

Strategic Green Infrastructure & Nature Recovery

Infrastructure Position Statement Topic Paper

1.0 Introduction

- 1.1 This paper considers the overall provision of strategic green infrastructure and nature recovery across the district, and will specifically set out the current context, condition and delivery mechanisms for strategic scale GI and nature recovery in South Gloucestershire. It excludes formal public open space provision (formal parks, outdoor sports pitches, SUDs and allotments) typically associated with new development, which will be dealt with in a separate paper.
- 1.2 Green Infrastructure is the term used to encompass all the natural environment assets of an area or site and to maximise their benefits through integrated area/site planning, with good design being the key to this integrated approach to land use. At its heart, the aim of GI is to manage the many, often conflicting, pressures for housing, industry, transport, energy, agriculture, nature conservation, recreation, and aesthetics.
- 1.3 GI definition; Green and blue infrastructure (GI/BI) is a strategically planned and managed network of natural and semi natural features, green spaces, rivers and lakes that intersperse and connect villages, towns and cities. Individually, these elements are GI assets, and the roles that these assets play are GI functions. When appropriately planned, designed, and managed, these assets and functions have the potential to deliver a wide range of benefits – from providing sustainable transport links to mitigating and adapting the effects of climate change. The planning, management and investment in GI is fundamental and is required at all levels of planning, from strategic, to local, to site specific plans.

2.0 National Policy Framework

- 2.1 There has been significant advancement in both GI and nature recovery since the last local plan and its now required to be considered at an early stage in the development process, in both national and local policy and guidance.
- 2.2 The Government’s 25 Year Environment Plan, enacted in 2021, provides a legal framework for environmental governance and makes provision for specific improvement to the environment. It focuses on enhancing natural capital, defined as: *“The elements of nature that directly or indirectly produce value for people, including ecosystems, species, freshwater, land, minerals, air and oceans, as well as natural processes and functions”*. GI consists of these natural capital assets, which underpin the provision of ecosystem services, providing benefits to our health, wealth and well-being.

- 2.3 The ambitions set out in the Government’s 25-year Environment Plan have recently been confirmed in the Environment Act, which includes a requirement to develop Local Nature Recovery Strategies and a duty on public authorities to actively carry out strategic assessments of the actions they can take to enhance and conserve biodiversity.
- 2.4 This includes a mandatory approach to **Biodiversity Net Gain** (10%). Biodiversity Net Gain (BNG) is the achievement of measurable gains for biodiversity through new development and occurs when a development leaves biodiversity in a better state than before development.
- 2.5 The NPPF (February 2019), NPPG (October 2019) and National Design Guide (September 2019) all recognise the importance of integrating GI into development. These give substantive weight to the need for plan making, policy development and economic development to be sustainable including through the integration, development and maintenance of Green Infrastructure.
- 2.6 The key components for the requirement for GI are further embedded in the National Design Guide (NDG). The NDG recognises that nature contributes to the quality of a place, and to people’s quality of life, and it is a critical component of well-designed places. Natural features should be integrated into well-designed development. They include natural and designed landscapes, high quality public open spaces, street trees, and other trees, grass, planting and water.
- 2.4 As a result, Natural England, in coordination with Defra and other partners, has developed a national GI framework of standards and guidelines¹, which aim to provide clarity and help local authorities, developers and communities plan and design GI to provide environmental and quality of life benefits for communities. The National GI Standards Framework sets out principles, attributes and guidance which can be applied to drive a partnership approach to the development and delivery of good multifunctional GI that responds to the needs of people and the environment at all scales and contexts. The approach will be worked into a new Local Plan GI policy.

3.0 Local Policy Framework

- 3.1 Since the adoption of our Core Strategy GI policy in 2013, GI has taken on enhanced significance due to the climate change emergency and mitigation and adaptation required. Our adopted PSP policies PSP1-PSP6 provide current policy guidance on climate change mitigation. However, in July 2019 all five West of England authorities declared climate emergencies, committing to area wide carbon neutrality by 2030. Our adopted Local Plan policies continue to be the starting point for how we want to deliver effective GI through new development in South Gloucestershire, but we also now recognise the value of other strategies, to help support our GI objectives. These

¹ [Green Infrastructure Home \(naturalengland.org.uk\)](https://www.naturalengland.org.uk)

act as other material considerations in the overall planning balance. The principle one is the Local Nature Recovery Strategy (LNRS) being produced by WECA².

- 3.2 There are a number of adopted planning policies that require, expect & encourage the provision and integration of GI into new development. A list is provided at Appendix 1. Our Biodiversity and Planning SPD was adopted in April 2023³ and explains how South Gloucestershire will support biodiversity through the determination of planning applications, together with providing clear guidance for developers regarding what will be required.

