South Gloucestershire Council

Delivering climate action

Green Infrastructure Strategy 2021

Greener Places

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Foreword

South Gloucestershire has a rich and varied landscape. Our area extends from the iconic Severn Estuary, across a historic tapestry of commons, ancient woodlands, rivers and farmland, to the Cotswold scarp and the Bristol urban fringe. Our location, environment, heritage, and access to the countryside are important reasons why South Gloucestershire is a great place to live, work and visit.

Parks, nature reserves and other public open spaces provide highly valued green space for people and nature, right in the heart of our communities. Green spaces support healthier lifestyles, boost our wellbeing and help to reduce inequalities. We want to manage these spaces so they are attractive, safe and welcoming for everyone. This includes improving accessibility, reducing litter and providing rich habitat for nature. Public rights of way, highway verges, water courses and hedgerows provide vital green connected networks for people and wildlife across our urban and rural areas.

We can all play a part in responding to the challenges of climate change and the nature crisis. Our Council Plan 2020 - 2024 recognises that, 'action on the climate and our environment is a fundamental challenge which must inform and influence all our priorities and commitments.' This requires a 'step change' across all areas of our work and lives. Whilst the scale of this challenge must not be underestimated, it is also important to acknowledge the progress underway and the journey we have already travelled together.

From improving how the council manages the green spaces we are responsible for, to greening our high streets, and transforming the role of green infrastructure within new development, we want everyone to be able to access local, high quality, nature rich green spaces and networks within our communities.

Delivering an ambitious vision for green infrastructure is central to creating thriving, attractive, nature rich, healthy and inclusive zero carbon communities. Places which attract investment to drive a green and sustainable economy. We want to work together with everyone who lives, works in, and visits South Gloucestershire to bring together and deliver a vision now and into the future across our area for 'greener places where people and nature thrive'.

Toby Savage
Leader of South Gloucestershire Council

Executive Summary

The Greener Places Strategy has been prepared by South Gloucestershire Council, our partners and residents, and sets out a shared vision, priorities, commitments and action to transform the role, creation and management of green infrastructure, now and into the future across our area.

> **Green infrastructure (GI)**
> is the term used to describe the natural environmental features of an area and the natural connections (or network) between these features.
>
> Green infrastructure also includes 'blue infrastructure', which are areas of wetland, water bodies and water courses.
>
> When green infrastructure is well planned, designed, managed and connected it gives many benefits for people and nature.

Purpose of this Strategy

The Greener Places Strategy presents why and how we will optimise the contribution of green infrastructure to improve the environment for people and nature. It sets out the context, evidence, what we intend to do, and when, and how we are working with our partners, communities and residents to 'green' our area.

Our objectives

This Strategy aims to bring together the council and our partners' ambitions, obligations, priorities and commitments for new and existing green infrastructure in South Gloucestershire to deliver our vision for **'greener places where people and nature thrive'.**

This includes how we will:

- **create more habitat for nature**
  how we will work across the council, with our partners and local communities to 'lead, enable and inspire' action to restore our natural environment

- **have quality public open spaces and green networks**
  the approach the council will take to managing all things green we have responsibility for

- **maximise the resilience and contribution of green infrastructure**
  to support adaptation to the changing climate, health and well being and our economy

- **have green infrastructure at the heart of new development planning**
  our approach and policies for the planning and design of green infrastructure in new development

- **work with our partners, communities, and residents**
  to have more, improved and better-connected green infrastructure, and contribute to local and regional priorities and plans including the Joint Green Infrastructure Strategy

The upper river Frome, Old Sodbury

nature people places

Our outcomes

Our outcomes for green infrastructure in South Gloucestershire have been shaped by our engagement work and contribute to the priorities and outcomes of the West of England Joint Green Infrastructure Strategy 2020 (JGIS) and South Gloucestershire Council Plan 2020 - 2024

By putting this strategy into action, the outcomes we strive to achieve are:

- Protected and restored nature
- Greater resilience to the changing climate
- Sustainable water management
- Improved health and wellbeing for all
- Sustainable places
- Valued healthy landscapes
- Sustainable and local food production
- A green and resilient economy
- Stronger working together

For each of these outcomes we have identified commitments which set out what we aim to achieve and the actions we will take.

Our response to the Climate and Nature Emergency

We recognise that we need to work together to take action to respond to the challenges of the Climate and Nature Emergency, to reduce the inequalities gap, improve health and wellbeing and deliver value for money.

These are linked rather than competing challenges and a holistic approach and integrated action is needed to improve the health and quality of life of everyone in our communities. Well designed, managed and connected green infrastructure has a key role to play in meeting these challenges, to achieve our goals for sustainability and the environment, aligned with regional and national priorities and the global UN Sustainable Development Goals.

Our overarching commitment regarding climate change and the environment:

> **'Action on the climate and our environment is a fundamental challenge which must inform and influence all our priorities and commitments.'** South Gloucestershire Council Plan 2020-2024

In order to respond to the climate emergency, the council also recognises the nature emergency and has determined that both issues are interconnected and need to be addressed urgently and in a coordinated way as referenced in the council's Climate Change Strategy:

> **'Our approach is to embed tackling the ecological emergency within and alongside the broad Climate Emergency agenda as it is a critical aspect of the wider environmental crisis and to make it clear that we need to act holistically.'** South Gloucestershire Climate Change Strategy

The Greener Places Strategy sets out the context, evidence and our plans to respond to the Nature Emergency and restore nature across our area. This includes bringing together our commitments for nature recovery and leading, enabling and inspiring action, to deliver the changes required to optimise the role of green infrastructure to meet these challenges.

Well planned, designed and managed green infrastructure is uniquely placed to provide 'nature based solutions' which deliver 'win wins' for nature's recovery, locking in carbon, climate change adaptation and resilience, our health and other multiple benefits to achieve our vision for 'greener places where people and nature thrive'.

Our overall commitment for green infrastructure:

Consistent with our Council Plan commitment for the need to apply an integrated approach on the climate and the environment, we will lead, enable and inspire action on our green infrastructure priorities across all areas of council work, decision making and influence.

'The Tortworth chestnut'. This majestic ancient tree is one of the oldest and most famous sweet chestnut trees in the country. At well over 600 years old, with legend dating the tree back to 800 AD, this chestnut and other ancient trees across South Gloucestershire provide inspiration for our work now to plant a legacy for future generations.

1

Our vision and values

1 Our vision and values

1.1 Our vision

Our vision is for 'greener places where people and nature thrive'. Working together is at the heart of achieving this vision. This Green Infrastructure Strategy sets out how we will deliver this shared vision through collective action across the council, with our partners and residents. This includes how our work contributes beyond South Gloucestershire, to regional, national and global ambitions and goals.

‘Greener places where people and nature thrive’

1.2 Our values

The values of the Council Plan and Sustainable Community Strategy explain the values for all our work, including this Green Infrastructure Strategy and how we will deliver it.

Our values are important to us. They guide how the council works with our communities and partners. They define what we stand for and are central to achieving the council's vision that South Gloucestershire will always be a great place to live, work and visit.

The South Gloucestershire Partnership

The South Gloucestershire Partnership works together to improve the quality of life for people across our area. The partnership brings together public, voluntary, community, private and social enterprise organisations. The work of the partnership is explained in the Sustainable Community Strategy 2016-2036

This includes a commitment to the following shared values:

- find simple and effective ways of working together that improve efficiency, make the most of resources and ensure value for money
- ensure social, economic and environmental well–being is embedded in all decisions
- promote a greater understanding and mutual respect between different sectors and sections of the community; empower all people to participate and become involved in decisions which affect the area
- ensure resources are used wisely, become carbon neutral, prevent pollution and waste, and conserve and enhance the environment for future generations

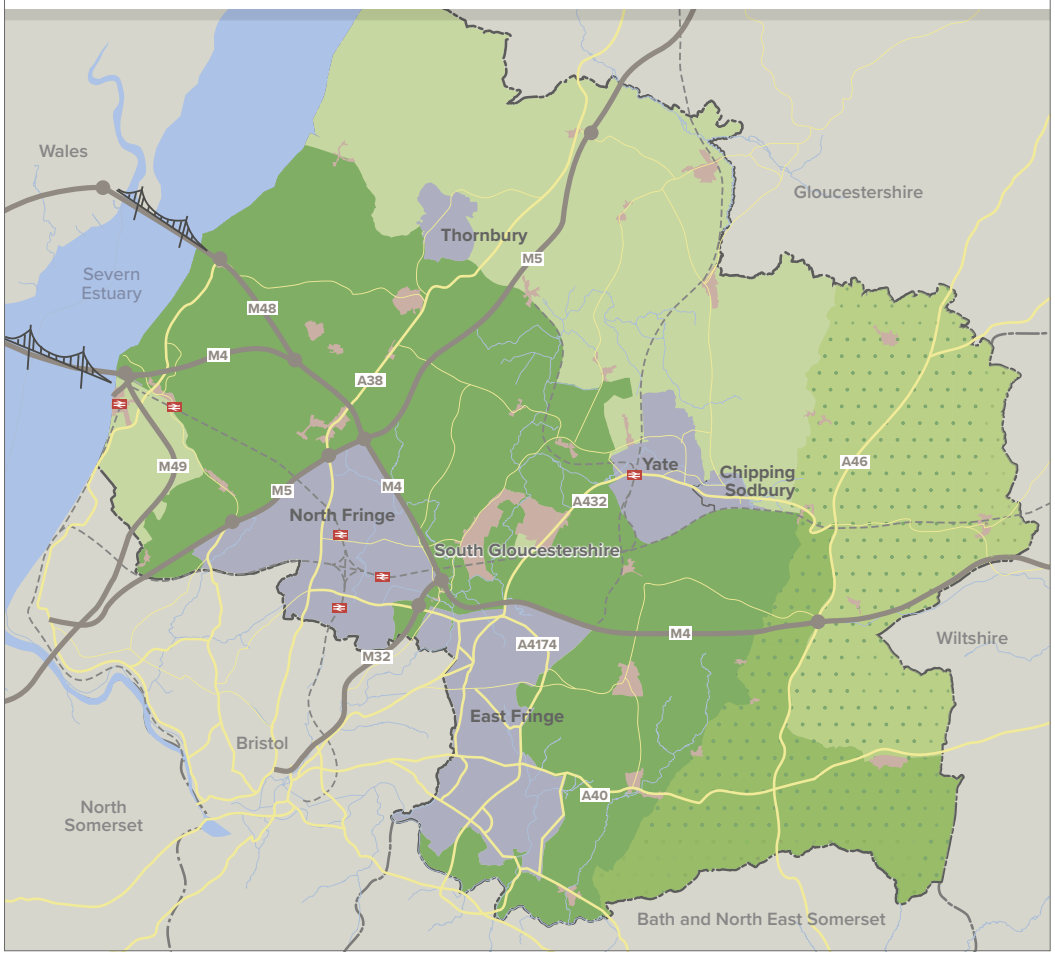
2 Setting the scene

2 Setting the scene

2.1 South Gloucestershire – an overview of our area

South Gloucestershire lies immediately to the east and north of the City of Bristol in the West of England region and is part of the Western Gateway partnership area. With a population of 285,100 in 2019, projected to rise to 354,000 by 2043 (Office for National Statistics 2018 data published 2020), this 25% increase is the sixth highest projected population growth in England. Most people live in the suburban areas to the north and east of Bristol and the market towns of Yate/Chipping Sodbury and Thornbury, with the rest of the population living across our rural areas.

