-Brexit transitions in agriculture and land management

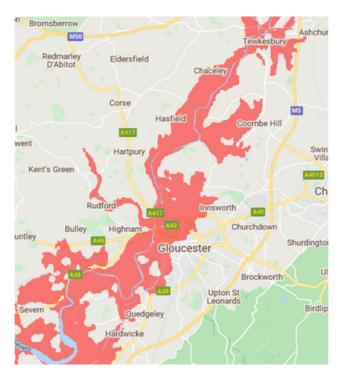
Green infrastructure provides a wide range of benefits simultaneously and from the same piece of land, often at a lower cost than non-natural solutions to the same problems.

### Green infrastructure and the climate and ecological emergencies in Gloucestershire

Gloucestershire has lost 70% of its traditional orchards and most of its species rich grassland since the 1970s.

Only 19% of land in Gloucestershire is currently supporting nature's recovery. The Prime Ministerial target<sup>[xiii]</sup> nationally is 30% by 2030 – another 35,000 ha of land is required to achieve this target in the county.

By 2030 half of Gloucester city is likely to be below the annual flood level [xii].



The red represents land that will be below annual flood level in 2050 (not taking into account any protection afforded by existing flood defences).

In response to the climate and ecological crises, many organisations, including all the Local Authorities in Gloucestershire have declared climate emergencies (Appendix 1).

The provision of new and enhanced green infrastructure is a key means of addressing the ecological and climate emergencies, for example -

01

nature recovery.

02

Planting woodlands, that creating new recreational space, enhancing biodiversity and providing timber products.

03

Enhancing wildflower grasslands that support pollinating insects, while also providing grazing land and visual benefits.

04

Planting urban trees that provide alleviate air pollution while also

### **Green infrastructure** and the COVID19 pandemic

During the pandemic it has become very clear that people value and want to use green spaces, from their gardens and local parks to the public footpath network and important wildlife sites. The health and well-being benefits of this interaction with the natural environment have been widely recognised, indeed COVID19 itself is less easily spread outdoors.

> 74% of respondents to a Gloucestershire-wide survey<sup>[xiv]</sup> reported an increase in spending time outside in nature, and 60% expected this to continue postpandemic

This increased use and love for outdoor spaces is to be welcomed; however it has put additional pressure on many of our most popular green space sites, such as country parks and nature reserves. In some instances, this has endangered the very places that people wish to visit, both through careless use of those places (litter, fires, poor parking etc) but also through the sheer number of people (trampling; disturbance etc.).

COVID19 has emphasised the need to create more accessible green spaces both very near to where people live – to use on an everyday basis, but also larger spaces which serve as destinations in their own right.

### **The Environment Act 2021** Biodiversity Net Gain

Biodiversity Net Gain (BNG), as mandated in the Act, sets a minimum requirement for a 10% net gain for biodiversity for new development.

BNG is designed to encourage habitat protection, enhancement and creation on-site and in the local area where possible, helping to support GI which is accessible to local communities as well as providing biodiversity enhancements. Existing GI assets could benefit through the delivery of off-site biodiversity net gain where required.

The Gloucestershire Nature and Climate Fund (GNCF) has been set up to deliver off-site Biodiversity Net Gain in the county, ensuring that biodiversity enhancements are delivered within Gloucestershire and in way that will support Gloucestershire's forthcoming Local Nature Recovery Strategy. [xv]

## Strategic green infrastructure principles for Gloucestershire

- Ensure that there is functional and well-connected strategic green infrastructure across the county. Gaps or missing links should be addressed as priority opportunities, in particular those highlighted in the Gloucestershire Nature Recovery Network<sup>[xvi]</sup> and Natural Capital Baseline Maps.
- Ensure that the multifunctional benefits of green infrastructure are understood by all stakeholders in the county.
- Ensure that green infrastructure principles are embedded in policies that guide change in the county, for example local development and transport plans; water catchment plans; health and wellbeing strategies; tourism strategies and economic plans.
- Maximise opportunities to improve green infrastructure whenever change is being considered – from individual development proposals, cycleway/footpath provision and agricultural changes to landscape scale environmental initiatives, flood alleviation schemes and major infrastructure projects.
- New and enhanced GI should be designed and implemented to deliver the widest range of benefits possible, while ensuring that the primary role of any GI assets are fully considered. (e.g. new SUDS schemes must enable effective water management but they can also enhance biodiversity and provide recreational space and visual amenity.)
- Promote the sustainable management of green infrastructure to ensure that the benefits are delivered for the long-term
- Deliver improvements to green infrastructure by facilitating a 'natural capital' approach to growth, securing funding from the corporate sector, utilities providers, infrastructure operators and developer contributions.
- Ensure all new developments and policy documents meet the 'Building with Nature' <sup>[xvii]</sup> or equivalent standards for high quality green infrastructure provision.