4.0 **Emerging GI and Biodiversity Policy**

- 4.1 Updated GI and biodiversity policies are currently being developed as part of our new Local Plan and these are underpinned by an extensive technical evidence base, recently completed;

- **GI Guidance for New Development SPD⁴**; this was adopted in April 2021 and sets out best practice for inclusion of GI on development sites. It divides the planning process into 8 stages and includes a step-by-step guide through each stage and what's expected from applicants and developers.
- **GI Corridor Mapping project⁵**; by overlaying the Core Strategy Fig 1 diagram with the WENP mapping data, the concentration of GI and ecological assets are seen to form a series of 9 blue and green infrastructure corridors through the district. These corridors can be used to focus retention and enhancement of the existing GI assets and help to determine locations for future projects to increase GI and biodiversity.
- **Landscape Character Assessment (LCA) SPD refresh**; our LCA originally produced in 2005 and reviewed in 2014 is being refreshed and brought up to date, to reflect new national and local policy and updated text and photographs to reflect new development across the district. This will form an important supplementary planning tool to support a revised policy CS2.
- **Visually Important Hillside**s; originally defined within policy CS2 Fig 1 and listed in the GI SPD, our visually important hillsides have been further mapped and evaluated against a strict set of criteria and have been included in both the GI Corridor Mapping Project and refreshed LCA.
- **Strategic Viewpoints**; all our strategic viewpoints (many taken from the 2014 LCA plus additional views) have been identified and re-evaluated in accordance with a strict set of criteria and have been included in both the GI Corridor Mapping Project and refreshed LCA.

² <https://www.westofengland-ca.gov.uk/what-we-do/environment/the-local-nature-recovery-strategy/>

³ <https://beta.southglos.gov.uk/static/aa6caecc3e7207cfbffa7d2dd7c08b39/Biodiversity-and-Planning-SPD.pdf>

⁴ <https://beta.southglos.gov.uk/static/c7a8346c52dc1f7fc934eca6f4b5a1a3/2602-Green-Infrastructure-SPD.pdf>

⁵ <https://beta.southglos.gov.uk/publications/local-plan-2020-phase-2-urban-rural-and-key-issues/strategic-green-infrastructure-network>

This evidence is being used to inform new Local Plan policy and, guide new development away from our most sensitive areas and assist focus priorities and projects for GI enhancement by spatially defining our landscape and ecological assets.

5.0 GI Delivery

- 5.1 Strategic scale GI is provided nationally by many organisations as well as private landowners. At local level, the West of England Combined Authorities (WECA) endorsed a Joint Green Infrastructure Strategy (JGIS) in June 2020⁶. The JGIS sets out the West of England (WoE) goals and objectives to enhance and optimise GI across the West of England. It also includes an Action Plan which sets out a number of programmes & projects intended to build capacity at the local level.
- 5.2 In addition, a South Gloucestershire GI Strategy⁷ has been prepared which is a non-statutory 'corporate' document that brings together the Council and our partner's commitments regarding GI alongside setting out the standards, priorities and approach we will take to managing Council owned and or maintained green space assets.
- 5.3 South Gloucestershire Tree Asset Management Plan⁸, adopted in 2018, this document was developed as a tool to describe the policies and strategies used by the Council in making management decisions on their tree resource. It sets out how the Council will maximize the value of our tree assets and aim to increase the existing tree canopy cover in South Gloucestershire on public and private land across the district. A recent assessment estimates canopy cover will need to be increased to 22% to aid climate change mitigation. This represents establishing a further 5900 hectares of tree canopy cover from existing levels.
- 5.4 Given the wide variety of delivery organisations and emerging policy it is not possible to provide a definitive list of projects or funding streams. As well as GI provided alongside new development (funded via section 106 legal agreements), Council officers are aware of and involved in the strategic projects listed in Appendix 2. Other strategies, action plans and projects are being devised, such as:
- Local Climate and Nature Action Plans (LCNAP) with out Town & Parish Councils
 - Reconnecting Nature Highways (reducing severance cause by roads, and
 - South Gloucestershire Climate & Nature Community Investment Fund
 - Bristol Avon Fish Recovery Strategy⁹
- 5.5 *Other organisations, both public and private are also funding and delivering green infrastructure projects. We would welcome any information on significant strategic*

⁶ <https://www.westofengland-ca.gov.uk/west-of-england-joint-green-infrastructurestrategy/>

⁷ <https://beta.southglos.gov.uk/publications/greener-places/>

⁸ <https://beta.southglos.gov.uk/tree-management-plan>

⁹ <https://www.bristolavoncatchment.co.uk/bristol-avon-fish-recovery-strategy/>

scale projects being carried out in South Gloucestershire or across border to add to our understanding and database.