South Gloucestershire – our area



Key

- South Gloucestershire Boundary
- Green Belt
- Cotswolds Area of Outstanding Natural Beauty
- Urban areas and market towns
- Rural settlements
- Motorway
- A roads
- Railway

Over 40% of South Gloucestershire is covered by a designated Green Belt which surrounds and separates Bristol and Bath. The purpose of a Green Belt is not in itself to prevent development, and is rather a tool to help inform planning to prevent urban sprawl and to optimise the role and benefits of green infrastructure.

Our natural environment - South Gloucestershire contains a high number of internationally, nationally and locally designated nature and geological conservation sites and areas which contribute to the distinctive landscape character of the area. This includes the Severn Estuary Special Area of Conservation (SAC), the Cotswolds National Landscape (Area of Outstanding Natural Beauty) and 22 nationally important Sites of Special Scientific Interest (SSSI).

Public open spaces – in addition to designated sites, the council owns or manages a wide diversity of parks and other public open spaces across the district. This includes larger formal parks such as Kingswood Park and Page Park and more informal green spaces. There are also public open spaces and sports pitches which are leased, owned or managed by town and parish councils, sports associations and other partners. Public open spaces provide essential green spaces and infrastructure to optimise the quality of life for people and nature within our communities.

Page Park, Staple Hill

Trees and woodlands – tree canopy covers approximately 11 % of South Gloucestershire. This includes Lower Woods SSSI which is one of the largest ancient woodlands in the South West of England and the Avon Valley Woodlands which are held within the iconic river Avon valley. For information see the South Gloucestershire Tree Asset Management Plan and The Forest of Avon Plan - The West of England Trees and Woodland Strategy.

Our blue infrastructure – includes the rivers Avon and Frome, their tributaries, catchments and the low vales of the Severn estuary. Our area is also crisscrossed by a network of ditches, ponds and water courses which provide vital wetland habitat, flood and drought resilience and connectivity for wildlife, amenity and recreation.

Heritage – Ancient settlements, historic buildings, veteran trees, heritage trails, industrial heritage and archaeological features are integral to the landscape character, cultural, natural and built heritage of the area. Many local events, seasonal activities and celebrations have been held here for generations including apple day and harvest celebrations and are intrinsic to community life and culture.

Neptune (the 'Warmley Giant'), Warmley Heritage Gardens

Travel and transport – The council is responsible for 1257km of public rights of way across South Gloucestershire and there is an evolving cycling network: Local Walking and Cycling Infrastructure Plan 2020. The Council manages 2.9 million m^2 of highway verges (an area equivalent to over 400 football pitches). Work is underway to change how our verges are managed to improve and connect habitat for nature, and climate change adaptation and resilience.

Economy – In the heart of the Western Gateway partnership area, South Gloucestershire has 3 economic enterprise areas at Severnside, Filton and Emersons Green and the South Gloucestershire 'Tec Arc'. Through the South Gloucestershire Climate Emergency action plan, we are working with our partners and businesses towards the shared goal of net zero carbon emissions by 2030 and action plans to restore nature across our area. Greening our town centres, local high streets and larger retail centres also helps to make them more attractive to customers and boosts green industries and jobs.

Tourism - South Gloucestershire is a growing cultural and tourist destination, with traditional attractions such as the National Trust's Dyrham Park, the Avon Valley Railway, Grimsbury Community Farm and the Cotswold Way national trail reflecting our rich landscapes and heritage. More recently developed attractions with an environment focus include Bristol Zoo's Wild Place and The Wave surfing lake.

2.2 What is green infrastructure?

Our area and communities are shaped by natural and built environment features alongside historic, social, cultural, and economic factors.

Green infrastructure (GI) is the term used to describe the natural environmental features of an area and the natural connections (or network) between these features.

Green infrastructure is a network of green (land) and blue (water) spaces which when appropriately planned, designed, connected, and managed provides a wide range of environmental functions and multiple benefits for people, communities, and nature.

The Green – Green infrastructure includes all natural, semi natural, and cultivated areas of land, public and privately owned, of all shapes and sizes.

- Includes urban parks, the public rights of way network, highway verges, commons, our wider countryside, woodlands, community allotments, informal green spaces, sports pitches, and private residential gardens.
- Green infrastructure provides vital places for recreation, health and wellbeing and habitat for nature as well as contributing to landscape character, natural drainage, flood and drought resilience, cooling, shading and air quality.

The Blue – Blue infrastructure includes all areas of wetland including rivers, streams, and tributaries, standing waters (lakes, ponds, ditches and marshes), coastal waters and estuaries.

- Blue infrastructure provides rain water storage, drainage, and flood resilience, and vital wetland habitat for nature. Spaces for amenity and recreation are key ways that blue infrastructure supports our health and wellbeing.
- Marsh and peat bogs provide the highest natural carbon storage of all habitat types in the UK and water bodies play a key role in cooling and as 'heat sinks'. This is why wetland protection, restoration and creation are such key areas of focus for climate change adaptation, mitigation, and resilience.

Grey infrastructure features – green and blue infrastructure, particularly public open spaces, contain a wide range of built and or engineered 'grey' infrastructure features that exist within, support, and enhance the use, accessibility and management of these spaces and the public realm.

- Grey infrastructure features include surfaced paths, drains, heritage features, hard areas, play equipment, fencing, pavilions, public toilets and buildings, particularly to enable access, use and enjoyment of these spaces by everyone in our communities and to manage recreation pressures.

Please note: throughout this strategy, Green Infrastructure (GI) is used to describe green and blue infrastructure unless specified as well as integral grey infrastructure features.

2.3 Why is green infrastructure important?

The natural environment provides the water, food, clean air, shelter and other resources and 'services' upon which all life on earth depends. Even though we live increasingly urbanised lives, our human lives are part of and dependent on nature. A thriving and resilient green infrastructure network is essential to provide the multiple benefits, resources and functions of the natural environment, known as 'ecosystem services'.

Ecosystem Services are all the many 'services' which nature provides.

Natural components including rocks, soil, water, plants and animals provide a wide range of functions or 'ecosystem services' which are vital for people and nature to live and thrive. 'Ecosystem services' provide resources, regulate the environment, and support all life processes and our culture.

When green infrastructure is effectively planned, designed and managed this enables the vital, interconnected and multiple benefits of the 'ecosystem services' of the natural environment to be optimised for people and nature.

Ecosystem Services

Provisioning Services – are the products obtained from ecosystems.

Regulating Services – are the benefits obtained from the regulation of ecosystem processes.

Cultural Services – are the nonmaterial benefits obtained from ecosystems.

Supporting Services – are those services that are necessary for the production of all other ecosystem services.

Source: WWF Living Planet Report 2016, adapted from the Millennium Ecosystem Assessment 2005

> **'Different people value different ecosystem services for different reasons; thus policy and decision making often require trade-offs to be made.'**
> West of England Joint Green Infrastructure Strategy 2020

Please refer to **Section 8. Glossary** for definitions of key terms used throughout 'Greener Places'. For latest green infrastructure research, evidence, and policy visit the Town and Country Planning Association GI research database.

2.4 Our challenges – the role of green infrastructure

We recognise in our Council Plan that we need to work together to take action to respond to the challenges of the climate and nature emergency, to reduce the inequalities gap, improve health and wellbeing, and deliver value for money.

These are linked rather than competing challenges. A holistic approach and integrated action is needed to improve the health and quality of life of everyone in our communities and to achieve our goals for sustainability and the environment.

There is growing evidence and awareness of the benefits and importance for our health and wellbeing of living healthier, low carbon and nature connected lives as well as benefits for the environment and our economy. Well designed, connected and managed green infrastructure has a key role to play in an integrated response to these challenges and opportunities.

By understanding our challenges for both people and nature and the role and benefits of green infrastructure, we can work together across South Gloucestershire to deliver our vision.

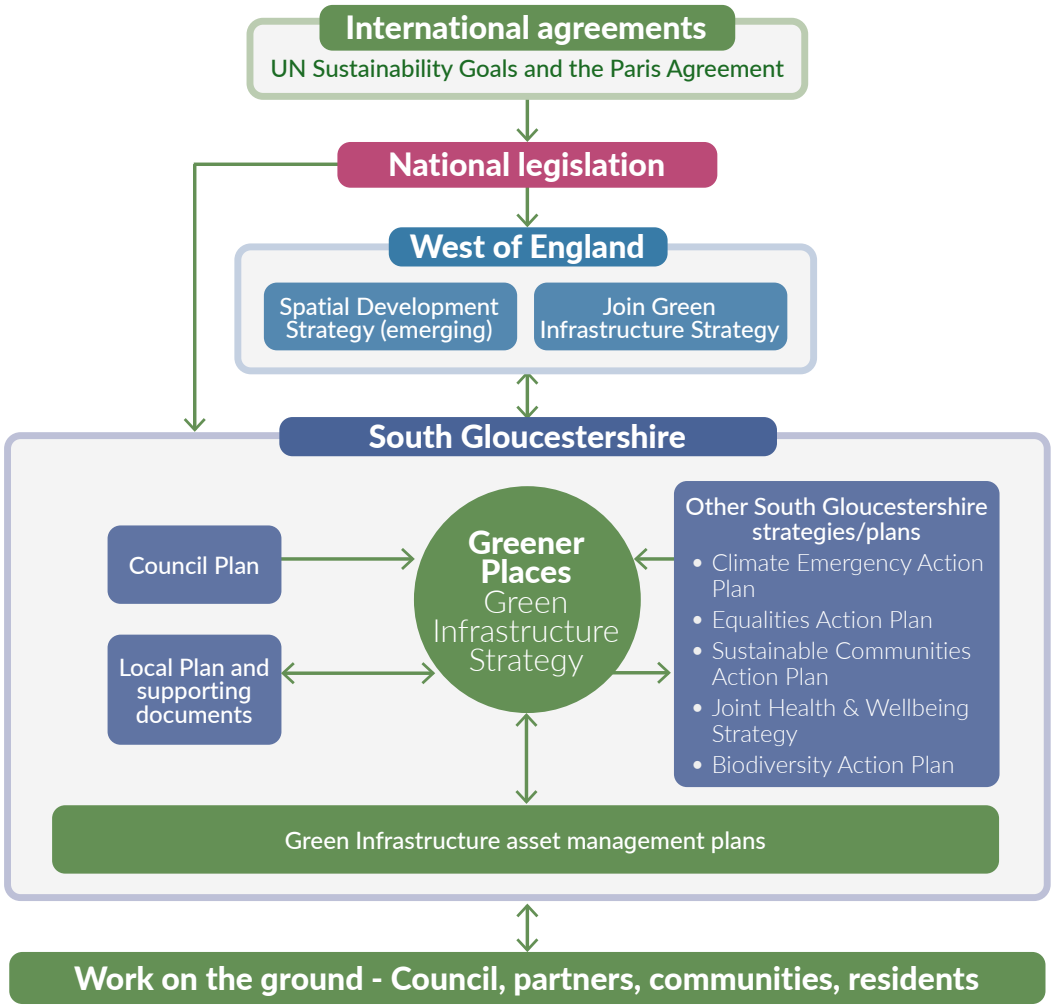
Credit: West of England Combined Authority – 'Joint Green Infrastructure Strategy'

2.5 Understanding our responsibilities

National legislation alongside regional and local policy sets out the requirements and our responsibilities for green infrastructure, and provides the key levers which drive change.