### Strategic green infrastructure principles for Gloucestershire

- Ensure that all residents of the county have access to GI and natural greenspace on both a local "everyday" basis and to more strategic open spaces, in line with Natural England's accessible natural greenspace standards (see page 20).
- Provide sufficient accessible recreational green space to alleviate adverse recreational impacts on designated biodiversity sites, for example on internationally designated Special Protection Areas and Special Areas of Conservation.
- Provide attractive non-motorised user routes that are designed along green infrastructure principles to encourage non-car travel and bring a range of mental and physical health benefits.
- 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 Gloucestershire Local Nature Partnership and GFirst LEP<sup>[xviii]</sup> (Gloucestershire's Local Enterprise Partnership) act as the focus for that co-ordinated effort.
- Work with partners outside the county to ensure that the strategically important green infrastructure of Gloucestershire links well across administrative boundaries.
- Work across all sectors to deliver key strategic place-based green infrastructure initiatives.



The Building with Nature (BwN) Standards provide planners and developers with evidence based, how to guidance on delivering high quality green infrastructure. The aim of BwN is to support and champion best-practice, helping great schemes get built, raising the bar for industry, and mainstreaming green infrastructure in placemaking.

The standards are divided into core standards and then additional ones that relate to water, well-being and wildlife and can be used to assess both development proposals and policy documents.

The Building with Nature initiative originated in the GI working group of the Gloucestershire Local Nature Partnership, leading to a collaboration between Gloucestershire Wildlife Trust and the University of the West of England and is now the national benchmark for high quality GI.



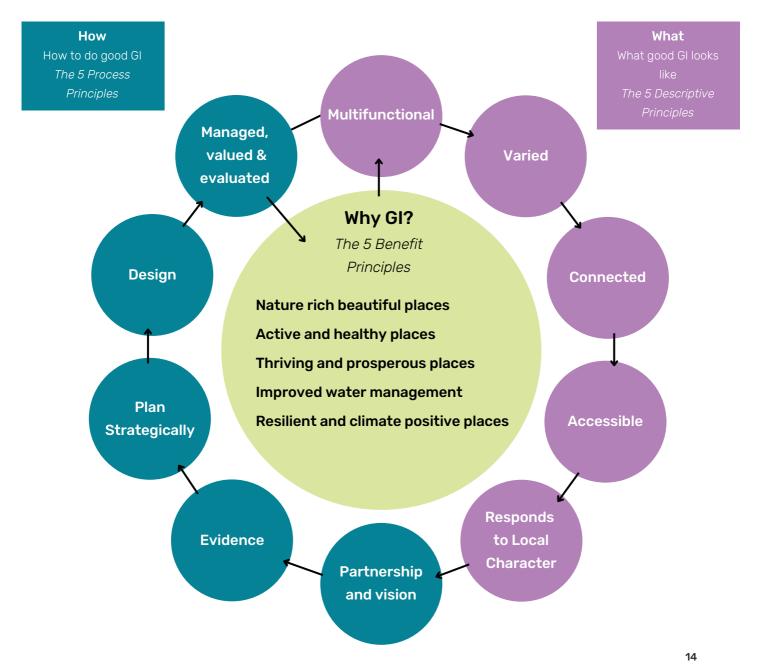
## Natural England Principles

The GI principles for Gloucestershire were established in the original county GI framework (2015), however more recently Natural England has developed their own set of GI principles, these correlate very closely with those for the county.