5.6 South Gloucestershire has a rich and diverse set of strategic GI assets. These include:

- Severn Estuary & estuarine habitat
- Cotswolds AoNB
- Frome River Valley
- Ancient Woodlands
- SSSI Grasslands

Moving forward, and in summary, these assets have now been mapped using the (WENP) WENP mapping data as a base¹⁰, work is now progressing towards a South Gloucestershire GI and Local Nature Recovery Strategy, to be produced alongside our new Local Plan and revised GI policy. Although at an early stage, the 'gaps' identified in the nature recovery network are being analysed and projects are being developed to enhance connectivity and biodiversity. Capital funding for these projects is not yet identified, but it will be required where appropriate and necessary that new development will make a contribution, either directly or via mechanisms such as BNG and the Community Infrastructure Levy, as well as via other organisation's projects and programmes.

¹⁰ <https://wenp.org.uk/nature-recovery-network/>

APPENDIX 1 – Current Local Plan Policy

Core Strategy

Policy CS1 – High Quality Design, requires that existing features of the landscape, nature conservation...are safeguarded and enhanced, plus the highest possible standard of design and site planning demonstrating that the proposal will connect to the wider network of foot, cycle and public transport links and enhance or develop the public realm including the needs of pedestrians, cyclists and disabled and older people.

Policy CS2 – Green Infrastructure, required that GI is planned, delivered and managed as an integral part of creating sustainable communities. It is supported by the Strategic Green Infrastructure Network which displays those current and potential GI assets which are important at a strategic scale. Some of these assets are protected by existing development plan policies, whilst other areas provide opportunities to extend (through the creation of new assets) and introducing enhancements to the network.

Policy CS24 - Green Infrastructure, Sport and Recreation Standards Policy, requires that where existing facilities are inadequate for the needs of new occupiers of a development, new provision will be required. It states that GI is an integral to a development and provision for GI, outdoor space, sport and recreation facilities will be sought according to 3 principles: 1) New developments must comply with local standards 2) Should be delivered on site unless it is demonstrated that provision off-site creates a more acceptable proposal; and 3) The functionality and usability of spaces and facilities must be suitable for their intended purposes. This is further developed in our Playing Pitch and Sports Strategy:

The Policies Site and Places DPD

Policy PSP3 - Trees and Woodland, requires development proposals to minimise the loss of existing vegetation on a site that is of importance in terms of ecological, recreational, historical or landscape value. Our Designated Local Green Spaces Policy PSP4 protects valued local designated areas from development and are identified on the policies map.

Policy PSP2 – Landscape, requires a high standard of landscape design for all amenity space, hard and soft landscape works and open space provision, appropriate to the use and character of the development and its location; and designed as an integral part of the development, incorporating - existing landscape features where appropriate, for the benefit of the development proposal.

Policies PSP4&5 protect local designated and undesignated green spaces.

Policy PSP18&19 protects statutory wildlife sites and require every effort to be made to maximise biodiversity net gain on a site, retaining and enhancing those habitats identified though the site survey work and incorporating them within the scheme.

APPENDIX 2: Green Infrastructure Projects

Scheme	Stage	Funding Source(s)	Cost	Expected Start & Completion date	Aims / Implications for sustainable communities	SGC Local Plan Strategic GI Network Corridor where applicable Strategic Green Infrastructure Network BETA - South Gloucestershire Council (southglos.gov.uk)
Avonmouth and Severnside Enterprise area (ASEA) Flood Resilience and Ecological Mitigation project	Under Construction (UC)	West of England Local Enterprise Partnership Economic Development Fund, administered by WECA. Other sources of funding are DEFRA and the Wessex Regional Flood and Coastal Committee.	£103m	2020 - 2026	Providing 17km of flood defences to reduce flood risk to 2,500 homes and businesses across both South Gloucestershire and Bristol and creation of new wetland habitat for birds along the internationally important Severn Estuary RAMSAR site (approx. 80ha in total). Planting within the project also returns the area to native tree species - silver birch and hornbeam, and shrubs (approx 2Ha) and improved public access routes are also being delivered. Avonmouth and Severnside Enterprise Area – Ecology Mitigation and Flood Defence Project (asea-flood-ecology.co.uk)	Corridor A - Shepperdine – Oldbury on Severn – Severn Beach (Severn Estuary and Levels)
Resilient Frome – made up of 6 workstreams including Natural Flood Management (NFM) and Sustainable Urban Drainage (SuDs)	NFM Full Business Case (FBC) in November 23 SuDS FBC Feb 24	DEFRA	£1m: (£600k NFM £400k SuDS)	March 21-end of March 27	Provide localised flood protection within Bristol Frome headwaters and reduced flood frequency/duration of highway flood locations. Improved biodiversity and water quality. Resilient Frome Engage Environment Agency (engagementhq.com)	Corridors C & G Corridor C - Winterbourne – Kendleshire – Yate (River Frome Corridor) Corridor G - Wickwar – Iron Acton – Yate (Ladden Valley)