2.5.1 Our 'green thread' – strategic context

The '**green thread**' shows how we link our work with regional, national, and global commitments for the environment. It highlights how we are connected to the environment, and the difference we can all make in our everyday lives.



Raising awareness of these links is an important way that we are strengthening an integrated approach to environmental considerations across council services, work and decision making. This work is also a focus with our partners in the South Gloucestershire Local Strategic Partnership, who oversee implementation of our Climate Emergency Strategy which includes area wide commitments to reduce carbon emissions and for nature recovery.

2.5.2 International agreements

UN Sustainable Development Goals

Following a historic UN summit of world leaders in September 2015, on 1 January 2016, the 17 UN Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda for Sustainable Development officially came into force. These interlinked goals universally apply to all, and all countries are committed to mobilizing efforts to achieve the SDGs including to reduce inequalities, protect and restore nature, reduce carbon emissions, and manage land and water sustainably. All the SDGs have targets that are directly or indirectly related to the daily work of local and regional governments. Local governments are catalysts of change, and best-placed to link global and local goals. For each of our green infrastructure outcomes, we have highlighted the SDG each outcome mostly closely aligns with in Section 4 our Green Infrastructure priorities and outcomes.

Paris Agreement

The central aim of the United Nations Paris Agreement (negotiated at the 21st Conference of the Parties (COP) of the United Nations Framework Convention on Climate Change (UNFCCC) in Paris in December 2015), is to strengthen the global response to the threat of climate change by keeping global temperature rise this century well below 2°C above pre-industrial levels, and to pursue efforts to limit the temperature increase even further to 1.5°C. The Agreement sets a goal for net zero global emissions in the second half of this century. It also aims to strengthen the ability of countries to adapt to and deal with the impacts of climate change. The Paris Agreement was ratified by the UK in November 2016. Global emissions would need to peak soon and decline rapidly for the Paris Agreement goals to be feasible.

2.5.3 National legislation

Protection for nature

Many species of plants and animals in England and often their supporting features and habitats are protected under the Wildlife and Countryside Act 1981. This includes protection for bats, breeding birds, and specific reptiles, mammals and plants. Local authorities and other public bodies have an important role to play with regard to protected species and conserving biodiversity. This is underpinned by a 'Biodiversity Duty' which was introduced by the Natural Environment and Rural Communities Act 2006 (NERC), whereby all public authorities in England have a duty **'in exercising its functions, have regard, so far as is consistent with the proper exercise of those functions, to the purpose of conserving biodiversity'.**

The UK also has many different types of designated Protected Areas. Some are designated solely for nature conservation, while others are protected for a range purposes including nature, landscape, heritage, geology and amenity value. Protected Areas fall into a number of categories with specific requirements, responsibilities and standards for protection and management including Ramsar sites protected under global agreements, Special Areas of Conservation (SAC), Sites/Areas of Special Scientific Interest (SSSI) and registered commons. See Greener Places: **Section 6 - our Green Spaces Asset Management Plan** for more information about protected areas and sites in South Gloucestershire and our responsibilities.

The 25 Year Environment Plan 2018 and the Environment Bill 2021

The Government DEFRA 25 year Environment Plan 2018 sets out the national vision, ambition, priorities and action for the environment across the UK, to ensure that we **'leave the environment in a better condition than we found it'**. Aligned with the 17 United Nations Sustainable Development Goals and the United Nations 2030 Agenda for Sustainable Development, the Environment Plan highlights the impacts of climate change, land use pressures and biodiversity loss on the natural environment and sets out measures to drive the restoration of nature across the UK.

The Environment Plan is due to be enacted by the UK parliament through the new Environment Bill in 2021 to require specific considerations for and improvement of the environment. This is due to include:

1. **Strengthened biodiversity duty** – a strengthening of the Natural Environment and Rural Communities Act 2006 (NERC) duty for local authorities and all public bodies from **'conserving' to 'conserving and enhancing biodiversity'.**

2. **Local Nature Recovery Strategies** – a statutory requirement to develop Local Nature Recovery Strategies. Local Nature Recovery Strategies will include a statement of biodiversity priorities for the area covered by the strategy and a local habitat map that identifies opportunities for recovering or enhancing biodiversity.

3. **Biodiversity net gain** – Biodiversity net gain in development requires there to be an overall increase in natural habitat and ecological features. The Environment Bill will introduce new legally binding requirements and targets to enhance and improve biodiversity (biodiversity net gain) in development.

4. **New monitoring and reporting requirements** – Local authorities will have a duty to monitor and report on biodiversity net gain and Local Nature Recovery Strategy implementation.

District Level Licensing

South Gloucestershire Council is working with Natural England to run a District Level Licensing scheme. This scheme operates in certain parts of England to better protect great crested newt (GCN) populations in planning for new development. In the council's capacity as the Local Planning Authority we will work with Natural England and authorised bodies to manage the District level Licensing process which includes the establishment and monitoring of a 'pond bank' in South Gloucestershire.

National planning policy

The National Planning Policy Framework (NPPF) (February 2019) sets out the government's planning policies for England and how these are expected to be applied. The NPPF recognises the importance of integrating Green Infrastructure into development and the duties and obligations regarding Green Infrastructure in national legislation including The Town and Country Planning Act 1990. The NPPF includes requirements for open space, sport and recreation and local green space designations alongside Natural England Green Infrastructure standards. The South Gloucestershire planning policy context for green infrastructure is summarised below in Section 2.5.5.

Further legislation

In addition to planning and environment legislation, other key national legislation which includes requirements and responsibilities regarding the design and management of green infrastructure. This includes the Agriculture Act 2020 which will introduce a new Environmental Land Management (ELM) Scheme of payments from 2024 and The Equality Act 2010 which **'legally protects people from discrimination in the workplace and in wider society.'**

2.5.4 Regional – West of England

Regionally the endorsed West of England Joint Green Infrastructure Strategy 2020 translates national legislation within our local context and sets out the vision, priorities and regional programmes for Green Infrastructure across the West of England. The Joint GI Strategy informs the emerging West of England Combined Authority (WECA) Spatial Development Strategy, and WECA Climate Emergency Action Plan.

We work with WECA, our neighbouring local authorities (Bristol, Bath and North East Somerset and North Somerset), and environment partners through regional partnerships including the West of England Nature Partnership, Cotswolds Conservation Board and Bristol Avon Catchment Partnership to deliver statutory duties and agree regional targets and action to restore, connect and improve green and blue infrastructure across the region. Regional priorities, targets and action for the protection, restoration and increase of trees and woodlands across the West of England are set out in the West of England Trees and Woodland Strategy.

Recognition of the role and value of green infrastructure is also included in the West of England Local Industrial Strategy, the Joint Local Transport Plan 4 and other regional plans and policy prepared by public sector, businesses, statutory and voluntary sector partners from across the region, working closely with national government.

2.5.5 Local – South Gloucestershire strategic context

The above international, national and regional strategic context informs our council corporate priorities as set out in the Council Plan 2020 - 2024 and South Gloucestershire Sustainable Community Strategy 2036 for our Place, our Economy, our Communities and our Health. This strategic context also underpins preparation and implementation of our Local Plan which will set out our plans for housing and development over the coming years.

South Gloucestershire Planning Policy

There are two key planning policies that relate to green space requirements for new development in South Gloucestershire in our Core-Strategy-2006-2027. Policy CS2 covers Green Infrastructure while Policy CS24 covers Green Infrastructure, sport and recreation standards. Appendix 5 gives accessibility standards that include minimum quantity and accessibility requirements for informal recreational open space, natural and semi natural green space, outdoor sports facilities, provision for Children and Young People and allotments. These are all set out in Core Strategy 2006-2027 and will be reviewed as part of the new Local Plan.

Greener Places is a corporate strategy, rather than statutory planning policy, and includes information, material evidence and considerations to inform future planning policy.

The adopted South Gloucestershire Landscape Character Assessment (2014) provides a statement of the character of South Gloucestershire's landscapes, their distinctive attributes and features, together with an assessment of the changes that are taking place in the landscape alongside guidance and recommendations to help steer future evolution.

Further detail of South Gloucestershire Planning Policy for green infrastructure is set out in a GI Supplementary Planning Document (SPD) 2021. This SPD describes and explains the adopted Local Plan policy (CS2), a check list of requirements planning applications should follow and case studies to emphasise good practice. Supplementary Planning Documents for Trees on development sites and Sustainable Urban Drainage Systems also set out green infrastructure and climate emergency considerations and requirements within new development, including. A further Biodiversity and Planning SPD will follow enactment of the Environment Bill.

Please refer to Section 9. References for a more comprehensive list of legislation, policy, strategy and research evidence informing Greener Places and to the GI Supplementary Planning Document (SPD) 2021 for a further detailed planning legislation and policy flowchart

Implementing our Council Plan commitments and priorities

Implementing the outcomes, commitments and actions of the Greener Places Strategy contributes to delivering the following commitments and Action Plans of Priority 3 of the Council Plan:

Council Plan Priority 3:

Promoting sustainable inclusive communities, infrastructure and growth.

- **Action Plan 12** – We will clean streets and maintain roads effectively
- **Action Plan 13** – We will lead the response to the climate emergency and deliver on our commitments
- **Action Plan 14** – We will promote clean, affordable, high quality design of new and existing communities
- **Action Plan 15** – We will plan to join up housing and the appropriate infrastructure such as schools and transport networks that make it easier for people to get around, prioritising sustainable and low carbon travel choices
- **Action Plan 16** – We will enable people and business to recover and thrive within cohesive communities that value diversity

3

What you have told us

3 What you have told us

Engagement with residents and our partners has played a key role in development of the Greener Places Strategy and Action Plan, and the Greener Places Equality and Diversity Impact Assessment and Action Plan (EqIA).

This includes work to co-identify issues and produce solutions to improve access to, management of, and broaden engagement in public open spaces and the wider environment, and to influence design for green infrastructure within new communities. This approach of co-production and review of progress, priorities and actions will continue as the Strategy is implemented.