#### **GREEN INFRASTRUCTURE PRINCIPLES WHEEL**

The 15 principles are based on:

- The 5 Benefits of GI or "Why" principles
- The 5 Descriptive or "What" Principles
- The 5 Process or "How" Principles



### Examples of key strategic place-based green infrastructure projects in Gloucestershire

### 01 Drawiawah

#### **SEVERNSIDE PARKS**

Previously known as Severn Vale Regional Park. The creation of an inter-linked series of natural parks along the Severn, particularly focused around Gloucester but linked along the Severn as part of the Severn Wild Belt project. These parks would not only provide recreational space but would aid nature recovery and provide much-need flood management.

Led by the Gloucestershire Local Nature Partnership, Gloucestershire County and Gloucester City Councils and the Environment Agency.



#### **GLOUCESTER SEVERNSIDE ECOPARK**

Close to Alney Island nature reserve in Gloucester. Centred on Hempsted landfill. A significant area of habitat restoration near the centre of Gloucester, which will also deliver renewable energy capacity and recreational space.

Led by Enovert, Gloucestershire Wildlife Trust, Gloucester City Council.



#### **SEVERN TREESCAPES**

Wales/England cross-border forestation project over an area of 160,000 ha. It aims to expand and connect existing forest areas to create a mosaic of wooded and open habitats and also to enhance existing ancient woodlands. Led by Gloucestershire Wildlife Trust, Forest Enterprise and Natural England.

### 04

#### **GREEN GROWTH THROUGH WILDER WETLANDS**

The Cheltenham project aims to re-naturalise sections of the River Chelt to improve water quality, reduce flooding issues, enhance biodiversity and add to the amenity and recreational value of the river.

Led by Gloucestershire Wildlife Trust, Cheltenham Borough Council, Environment Agency, GFirst LEP



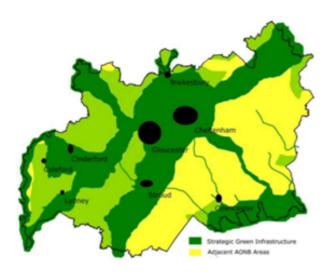
#### NATURE RECOVERY PLANS FOR THE COTSWOLDS<sup>[xix]</sup> AND FOR THE COTSWOLD WATER PARK (CWP)<sup>[xx]</sup>

Both plans have been prepared by wide partnerships of organisations and aim to direct and encourage nature recovery while also ensuring that wider benefits are realised, in line with green infrastructure principles. Led by Cotswolds National Landscape for the Cotswolds and the CWP Nature Conservation Forum for the CWP.



## Identifying the strategic green infrastructure of Gloucestershire

The first edition of the GI Framework (2015) included a map to show the strategic GI for the county based on the Severn Vale, the Wye Valley, the Cotswold scarp, the woodlands of the Forest of Dean the Cotswold Water Park (River Thames) and the connections between those. This was very much a high-level view showing the interconnections between these important areas but also acknowledging the importance of other areas, much of which is designated as Areas of Outstanding Natural Beauty (National Landscapes).



Mapping diagram from the 1st edition of the GI framework Since 2015 much more detailed mapping work has taken place. Many of the Districts have or are preparing GI strategies which provide a much more nuanced and locally relevant approach to GI provision (table 2). At a county level local nature recovery network mapping and natural capital mapping <sup>[xxi]</sup> have been produced, providing a much more accurate and fine-tuned approach.

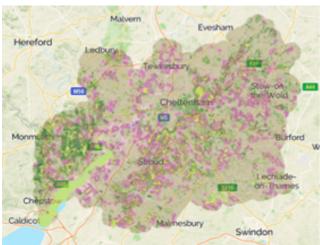
These maps will continue to be refined and revised as more data is made available and will form a key component of the emerging Local Nature Recovery Strategy. This new mapping system supersedes the 2015 GI framework schematic diagram.

This nature recovery and natural capital mapping clearly shows

- The strategic areas of both existing and potential natural capital and GI value, for example along the Severn Vale, the Stroud Valleys, the Cotswold escarpment, the Forest of Dean and in the Thames Vale (Cotswold Water Park).
- The value of the multiple ecosystem services delivered by land in Gloucestershire, enabling provision of new and enhanced GI to maximise those services.
- That existing wildlife rich habitat is highly fragmented and often too small to be viable. GI can help to connect and expand these areas.