River Reserve (River Frome)	Delivery	WECA Green Recovery Fund	£1.1 m	Sept 2022- March 2025	Improve wetland and riparian habitat to deliver nature recovery, flood and drought resilience, improved water quality, access, and amenity. Potential for Biodiversity Net Gain (BNG). River Frome reconnected BETA - South Gloucestershire Council (southglos.gov.uk)	Corridor C - Winterbourne – Kendleshire – Yate (River Frome Corridor)
Common Connections	Delivery	WECA, SGC Climate and Nature Emergency Action Plan budget, Enovert Community Trust (ECT) funding secured by the Friends of Siston Common through the 'Landfill Communities Fund'	£1.2 m	2022 – 2026	A landscape scale habitat restoration project to restore and connect habitat including linking registered common land, unimproved grasslands, woodlands and associated habitats along the South Gloucestershire urban fringe. https://beta.southglos.gov.uk/common-connections#Who%20We%20Are%20Working%20with	Corridor D - Wickwar – Westerleigh – Bitton (Westerleigh Vale Oldland Ridge/ East Fringe)
Assley, Hareley, Inglestone and Hawkesbury Common	Delivery	DEFRA - Higher Tier, Countryside Stewardship and Trees for Climate funding through the Forest of Avon Trust	£350k	10 years. January 2021- December 2030	Assley, Hareley, Inglestone and Hawkesbury Commons are managed under a Higher Tier Countryside Stewardship scheme which enables the council to continue to work with commoners and the local community to manage these commons for the benefit of all who use them. They will be enhanced for nature through tree planting, scrub management, grassland and pond enhancements.	Corridor D - Wickwar – Westerleigh – Bitton (Westerleigh Vale Oldland Ridge/ East Fringe)

Lower Woods Link	Concept/OBC	Dept for Levelling Up (administered and managed by WECA)	TBC	2025 TBC	Increasing woodland connectivity. This programme aims to create additional buffer habitats around Lower Woods and improve links to Cotswold woodland. Lower Woods is the most extensive area of ancient woodland in the West of England. However, it is isolated from other woodland which may help explain the recent loss of breeding nightingales from the area.	Corridor D - Wickwar – Westerleigh – Bitton (Westerleigh Vale Oldland Ridge/ East Fringe)
String of Pearls	Concept/OBC	Section 106 (Avalon Works)	TBC	2025 TBC	At concept stage, this strategic GI programme aims to connect and restore wetland habitat of the protected Ramsar area of the low-lying vales and coast of the Severn Estuary, to support resilience of the area, deliver nature recover and improve public amenity	Corridor A - Shepperdine – Oldbury on Severn – Severn Beach (Severn Estuary and Levels)
Little Avon River Catchment	Concept stage	Funding being sought to prepare an Outline Business Case	TBC	2025 TBC	At concept stage, this catchment-based programme aims to gather data, and engage partners, statutory agencies, landowners and stakeholders to prepare a catchment plan which identifies priorities and a business case outlining the case and delivery priorities which will make the case for attracting further external investment for capital delivery from a range of sources.	Corridor I - Huntingford – Charfield – Wickwar (Little Avon River Corridor)
Tree Canopy Project	Delivery	West of England Combined Authority (WECA) Green Recovery Fund	£1.1m	January 2023 – end of March 2025	Delivering shading, cooling, SUDs, air quality, biodiversity and nature recovery, landscape, amenity, regeneration, carbon sequestration, place making and place shaping benefits. – District wide	

Highway Verges – LiveLabs 2	Delivery	Department for Transport (DfT)	£4 million (shared with West Sussex County Council)	April 2023 -	Reducing grass maintenance operational greenhouse gas emissions, increasing soil carbon sequestration, increasing biodiversity and ecosystem services particularly pollinator services (increased wildflowers and pollinating insects) and SuDS. – District wide	
Kingswood Park restoration	Stage 2 Bid	National Heritage Lottery Fund	£3.36m	2024-2026	The project will deliver sustainable community benefits by restoring and improving facilities, access infrastructure, landscaping and an engagement programme to deliver climate resilience, biodiversity, health and social cohesion benefits.	