Through our work during 2020/21 to prepare the Greener Places Strategy we have undertaken public and targeted engagement. The following include some of the groups we have worked with reflecting our commitment to involve everyone in our communities, particularly people with protected characteristics:

- Public consultation 2021 – 108 survey responses and 10 email responses
- Viewpoint survey (included specific green space questions) – 871 responses
- Greener Places public engagement survey - 510 responses
- Climate Emergency Engagement Forum (South Gloucestershire)
- Community Engagement Forums (South Gloucestershire)
- Community Spaces Network (South Gloucestershire)
- Disability Equality Network (South Gloucestershire)
- Equalities Forum (South Gloucestershire)
- Lesbian, Gay, Bisexual, Trans, Queer (LGBTQ) Equality Network (South Gloucestershire)
- Over 50s Forum (South Gloucestershire)
- Race Equality Network and Black2Nature (South Gloucestershire)
- Sensory Impairment stakeholders group (South Gloucestershire)
- The Diversity Trust
- Town and Parish Council Forum (South Gloucestershire)
- Young Ambassadors (South Gloucestershire)

The South Gloucestershire Council Resident Viewpoint survey 2020, Greener Places engagement survey 2020, and StreetCare 2021 survey findings tell us that public open spaces, the natural environment and our heritage are highly valued by residents in South Gloucestershire. In particular surveys and engagement undertaken during the Covid 19 pandemic in 2020 and 2021 have highlighted how both use and valuing of green spaces increased.

3.1 Public Consultation - 2021

A public consultation was held from 17 June to 12 September 2021 to gather feedback from residents and stakeholders, including what they thought about our plans, vision, objectives, content and clarity of the strategy. A full draft strategy along with a summary version and web accessible version was published on the council website. An Equality Impact Assessment was also shared alongside the strategy on our consultations webpage.

The consultation was promoted through our social media channels, consultation email list, resident update and other newsletters. We also arranged workshops and presentations with community groups and our Community Engagement Forums. We met with people and groups from Black, Asian or Minority Ethnic backgrounds to prepare and consult on the draft strategy including the South Gloucestershire Race Equalities Network, Black2Nature and Equalities Voice. We also met with the Diversity Trust, South Gloucestershire LGBTQ Equality Network and Equalities Voice.

There was strong overall support for the strategy vision and what it is aiming to achieve. 75% of those responding to the online survey thought the content of the strategy was good with ambitious goals and objectives. 74% said they felt the explanation of the issues in the strategy were either 'good' or 'very good' whilst only 38% rated measuring progress as 'good' or 'very good'.

People were keen to see the Action Plan to deliver the strategy, and to understand more about the resources needed.

We supported the survey work with qualitative engagement of equalities and diversity groups as part of our pre-engagement and public consultation work. We will continue to build on and extend this engagement as we implement our equalities action plan and seek to engage with individuals and groups to improve green spaces and make them inclusive for everyone.

The findings of our public consultation survey and engagement work have been used to inform:

- updating of the strategy documents to revise content and information, taking into account the consultation comments and findings
- preparation of the Action Plan which will accompany the final strategy papers, and provide further detail of the actions we will take and how success will be measured
- continuing engagement with equalities groups and particularly with people of Muslim faith and people from Black, Asian and Minority Ethnic backgrounds to understand the issues and identify solutions to improve satisfaction levels with green spaces

3.2 Viewpoint Survey - June 2020

Additional questions were added to the council annual Viewpoint survey in 2020 to identify any changes in use, perceived value and barriers to using green space by residents before and during the Covid 19 pandemic. 48% of survey respondents reported that they **used** green spaces more and 60% reported they also **valued** green spaces more since before the Covid 19 pandemic, particularly because of the benefits for their health and wellbeing. Virtually no one reported they value green spaces less (1%).

It is significant that 96% of people whose housing does not have access to a private or shared outdoor space reported they were significantly more likely to use green spaces, compared to 45% of people who have access to outdoor space. This is an important issue we are following up to improve access to local green space in communities where people need it most.

28% of respondents reported using green spaces less since the Covid 19 pandemic including those who have been shielding and people who have avoided using green spaces due to higher numbers of people visiting them during the pandemic. We listened to this important feedback and undertook work to help make our green spaces safe during the pandemic and into the future for everyone according to the latest requirements and advice including:

- Working closely with neighbouring local authorities and services, such as the police, to make sure our approach, information and work is consistent across the region, particularly for communities on our borders. This work has had a positive and wider impact as we are now collaborating more closely across the region regarding a range of green space management issues as a result of our work together during this time.

- With increasing numbers of people using green spaces for daily exercise, on our busiest sites we have increased our inspections to optimise the safety of all visitors.

- Strengthening our communications through the council Covid 19 Response team and StreetCare communications to keep in touch with residents as well as sharing information in notices on green spaces and through partner networks.

3.3 Greener Places Engagement Survey – Autumn 2020

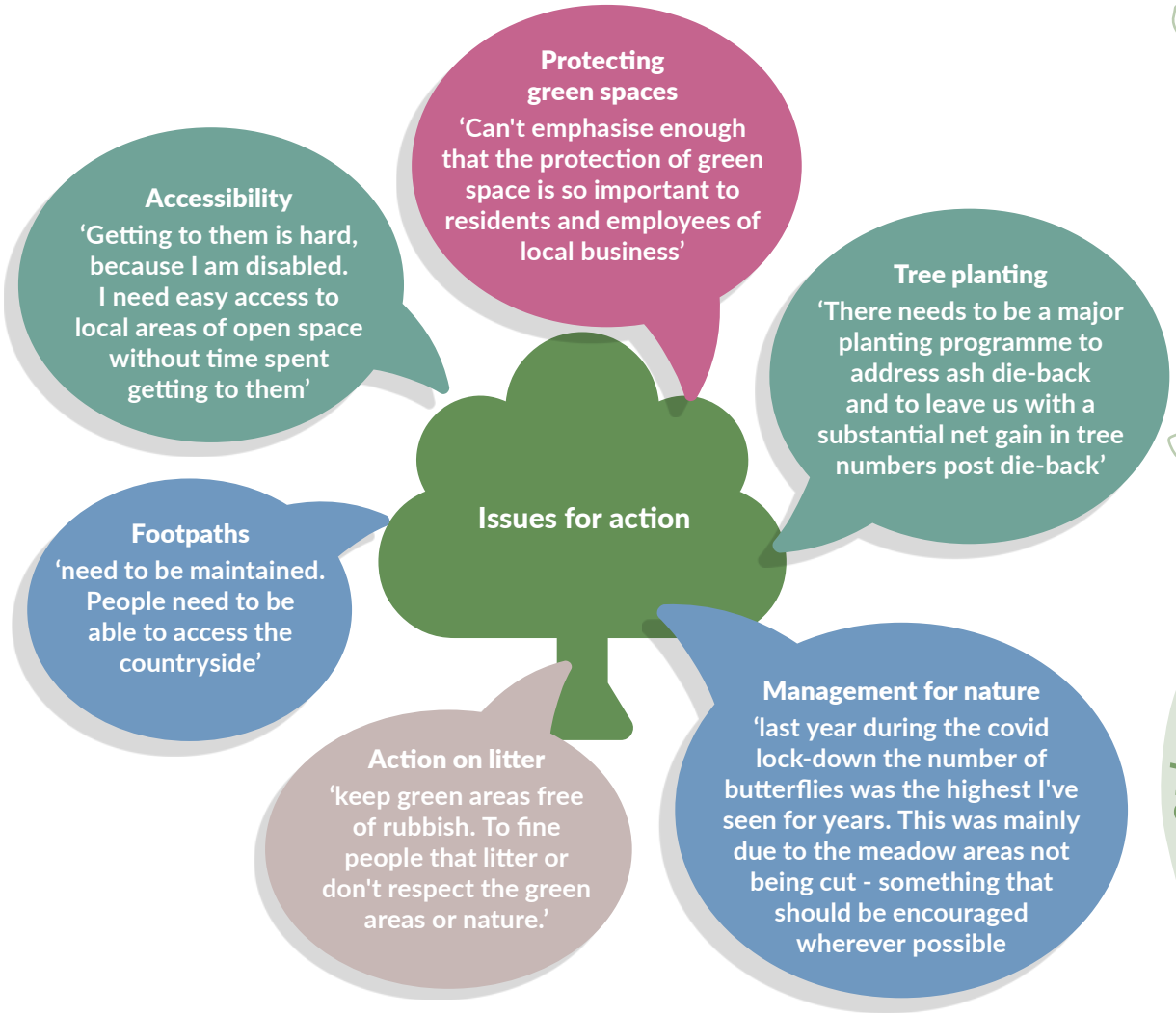
Building on the Viewpoint findings, an engagement survey was held autumn 2020 to help us further understand more about how people use and value green spaces and how we can make them more welcoming and accessible for everyone. The findings and suggestions of this survey have informed the priorities and commitments of our green infrastructure outcomes and the management of green spaces the council is responsible for through our Green Space Asset Management Plans.

Complementing the data, engagement survey respondents also reported powerful comments about the importance of green spaces, particularly during the pandemic for their health and wellbeing including:

Comments received through our engagement survey which reflect the wider benefits of green spaces respondents reported for their health and wellbeing include:

Some of the barriers and issues for action highlighted by engagement survey respondents include:

Understanding barriers and co-production of solutions regarding access to and use of green spaces, particularly for people with protected characteristics, continues to be at the heart of our engagement work as further detailed in Section 4.4 Improved health and wellbeing for all.



4

Our green infrastructure priorities and outcomes

4 Our green infrastructure priorities and outcomes

Our priorities, outcomes and commitments for green infrastructure incorporate and contribute to our Council Plan priorities, and the eight regional agreed outcomes for green infrastructure of the Joint Green Infrastructure Strategy (JGIS). These regional outcomes have been endorsed by all four West of England Unitary Authorities (Bath and North East Somerset, Bristol, North Somerset and South Gloucestershire) and the West of England Combined Authority (WECA) and underpin our work together across the region for green infrastructure.

Recognising that a co-ordinated approach and strong partnership work is required to achieve these outcomes, we have added a further ninth green infrastructure outcome for 'Stronger working together'.

By putting this strategy into action, the outcomes we strive to achieve are:

- Protected and restored nature
- Greater resilience to the changing climate
- Sustainable water management
- Improved health and wellbeing for all
- Sustainable places
- Valued healthy landscapes
- Sustainable and local food production
- A green and resilient economy
- Stronger working together

For each of these outcomes we have identified commitments which set out what we aim to achieve. The actions we will take to deliver these commitments are set out in our Action Plan. We will review, report on progress and update our Action Plan each year.

Continued engagement with our partners and residents alongside new evidence, local and regional strategies and policies, and national legislation will continue to underpin, inform and shape our work together, our commitments and action plan for green infrastructure to deliver our vision for **'greener places where people and nature thrive'**.