### Examples from the Gloucestershire Nature Recovery Network and Natural Capital Mapping

These are examples taken at one point in time and reference should be made to the mapping system itself for the most up-to-date information.



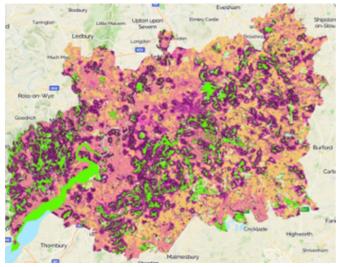
#### Nature Recovery Network

#### Water flow regulation baseline map



← Low ecosystem service provision

High ecosystem service provision →



#### Biodiversity opportunity map

Existing Priority Habitat

← Low demand/opportunity for improvement

High demand/opportunity for improvement  $\rightarrow$ 

## Other key strategic mapping and data related to green infrastructure

#### WALKING AND CYCLING ROUTES

The natural capital and nature recovery mapping<sup>[xxi]</sup>includes cycle routes and major walking routes (but not all public rights of way). Whilst these cannot be viewed simultaneously with other data, they remain important components of the GI of the county.



#### **NATIONAL DATA**

Natural England GI Framework mapping<sup>[xxii]</sup> provides data at a national level.

Defra and Natural England have developed a Beta version (V1.1) of an England-wide GI mapping database, bringing together data from over 40 individual environmental and socio-economic datasets. It will support local authorities and other stakeholders to assess green infrastructure provision against the emerging GI Standards.

# Accessibility to natural greenspace

Easy access to natural greenspace as part of the GI provision of an area is key for health and well-being. Natural England prepared accessible greenspace standards<sup>[xxiii]</sup> (ANGSt) some years ago and they are currently under review within the Natural England Green Infrastructure Framework - Principles and Standards for England project<sup>[xxiv]</sup>.

#### ANGSt RECCOMENDS THAT EVERYONE, WHEREVER THEY LIVE, SHOULD HAVE AN ACCESSIBLE NATURAL GREENSPACE:

- of at least 2 hectares in size, no more than 300 metres (5 minutes walk) from home;
- at least one accessible 20 hectare site within two kilometres of home;
- one accessible 100 hectare site within five kilometres of home (District standard); and
- one accessible 500 hectare site within ten kilometres of home (subregional standard) ; plus
- a minimum of one hectare of statutory Local Nature Reserves per thousand population

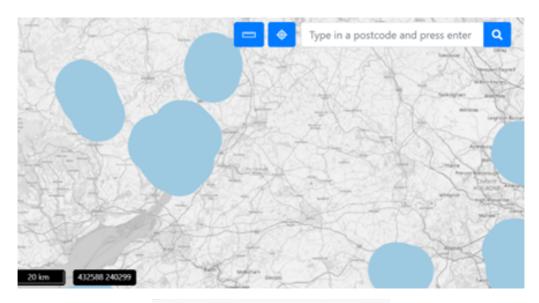
### THE REVIEW OF THE GI STANDARDS IS LIKELY TO RECOMMEND -

- Doorstep Green Space ANGSt: a green space of at least 0.5ha within 200m from home
- Local Natural Green Space ANGSt: a natural green space of at least 2ha within 300m from home
- Neighbourhood Natural Green Space ANGSt: a natural green space of at least 10ha within 1km from home

Analyses of GI provision at a local level forms part of many District-wide GI strategies and is core to the national Natural England GI mapping project, currently in the beta stage. In terms of the provision of more strategic/county-level GI, the relevant standards are the District and sub-regional ones. The Natural England GI mapping illustrates how this is achieved, or not, across the county. The national data has not yet been validated on a local basis for Gloucestershire.

### **ANGSt Sub-regional Standard:** One accessible 500 ha natural greenspace site within 10km of home

Only a small part of Gloucestershire meets the ANGSt sub-regional standard. The two relevant GI assets being the publicly accessible Forest in the Forest of Dean and the Malvern Hills. The Natural England mapping is based on a "how the crow flies" distance and therefore those areas shown as meeting the standard but on the eastern side of the River Severn do not in reality meet the standard due to that barrier.