4.1 Protected and restored nature

Our commitment

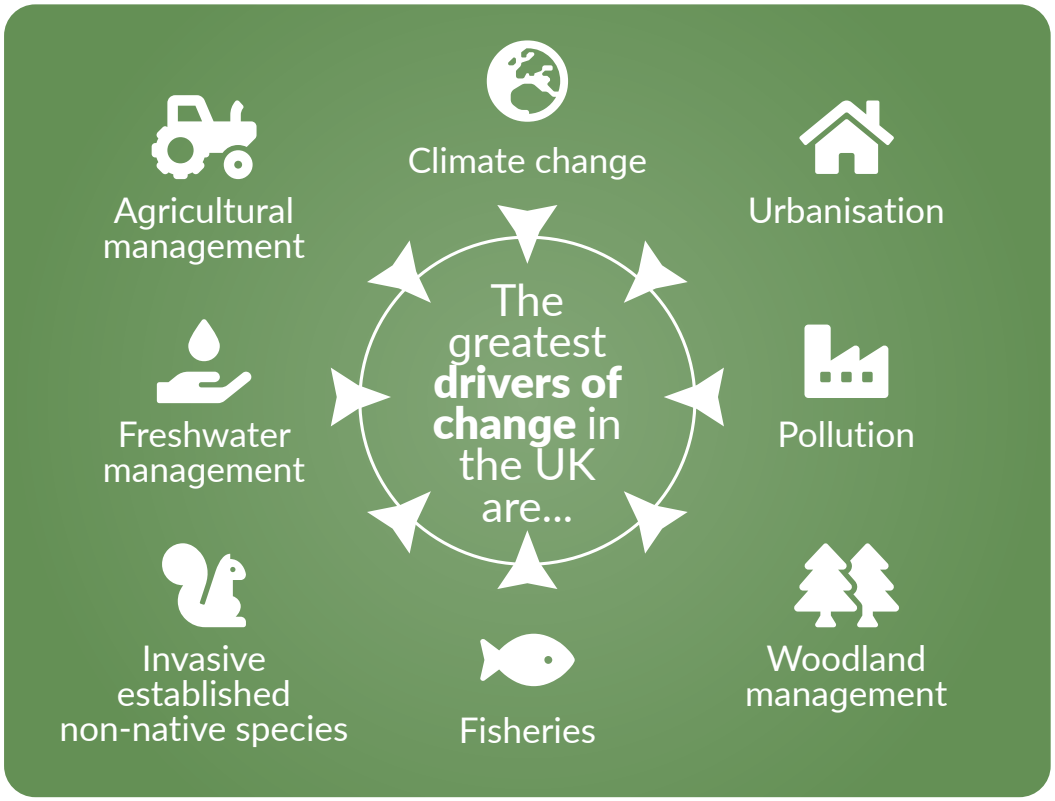
Protect, restore, connect and increase nature.

Creating 'bigger, better, more and connected' habitat for nature – our 'Nature Recovery Network', is central to our plans and work to respond to the Nature Emergency.

Why this matters

All life on earth is dependent on a healthy, thriving, and resilient natural environment. Our food, water, the air we breathe, the places where we live, and our lives are inextricably linked to and part of the natural world.

However, nature is in crisis. Globally and locally we are facing a dramatic decline in nature because the natural environment is under growing pressure from a range of factors including development, intensive agriculture, changes in land and water use, climate change and increased levels of pollution.



The key factors which are driving land use change and nature loss in the UK
UK State of Nature Report 2019 - National Biodiversity Network NBN
Source: State of Nature 2019 Infographics - National Biodiversity Network (nbn.org.uk)

These pressures are causing a collapse of the natural ecosystems on which all life on earth, including human life, is part of and depends:

Globally

The Global Assessment Report on Biodiversity and Ecosystem Services 2019 (IPBES) reports that:

- almost three quarters of land and 66% of marine environments have been significantly altered by humanity and more than 85% of wetland areas have been lost
- 60% of the world's wild animals have been lost since 1970 including 83% of wildlife in freshwater rivers and lakes
- 75% of human food crops rely on insect pollination, yet insect numbers are plummeting at alarming rates with significant implications for natural systems and human food supply

Nationally

The UK State of Nature Report 2019 - National Biodiversity Network (nbn.org.uk) identifies that:

- 97% wildflower meadows and 50% ancient woodlands gone since World War 2
- 15% of UK species under threat of extinction and 2 % now extinct since 1970
- 46% decline in butterflies and 95% of hedgehogs

Locally

- In the West of England we have seen a devastating 96% decline in our swifts and starlings

Insects in focus

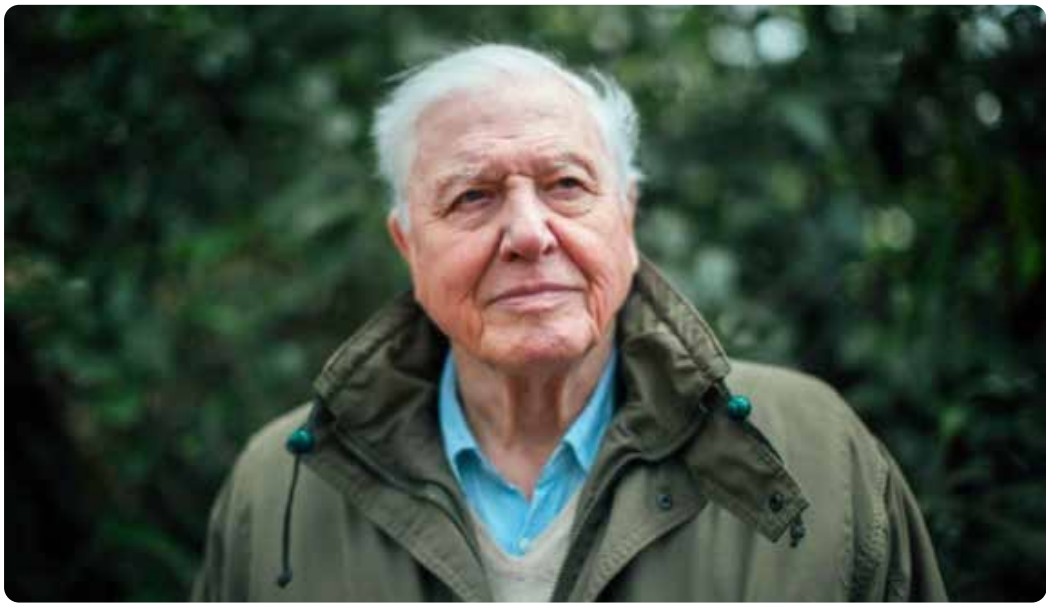
- Insects are a vital part of natural ecosystems. Globally, insects are facing a rapid decline which is causing grave threats for nature, global food production, our health and security. Global Assessment Report on Biodiversity and Ecosystem Services (IPBES)

- Globally around 75% of the food crops grown by humans require pollination by insects.
- Due to the loss of insect pollinators, in some countries crops and fruit trees are requiring pollination by hand with rising impacts for nature, food security and costs
- Insects are a key part of natural food chains and alongside the decline in insects, in the UK we are losing many insect eating birds including 93% nightingales and 77% cuckoos, and 96% of our swifts and starlings in the West of England in recent years
- Closer to home, 2016 was the last recorded sighting of a nightingale in South Gloucestershire. Bristol regional environmental records centre

University of Bristol Urban Pollinators Project

'Economically, the total value of crops pollinated by insects is estimated to be £510m per year in the UK (Breeze et al. 2012). The actual cost of replacing the pollination services provided by these insects with hand pollination is estimated at £1.8bn per year.'

Globally, the pollination services provided by insects, are estimated to be worth **EURO 153 billion a year** Cordis Europa 2020



'The truth is the natural world is changing. And we are totally dependent on that world. It provides our food, water and air. It is the most precious thing we have, and we need to defend it.'

Sir David Attenborough, BBC 2020

Locally, South Gloucestershire has a rich natural and historic environment, in both urban and rural areas. However, due to global, national and local pressures, our environment is under increasing pressures and we need to act now to ensure that we have a healthy, natural environment, now and for future generations where people and nature can thrive.

What do we want to achieve?

Working across the council, with our partners, businesses, local landowners and residents we want to work together to protect and restore nature across South Gloucestershire. We want 'to ensure that nature in our local area is more protected, connected and healthy and that biodiversity is increased' South Gloucestershire Climate Change Strategy 2018 - 2023

West of England Nature Partnership
Joining up the dots for nature

With our partners we want to play our part in delivering a regional vision for:
'a thriving and well connected natural environment in the West of England that underpins a healthy and resilient society and economy'

West of England Nature Partnership (WENP)

This vision for a restored natural environment aligns with the following outcomes of the Joint Green Infrastructure Strategy and the UN Sustainable Development goals:

Joint Green Infrastructure Strategy 2020 outcome – 'Improved and better-connected ecological networks: protect, enhance and expand coherent, thriving and resilient ecological networks that deliver net gains in biodiversity and ecosystem services, including the creation of bigger, better, more and joined-up woodland, grassland and wetland habitats to achieve the ambitions of the West of England Nature Recovery Network.'

UN Sustainable Development Goal 15 – Life on Land – 'Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.'

Our mission – to protect and restore nature across South Gloucestershire: Working with our partners, businesses, local landowners and residents we will work together to protect and restore nature by creating bigger, better, more and connected habitat for nature across South Gloucestershire.

We will take action to deliver the commitments in our Action Plan 'for nature to be better protected, bigger, better, more and connected across our area by 2030.'

The role of green infrastructure to restore nature

Restoring nature – a bigger, better, more and connected Nature Recovery Network

Increasing and improving the Nature Recovery Network (NRN) across the UK is right at the heart of the vision, goals and commitments of the government's 25 Year Environment Plan to achieve a national network of wildlife-rich places across our towns, cities and countryside.

> **The Nature Recovery Network is:** 'An expanding, increasingly connected, network of wildlife-rich habitats supporting species recovery, alongside wider benefits such as carbon capture, water quality improvements, natural flood risk management and recreation. It includes the existing network of protected sites and other wildlife rich habitats as well as landscape or catchment scale recovery areas where there is coordinated action for species and habitats.' The National Planning Policy Framework (NPPF) Glossary

By improving the size, quality, and connectedness of habitat for nature, we can create stronger natural networks which enable wildlife to thrive, move and be more resilient to climate change and other pressures compared to isolated and fragmented habitat. A stronger, bigger and better connected natural network also supports our health and wellbeing through improving opportunities for recreation and active travel as well as carbon capture, improved water quality and flood management.

The South Gloucestershire Biodiversity Action Plan 2016 - 2026 presents the local requirements, evidence, context, challenges and areas for action to restore nature across South Gloucestershire and highlights the importance of taking action to restore our Nature Recovery Network.

Working with our local and regional partners in the West of England Nature Partnership (WENP), Nature Recovery Network gaps, opportunities and priorities for **woodland, grassland and wetland habitat** have been mapped across the West of England. This work also highlights the important role of hedgerows, dry stone walls and verges for providing habitat, links and connectivity for nature.

The design, planning and management of green infrastructure is central to achieving our Nature Recovery Network goals to create bigger, better, more and connected habitat for nature.

Changing management for nature

As well as increasing the area of our green infrastructure network, significant gains for nature, places and people can also be achieved through changes to the management of land and waters within our existing green infrastructure network. For example, see Section 6 our green spaces asset management plan regarding changes to the management of our highway verges and other land the council is responsible to increase the amount and network of species rich grassland across our area to provide vital habitat for pollinating insects and other wildlife.

By working with our partners we can identify and share best practice and make these changes together to restore nature and create thriving, resilient, connected and nature rich and greener places across our area.