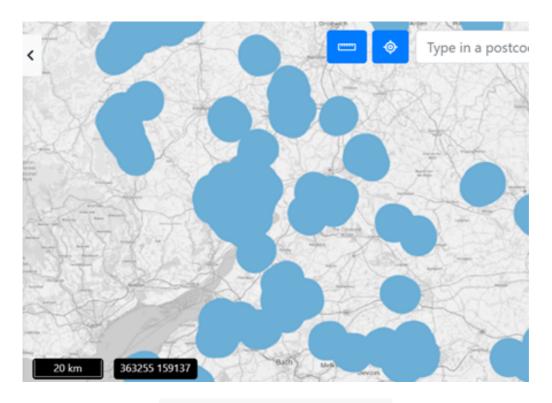
#### ANGSt Sub-Regional Standard

The Sub-Regional ANGSt assessment (A natural green space of at least 500 ha within 10 km). Buffers of 10 km have been created around all "Natural Green Spaces" (see method statement).

The mapping shows a major deficit in sub-regional provision in the eastern part of the county and beyond, outside the county boundaries, emphasising the need for the creation of additional major green spaces in the Cotswolds, as well as Gloucester and Cheltenham.

### **ANGSt District Standard:** One accessible 100ha natural greenspace site within 5km of home

The Natural England mapping shows a more positive position in respect of the District standard; however there are still considerable gaps across the county where the District level standard is not achieved.



#### ANGSt District Standard

The District ANGSt assessment (A natural green space of at least 100 ha within 5 km). Buffers of 5 km have been created around all "Natural Green Spaces" (see method statement).

In addition closer examination of the background data for the beta mapping shows that a number of the sites do not meet the accessible natural greenspace criteria and therefore the Natural England mapping over-estimates the degree of District level accessibility.

## Delivering strategic green infrastructure for Gloucestershire

There are a wide range of mechanisms and stakeholders that will deliver the aspirations of this strategic framework.

#### POLICY

The inclusion of green infrastructure and reference to this strategic Framework (as well as the national Natural England framework) within plans and strategies. This has already happened in the context of some Local Development Plans. Other examples include Neighbourhood Plans; Local Industrial Strategy, Local Transport Plan, Air Quality and Health Strategy, and the Health and Wellbeing Board Strategy, Tourism strategies, AONB Management plans, Local Authority Playing Pitch Strategies.

#### GLOUCESTERSHIRE LOCAL NATURE RECOVERY STRATEGY

Linking up green infrastructure provision and management with some of the priorities in the forthcoming Local Nature Recovery Strategy.

### THE ENVIRONMENT ACT - LOCAL NATURE RECOVERY STRATEGIES

The Environment Act will require the compilation of Local Nature Recovery Strategies (LNRSs) and Gloucestershire's is being developed through the Local Nature Partnership. This will further identify key opportunities within the county for ecological enhancement, connection, extension, promotion and/or management – including opportunities for green infrastructure implementation. The LNRS will also influence the delivery of mandatory biodiversity net gain.

#### LOCAL AUTHORITIES

Consideration of how the Community Infrastructure Levy (CIL) or S106 Agreements can enable green infrastructure creation and improvements.

#### LOCAL ENTERPRISE PARTNERSHIP

Consideration and inclusion of Green Infrastructure in strategic growth projects.

#### **PLANNERS**

Increasing awareness and understanding of green infrastructure and its multifunctional benefits within new developments.

#### LOCAL COMMUNITIES

Engagement in the enhancement and creation of green infrastructure in their area, including through neighbourhood development plans (NDPs) and the management of their own landholdings.

#### **DEVELOPERS**

Increasing green infrastructure delivery and awareness of its multifunctional benefits amongst the development industry and decision makers.

#### WATER MANAGEMENT

Exploiting the potential for green infrastructure improvements within flood, drainage or catchment projects and plans.

#### PARTNERSHIPS

Bringing together key partners in the delivery of green infrastructure to share insight, evidence, raise awareness, identify opportunities and collaborate where appropriate, including through facilitation by GLNP Green Infrastructure working group and the emerging Gloucestershire Nature and Climate Fund<sup>[xxv]</sup>.

#### **AGRI-ENVIRONMENT SCHEMES**

The new agricultural support schemes are based on the delivery of public goods, which includes natural capital and green infrastructure. There are real opportunities for farmland to provide additional GI benefits such as water management and public access in addition to food provision.

### Local green infrastructure strategies

In addition to this county-level Framework most of the Districts within Gloucestershire are working on or have produced GI strategies.

Each District has taken a very different approach, which is guided by the particular environmental, social and economic needs and settlement patterns of their area, (e.g. predominantly urban or rural); however care has been taken to ensure co-ordination across boundaries. These District-level plans provide more detailed green infrastructure mapping, priorities and actions.

#### TABLE 2: GREEN INFRASTRUCTURE STRATEGIES ACROSS THE COUNTY

Cheltenham Borough Council	New or updated GI strategy/evidence is proposed as part of the JCS <sup>[xxvii]</sup> Review.	
Cotswold District Council	Draft GI strategy <sup>[xxvii]</sup> public consultation summer 2021.	
Forest of Dean District Council	GI strategy in preparation as part of the Local Plan review	
Gloucester City Council	New or updated GI strategy/evidence is proposed as part of the JCS Review plus updates for the JCS examination in 2017 <sup>[xxviii]</sup> .	
Stroud District Council	June 2019 work completed by Ethos Consultants <sup>[xxix]</sup> . New GI policy in Local Plan – Delivery Policy DES2 Green Infrastructure as a consequence. (Pages 300-301 of submitted Local Plan.)	
Tewkesbury Borough Council	New or updated GI strategy/evidence is proposed as part of the JCS Review.	
Gloucestershire County Council	Reference is to District GI Strategies and Gloucestershire's Strategic GI Framework produced by the LNP	

# Status of the framework

The first edition of the Strategic Framework for Green Infrastructure was endorsed by the Board of the Gloucestershire Local Nature Partnership (GLNP) in 2015, with subsequent revisions in 2019 and 2020. The current edition has also been endorsed by the GLNP Board (April 2022) and has the widespread support of the partner organisations within the GLNP. Some of these organisations have or will also formally endorse the Strategic Framework through their own internal processes, as well as by having signed the GLNP's Green Infrastructure Pledge<sup>[xxx]</sup>.

The Framework has been prepared using many relevant information sources and has benefited from the input of a wide range of green infrastructure professionals. A formal public consultation process has not been undertaken; however, partners of the LNP were consulted, via GLNP's Green Infrastructure group. The Strategic Framework is therefore a sufficiently robust document to form part of the evidence base for Local Plan/strategy production and a wide variety of projects. The first edition was used on that basis within the examination and adoption of a number of Local Plans.

Given the fast pace of change in this space it is likely that the Strategy will have to be updated regularly, particularly when the Natural England Green Infrastructure Framework is finalised.

### **Appendix 1:** Gloucestershire Local Authorities Declarations of Climate and Ecological Emergencies

	Climate emergency	Ecological emergency	
Cheltenham Borough Council	2019	Declared December 2019	Ecological Emergency recognised within the Climate Change Strategy & Master Plan (Aug 2021). Both referred to in the Local Plan (Regn. 19 version - July 2021).
Tewkesbury Borough Council	2019		
Cheltenham Borough Council	2019	No	Carbon Neutral Cheltenham Report <sup>[xxxi]</sup> makes some references to biodiversity.
Gloucester City Council	2019		
Forest of Dean District Council	2018	2020	
Cotswold District Council	2019	July 2020	Ecological emergency action plan <sup>[xxxii]</sup> .
Gloucestershire County Council	2019		

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[xiv] https://www.gloucestershirenature.org.uk/post/life-after-lockdown-results-of-the-gloucestershire-wildlife-trust-survey

[xv] https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted

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[xxxi] https://www.cheltenham.gov.uk/info/61/sustainability/1622/climate \_emergency/3

[xxxii] https://www.cotswold.gov.uk/media/au2c5l4i/ecological-emergency-action-plan.pdf