Trees and woodlands

Trees and woodland provide vital habitat for a wide range of plants and wildlife. Trees also provide other multiple benefits for the environment and for people including air, water and soil quality, cooling and shading. Trees and woodlands enhance the visual landscape and positively improve our health and wellbeing.

> **The Woodland Trust's, State of Woods and Trees report 2021, highlights that: 'Woodland cover is gradually increasing, but woodland wildlife is decreasing. The trends for the UKs woods and trees are concerning. The UK's woodland cover has more than doubled in the last 100 years, but much of this is non-native trees. Existing native woodlands are isolated, in poor ecological condition and there has been a decline in woodland wildlife.'**
> State of the UK's Woods and Trees 2021 (woodlandtrust.org.uk) Page 4

To increase our woodland Nature Recovery Network, support the resilience and adaptation of nature to climate change and other pressures we need to increase tree cover across the UK as set out in the draft Tree Strategy for England.

The Forest of Avon Plan – A Tree and Woodland Strategy for the West of England – provides a coherent strategy and shared plan for trees and woodlands across the region to deliver a vision of **'more, better managed and connected trees and woodland making a vital contribution to a thriving natural environment, society and economy'**. The plan highlights provisional figures from the Environment Agency's Natural Capital Tool which estimate that woodland in the West of England is worth £717 million in carbon sequestration, air quality improvements and hazard regulation alone.

South Gloucestershire Tree Asset Management Plan – the priorities and our plans for the management of trees the council is responsible for are set out in the South Gloucestershire Tree Asset Management Plan and Section 6 our green spaces asset management plan.

Doubling tree canopy cover – trees and woodland cover approximately 11% of South Gloucestershire. When South Gloucestershire Council declared a Climate Emergency to provide the leadership for South Gloucestershire to have net zero carbon emissions by 2030, a commitment was also set to double tree canopy cover across our area. We are working with our partners to plant and establish trees across South Gloucestershire by 2030, to double tree canopy cover at maturity. This includes ensuring that we plant the right trees in the right place with appropriate care in place and consider future conditions particularly climate change to optimise the resilience and contribution of our trees and woodlands.

Street trees – planting more trees within existing and new communities is an important way of greening our communities for nature and people to provide multiple benefits including flood resilience, air quality, cooling and shading and plays an important role in our tree planting plans.

Ash dieback – Approximately 20% of our tree canopy cover in South Gloucestershire is ash and in line with national projections, we anticipate losing at least 90% of our ash trees over the next eight years due to the ash die back fungus, Hymesnoscyphus fraxineus. This shocking and at scale loss brings significant challenges for the health of our woodlands, our ambitions to increase tree canopy cover, alongside increased risks from diseased trees falling. We are responding to this challenge by:

- A planned approach to the assessment of all ash tree stock to prioritise tree works to higher risk locations including schools and highways to reduce the level of risk.
- Alongside goals to increase tree canopy cover, where ash is removed, where appropriate to replant with a mixture of species or allow natural regeneration to support future woodland resilience to new diseases.
- Planting with UK, locally sourced and grown tree stock to reduce future biosecurity risks from new diseases and pests.

Biosecurity - non-native invasive species and diseases

Around 10 new non-native invasive species of plants and animals come into and establish each year in the UK. Around 12% of these cause serious impacts and are classed as invasive, costing millions each year to control. This includes giant hogweed (human health risks), signal crayfish (freshwater ecology risks), Japanese knotweed (infrastructure risks). National Biodiversity Network NBN non native species.

A proactive approach to biosecurity is essential to control and stop the spread of non-native invasive species and diseases. This includes measures for procurement regarding sourcing of trees, plants and animals, information sharing, hygiene and control measures to stop the spread and protect nature and people.

Environmental care

Environmental crimes from dropping litter and fly tipping to trafficking of endangered species have a devastating impact on wildlife and natural habitats. For example, in addition to risks and hazards for human health, Keep Britain Tidy estimates that 2.9 million small mammals including shrews, hedgehogs and voles are dying each year after getting stuck in litter discarded across the UK.

A robust approach to environmental crime including prosecution, as well as education, raising awareness and measures to 'design out crime' are key areas of work to protect nature and people as set out in section 6 our green spaces asset management plan and the council Resources and Waste Strategy.

4.2 Greater resilience to the changing climate

Our commitment

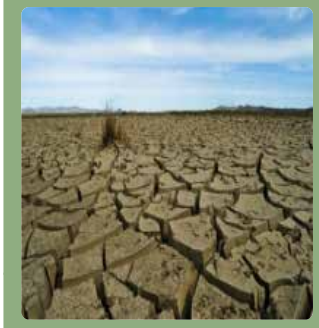
We will respond to the Climate Emergency by strengthening our green infrastructure to support adaptation and resilience to the changing climate.

Why this matters

South Gloucestershire Council declared a Climate Emergency on 17 July 2019 and has committed to provide the leadership for South Gloucestershire to be carbon neutral by 2030 as set out in our Climate Emergency Strategy and annual Action Plans.

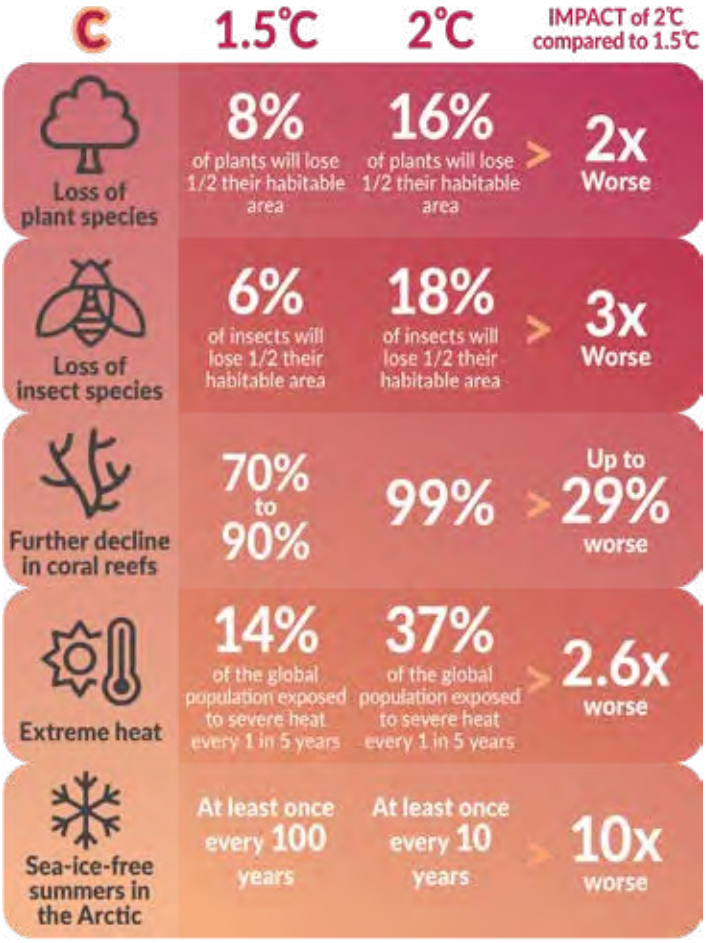
Climate change is occurring as a direct result of global heating, largely due to increases in greenhouse gasses caused by human actions. Most of these emissions come from the combustion of fossil fuels for transport, heating, buildings, factories, as well as other sources of emissions from agriculture and waste as set out in our carbon baseline assessment.

The changing climate is already causing significant impacts. This includes affecting our food and water supply, air quality, our health and wellbeing, built infrastructure, our economy, and all natural ecosystems. We also know that climate change is disproportionately adversely impacting those of us who are already experiencing inequality Intergovernmental Panel on Climate Change 2020 and action is needed to achieve the United Nations 2030 Agenda for Sustainable Development central commitment to **'leave no one behind'.**



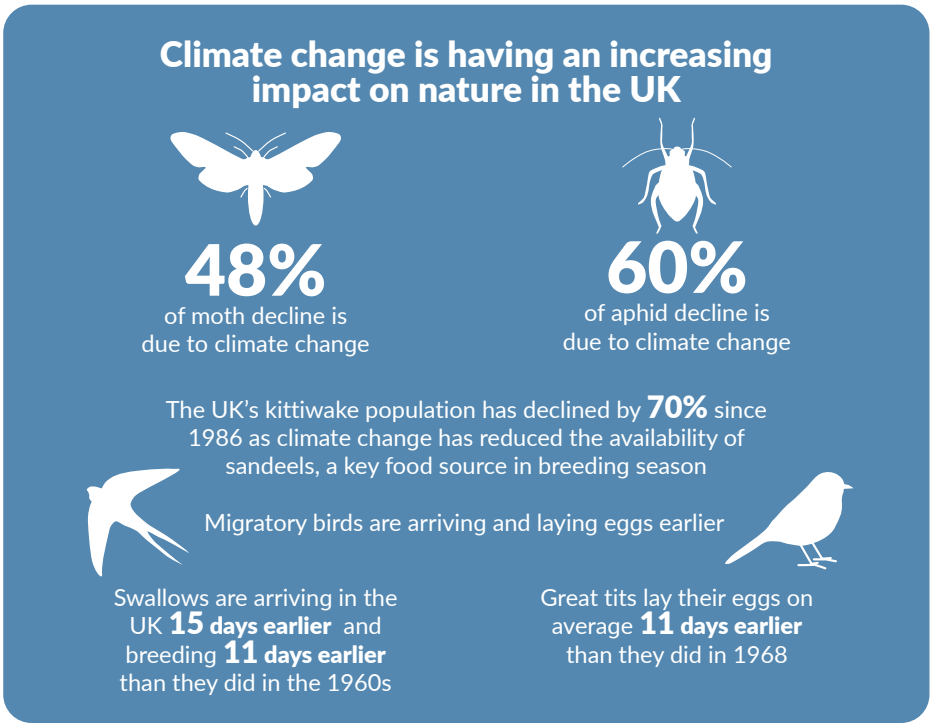
The changing climate
Average UK temperatures have increased by nearly 1°C since the 1980s with widespread impacts evident already for nature and people.

Projected impacts of a 1.5°C or 2°C global temperature rise



- The impact of average warming of **2 degrees C** is much greater than average warming of **1.5 degrees C**.
- **2 degrees C** warming would lead to severe consequences for humans and all life on earth.
- Many people would be forced to leave their homes due to flooding, droughts and famine.

The impacts of climate change for nature in the UK



The Intergovernmental Panel on Climate Change highlights that globally, 20-30% of species on Earth may be at risk of extinction if the climate warms by an average of 1.5°C and most ecosystems will struggle if the planet warms by more than 2°C. In the UK 48% of moth decline and 60% of aphid increase is due to climate change placing significant pressures on already fragile natural ecosystems and agriculture UK State of Nature Report 2019 - National Biodiversity Network.

What do we want to achieve?

Our vision is for:
'a climate resilient South Gloucestershire with a thriving low carbon economy and lifestyle reflected in our travel, homes, businesses and communities, where nature can flourish.'

South Gloucestershire Climate Emergency Strategy 2020

This vision for a climate resilient South Gloucestershire aligns with the following regional outcomes of the Joint Green Infrastructure Strategy and the UN Sustainable Development goals:

Joint Green Infrastructure Strategy 2020 outcome – 'Greater resilience to a changing climate : Provide natural solutions to build resilience against the impacts of climate change including use of well-designed Green Infrastructure to stabilise slopes and attenuate flood water, absorb carbon, and increased use of trees to reduce urban heating.'

UN Sustainable Development Goal 13 – Climate Action – 'Take urgent action to combat climate change and its impacts'

The role of green infrastructure in our climate emergency response

Green infrastructure plays a key role in capture and storage of carbon, and provides natural solutions for adaptation and resilience to the changing climate.

Natural capture and storage of carbon

Carbon sequestration is the process of capturing carbon dioxide from the atmosphere through biological, chemical, and physical processes. Green (including blue) infrastructure plays a vital role in carbon sequestration, through the natural life processes of trees, vegetation, algae and phyto plankton.

Carbon storage is the long-term confinement of carbon in plant materials, soils, sediment, rocks and 'fossil fuels', and is measured as a total weight of carbon stored.

When green/blue infrastructure is lost, particularly carbon rich habitat such as peaty soils, salt marsh and sea grass meadows, carbon is released back into the atmosphere which is a key driver for climate change. We need to protect carbon already locked into existing green/blue infrastructure and create more opportunities for carbon sequestration through habitat restoration and creation.

- **Grasslands** – UK grasslands hold two billion tonnes of carbon in their soils with potential to store more through changes of management to species-rich meadows with low density grazing. Between 1990-2006, conversion from grassland to arable production (such as ploughing to grow crops) released 14 million tonnes of CO_2. www.wildlifetrusts.org/grassland-solutions

- **Woodlands** – woodland in the UK removed 18.1 million tonnes of carbon dioxide in 2017, equating to a value of £1.2 billion. Office for National Statistics ONS Natural Capital Accounts 2020. This is equivalent to 4% of total UK greenhouse gas emissions in 2017. Most woodland carbon is stored in the soil rather than trees and much of our land in the UK would naturally support woodland.

- **Wetland and marine ecosystems** – wetlands, salt marsh and peat bogs sequester carbon at a much faster rate than forests, and can continue to do so for millions of years. Coastal ecosystems such as tidal marshes and seagrass meadows sequester and store more carbon per unit area than forests and are now being recognised for their role in mitigating climate change. www.iucn.org/resources/issues-briefs/blue-carbon These ecosystems also provide essential benefits for climate change adaptation, including coastal protection and food security for many coastal communities.

- **The Severn estuary salt marsh in focus** – the Severn estuary holds the largest aggregation of salt marsh habitat in the south and southwest of the UK, covering about 1,400 hectares in total. Severn estuary salt marsh sequesters nearly 11,000 tonnes of carbon dioxide/year (21 kg per hectare per day). Real World Visuals - carbon sequestration in the Severn Estuary

Green infrastructure provides nature-based solutions for climate change adaptation and resilience

Climate change adaptation involves adjusting, reorganising, and evolving natural or human systems in response to the actual or anticipated impacts of climate change. Adaptation improves the sustainability of a system, leaving it better prepared and more **'resilient'** to future impacts.

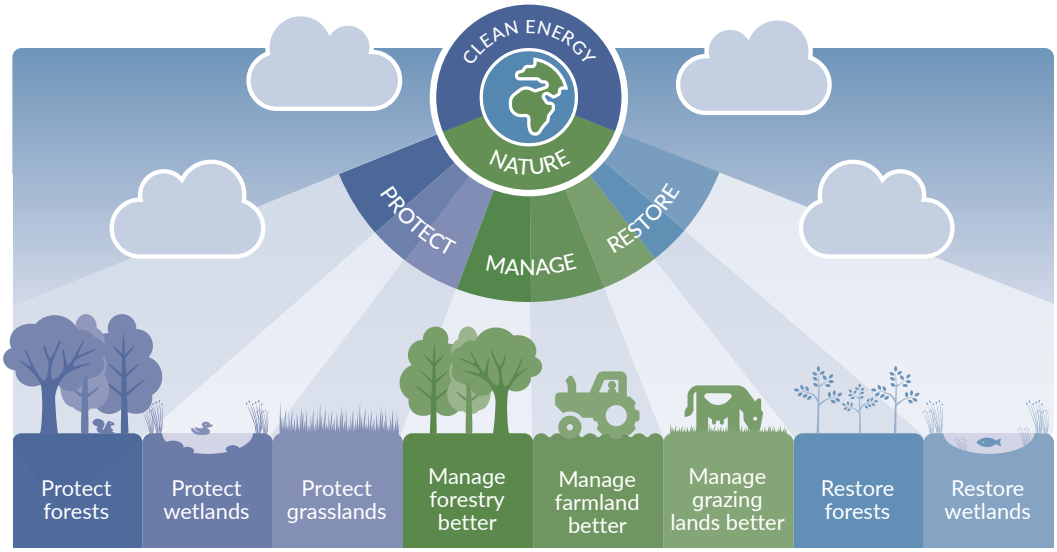
Well designed and managed green infrastructure helps adaptation to a changing climate by supporting:

- **Resilient communities** – working with nature and natural processes to help protect our built infrastructure and communities from flooding, drought, heating and other impacts of a changing climate by designing and managing green infrastructure to provide nature-based solutions for rainwater drainage and storage, shading and cooling.

- **Resilient nature** – Ecologically thriving, nature rich and well-connected green infrastructure is more resilient to future risks including the changing climate, new pests and diseases.

- **Cooling and shading** – Summer cooling of businesses by trees and greenspace is worth at least £3.63 million annually in the West of England (Forest of Avon Plan citing: Economics for the Environment Consultancy (EFTEC) and others, Scoping UK Urban Natural Capital Account, June 2018, p.4.)

- **Green spaces and networks to enable Zero carbon, healthier lifestyles** – green and blue spaces within our communities boost local recreation and provide networks for travel by walking, cycling and wheeling to support adaption to zero carbon and healthier lifestyles.



Source: Nature4Climate natural climate solutions

Well planned, designed and managed green infrastructure plays a key role in providing 'nature based solutions' to sequester carbon and enable our built infrastructure and communities to be better adapted and more resilient to the impacts of a changing climate.

By contributing to the adaption and resilience of our communities, 'nature-based solutions' also help mitigate the risks of deepening inequalities due to impacts of the changing climate, alongside the health and wellbeing benefits of access to local green spaces.

Through an integrated approach to protecting, planning, designing, and maintaining green infrastructure, we can work together to achieve our goals for climate change resilient places, healthier lives and zero carbon communities where nature can flourish.

Tree planting at Warmley Forest Park during Tree Week 2019

4.3 Sustainable water management

Our commitment

We will take action to respond to and manage flood and drought risk, improve water quality, restore our rivers, and connect wetland habitat.

Why this matters

Blue infrastructure includes all areas of wetland, rivers, streams, tributaries, standing waters (lakes, ponds, ditches and marshes), coastal waters and estuaries. The quality and health of our blue infrastructure is a key indicator of the condition of the wider green infrastructure network.

In South Gloucestershire, the rivers Avon and Frome, their tributaries and catchments provide vital wetland habitat and blue infrastructure networks for wildlife across our area. The low lying vales and coastal margins of the Severn estuary is designated as a Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site due to the international importance of this unique wetland habitat for wildlife.

Across South Gloucestershire there are also many ponds, lakes, streams, drainage ditches and watercourses. Where these blue infrastructure assets are on Council land or we have responsibilities for them, we manage these assets with our partners as set out in Section 6: our Green Spaces Asset Management Plan

Locally and globally our river catchments, lakes, ponds, coastal areas, and wetlands are under growing pressures from pollution, development, agriculture, unsustainable fishing, and climate change. These pressures are causing fragmentation and reduction of vital wetland and marine habitat, reduced water quality and poorer flood and drought resilience. For example, The World's Forgotten Fishes Report, World Wildlife Fund, 2021 highlights that nearly a third of freshwater fish are threatened with extinction and populations of migratory fish have fallen by three-quarters in the last 50 years.

The government aims to ensure all waterbodies in England meet good ecological status by 2027 under the European Union's Water Framework Directive, which remains in UK legislation as a 'retained EU law' following the exit of the UK from the European Union.

Locally, only 11% of the Bristol Avon catchment is classified as having 'good ecological status', however this is typical of other catchments in the UK, demonstrating the significant scale of the challenge to meet the Water Framework Directive targets. Global action to address these challenges is set out in the commitments and action of UN Sustainable Development Goal 6 - Clean Water and Sanitation.

Increased incidence of extreme weather events including flooding and rising sea levels and drought risk are some of the effects of the changing climate. Our South Gloucestershire Local Flood Risk Management Strategy action plan sets out the steps we are taking locally to respond to and manage flood risk in our area.

What do we want to achieve?

Restoring the quality of our fresh and marine waters is vital to achieve a thriving, nature rich environment that is resilient to the changing climate, where flood and drought risk is managed, agriculture and industry is sustainable, landscape character enhanced and recreation, health and wellbeing and economic benefits optimised. To achieve this requires balancing the requirements of multiple users and strong partnership work between land owners, agencies, and organisations with a range of regulations, powers, duties, roles and responsibilities as well as local businesses and communities.

> **The vision of the River Frome Reconnected Catchment Plan is for:**
>
> 'a valued, healthy and resilient river and catchment; one which communities can access and enjoy and where nature thrives'

> **Joint Green Infrastructure Strategy 2020 outcome outcome: 'sustainable water management:**
> Optimise and improve the use of Green Infrastructure to deliver an improved water environment by working with natural processes to help reduce flood risk, manage drought, improve water quality and improving connectivity to reduce the loss and quality of aquatic habitats and wildlife.'

> **UN Sustainable Development Goal 6 – Clean Water and Sanitation** – 'Ensure availability and sustainable management of water and sanitation for all.'

The role of green infrastructure

With our partners in the Bristol Avon Catchment Partnership (BACP) we work to deliver the Bristol Avon: Catchment flood management plan and the River Frome Reconnected Catchment Plan. This includes delivering priorities to restore and reconnect the River Frome and catchment by 2030 including 'Working with Natural Processes' interventions. These measures optimise the design, role, use and management of green and blue infrastructure to reduce diffuse pollution, build resilience in the catchment (by preserving and enhancing natural capital e.g. soil), locally reduce flood risk and address flood issues affecting infrastructure networks.

We also work with our partners through the Devon and Severn Inshore Fisheries Conservation Authority (IFCA) which is the regional authority leading and co-ordinating partnership work to restore fisheries across our region.

For new development in South Gloucestershire, requirements and guidance to optimise sustainable drainage systems and natural solutions for surface water management are set out in our Sustainable Urban Drainage Systems Supplementary Planning Document and will inform revised planning policies in our Local Plan to optimise sustainable water management.

The Avonmouth and Severnside Enterprise Area (AESA) Ecological Mitigation and Flood Defence Project is a major infrastructure programme to reduce the risks of flooding, protect communities and infrastructure, and create new wetland habitat. This ambitious project will also help protect the internationally important designated Ramsar site and bird species of the Severn Estuary, alongside improvements to public access infrastructure and amenity. The 'String of Pearls' is a wetland restoration programme being prepared which aims to further connect and restore fragmented wetland habitat across the Severn Vales as introduced in 5.32 Our 'pipeline' of strategic Green Infrastructure programmes

Sustainable water management is central to the design and management of thriving, resilient green and blue infrastructure, and healthy places. By working with natural processes we can make the most of nature-based solutions and deliver 'win win's to address key priorities, provide strong return on investment and deliver multiple benefits across our area. For example, The Wave is a pioneering new visitor attraction in South Gloucestershire, the first inland-surfing destination of its kind, and a world leading example of blue infrastructure which optimises sustainable water management, boosts local recreation and champions sustainable tourism.

Sustainable management of our waters and their catchments, underpins management of flood and drought risks, optimises the resilience of new development, improves water quality, and supports a transition to more sustainable and resilient agriculture. Sustainably managed waters play a central role in delivering ecological benefits through enhanced, connected wetland habitat where people and nature can thrive.

nature people places

4.4 Improved health and wellbeing for all

Our commitment

We will improve health and wellbeing and reduce inequalities by creating and maintaining greener places which boost the health and wellbeing of everyone.

Why this matters

At a fundamental level we depend on the natural environment for our food, shelter, the air we breathe and the water we drink. We are a part of nature ourselves, and the health of our environment underpins our health and wellbeing, and the health of all natural systems.

There are also health inequalities which NHS England defines as 'unfair and avoidable differences in health across the population, and between different groups within society'

In addition to the challenges of the Climate and Nature Emergency, we face a rising health crisis and a widening health inequalities gap. This has been further heightened through the Covid 19 pandemic. These are the defining issues of our time and require us all to make steps to transform and redefine our lives and our relationship with the natural world and each other.

Key challenges for the health of our environment and for people include:

- **The Climate and Nature Emergency -** all natural systems, our own health and all aspects of our lives are under rising pressures due to the changing climate and the nature crisis.

  This global environmental crisis is causing new and increasing health risks from higher temperatures, drought, flooding, and new diseases, as well as impacting our food supply and our economy. For example, Public Health England research demonstrates the significant burden of mental health problems associated with flooding and the need for preventative interventions: The English National Study of Flooding and Health - Summary of the evidence generated to date (publishing.service.gov.uk)

  Globally and locally, the changing climate is causing a deepening of inequalities. This is evidenced by the Intergovernmental Panel on Climate Change IPCC Report 2019 which highlights that people already subject to social, health, economic and environmental pressures and inequalities are disproportionately impacted by extreme weather events which will worsen due to the changing climate unless effective action is taken.

Action is urgently needed to respond to these linked though distinct crises, to restore our natural environment and support adaptation, resilience and mitigation of impacts to the changing climate, for the health of people and nature.

- **Air quality –** legislation in the UK has driven marked reductions in emissions of some harmful pollutants, however further measures are required to protect nature and people from air pollution. The forthcoming Environment Bill will set new standards for the environment and pollution in the UK. In South Gloucestershire, we currently have two Air Quality Management Areas (AQMAs) in Staple Hill and Kingswood – Warmley which were declared due to annual mean levels of nitrogen dioxide (NO^2) exceeding 40 $\mu g/m^3$, primarily due to vehicle emissions. However, evidence shows that there are health impacts from air pollution at levels below the current UK targets, so it is important to reduce people's exposure to air pollution across the whole district.

  The interaction between air pollution and green infrastructure is complex. Green infrastructure can act as a barrier to pollution and can help to create desirable routes which encourage walking and wheeling. On a national scale it can help to remove some (but not all) types of pollution. (Ref DEFRA 2018 Effects of Vegetation on Urban Air Pollution).

  Our approach in our Air Quality Action Plan is to use GI throughout South Gloucestershire to reduce exposure to pollution and to create desirable routes for active travel modes which help reduce vehicle use and emissions.

- **Water quality** – the government aims to ensure all waterbodies in England meet good ecological status by 2027 under the European Union's Water Framework Directive. As detailed in Section 4.3 Sustainable water management, locally only 11% of the Bristol Avon catchment is classified as having 'good ecological status', although this is typical of other catchments in the UK, demonstrating the scale of the challenge to improve water quality for the health of people and nature.

- **Soil quality** - the quality and health of our soils is a strong indicator of the health of our natural systems, the productivity of our land the quality of our food. As highlighted in Section 4.7 Support sustainable and local food production, our soils are becoming degraded due to a range of pressures including development and intensive agriculture.

- **Mental Health** - across the UK, levels of poor mental health are rising with one in four adults having a diagnosable mental health problem each year. In South Gloucestershire our Joint Strategic Needs Assessment, Adult Mental Health and Emotional Wellbeing Strategy and mental health Public Health Profiles - PHE presents a similar picture. Levels of poor mental health have also been further affected as a result of the Covid 19 pandemic.

- **Physical activity** – for adults in the UK, recommendations are for a minimum of 150 minutes of 'moderate intensity' activity each week NHS/ live well/ exercise and for 60 minutes of exercise a day for children and young people Sport England. However, across the UK there is rising challenge of poor physical activity levels and rising unhealthy weight. This includes one in three children who are not active enough and have an unhealthy weight. These trends are reflected locally in South Gloucestershire Public Health Profiles - PHE and Physical Activity - Public Health Profiles - PHE

- **The inequality gap** – going into 2020 South Gloucestershire had levels of health and quality of life above the national average. However, the differences between the most and least deprived residents has increased in seventeen out of twenty-five health indicators over recent years and been deepened by the Covid 19 pandemic: Joint Strategic Needs Assessment and SG Joint Health & Wellbeing Strategy (JHWS) 2017 – 2021

We need to apply an ambitious and integrated approach to improve the health of our natural environment, and to understand and optimise the role of green infrastructure to improve the health and wellbeing of everyone in our communities.

What do we want to achieve?

Our vision
is for everyone in our communities across South Gloucestershire to have access to local, 'greener places where people and nature thrive'.

> **The vision of the draft South Gloucestershire Joint Health and wellbeing Strategy 2021 - 2025 is:** 'All people in South Gloucestershire have the best start in life, live healthy and happy lives and age well in health-promoting communities.'

This vision for healthier lives and healthier places in South Gloucestershire aligns with the following regional outcomes of the Joint Green Infrastructure Strategy and the UN Sustainable Development goals:

> **Joint Green Infrastructure Strategy 2020 outcome:** 'Health and wellbeing for all: Improve the network of active travel routes and accessibility to green spaces to support healthy lifestyles and mental wellbeing and provide more opportunities for people to connect with landscape and nature and addressing inequalities in provision.'

UN Sustainable Development Goal 3 – Good Health and Wellbeing: 'Ensure healthy lives and promote well-being for all at all ages'

The role of green infrastructure

Within our communities, the quality of and access to the natural environment, local green spaces and well connected green infrastructure plays a key role in supporting healthy active lifestyles, good mental health and wellbeing and reducing inequalities. The built and natural environment commitments in the South Gloucestershire Joint Health and Wellbeing Strategy 2017-21 (JHWS) highlight the role of green infrastructure and key considerations to support healthy lifestyles, prevent disease and reduce health inequalities.

As set out in section 4.8 – Build a resilient economy, we need to fully consider the multiple benefits, return on investment, contribution and value of green infrastructure to achieve health, social, environmental and economic priorities to inform all our decisions and work.

Key considerations regarding the role of green infrastructure to achieve health and wellbeing for all include:

A healthy environment

Well designed, planned and managed green infrastructure is integral to a healthy environment including the quality of our air, water and soil.

- **Air –** Trees provide vital air quality, shading and cooling 'ecosystem services', especially in urban areas, which deliver significant and multiple benefits for the health of people and nature. The council is preparing a Clean Air Strategy and Action Plan, to improve air quality locally, which includes strengthening the role of green infrastructure in reducing exposure to air pollution and encouraging active travel by walking and cycling.

- **Nature –** Section 4.1 improved and better connected ecological networks, highlights how restoring nature improves the resilience of our environment to new diseases, boosts crop pollination and provides thriving green and blue spaces which are vital for our health and wellbeing.

- **Water –** Improving the management, connectivity and water quality of our river catchments and water bodies is a key priority to improve the health and resilience of our communities for people and nature: Section 4.3 Sustainable water management.

- **Soils** – healthy soil is vital for the health and resilience of natural systems including water quality, underpins sustainable food production, locks in carbon, and supports climate change resilience and adaptation. Working together with farmers and other landholding partners provides important opportunities to optimise the role, resilience and management of green infrastructure to optimise soil health to support environmental and human health alongside other objectives: Section 4.7 Support sustainable and local food production.

- **Adaptation and resilience to the changing climate** – Well designed and managed green infrastructure plays a key role in responding to and managing flooding and drought risk through providing natural drainage and storage of rainwater. Green infrastructure also provides vital cooling and shading, particularly in urban areas, and resilience to extreme weather events and new diseases caused by the changing climate: Section 4.2 Greater Resilience to the changing climate.

A healthy start in life

The South Gloucestershire Early Help Strategy 2019-2024 recognises the key role green infrastructure has to play in creating the best start in life for our children and young people. Regular opportunities to play, learn and be active outdoors are essential for healthy growth, physical, emotional, cognitive and social development and wellbeing.

Physical activity

> **'Childhood obesity has been described as one of the most serious public health challenges in the 21st Century... being overweight can have serious implications for the physical and mental health of a child in the short and long term...'**
> PHE promoting healthy weight in young children and families 2018

The above study includes a case study of successful programmes in Page Park, South Gloucestershire highlighting the vital role of parks and green spaces as well as engagement programmes to support healthy active family lifestyles.

Outdoor play and nature connection

The above study includes a case study of successful programmes in Page Park, South Gloucestershire highlighting the vital role of parks and green spaces as well as engagement programmes to support healthy active family lifestyles.

Play and wellbeing

The physical, mental health, wellbeing, learning, social and developmental benefits of outdoor play and time in nature are well evidenced as set out in the UK National play strategy. Outdoor play includes play in formal play areas and facilities, and informal play in green and blue spaces:

Formal play – The main purpose of our council play and activity areas is to provide equal opportunity for children and young people to participate in outdoor play and leisure as required by Article 31 of the United Nations Convention on the Rights of the Child (UNCRC)

Informal and natural play – Outdoor play also includes play in wilder natural spaces as championed nationally by Play England and the Forest School Association.

Play Streets – Working with national charity Playing Out, South Gloucestershire Play Streets provide opportunities for people of all ages to enjoy outdoor multi generational play in our communities. Greening our streets is a key way that green infrastructure can help achieve play friendly greener communities.

Learning, skills, and development

As highlighted in the South Gloucestershire Early Help Strategy 2019-2024, opportunities for learning outdoors in early years and Key Stages 1-3 education settings plays a vital role to optimise hands on opportunities for learning, support healthy development and help provide the best start in life for our young people. Well designed and managed education setting grounds and access to local high quality green infrastructure in the public play a key role in learning, skills and development.

Outdoor learning – Outdoor learning opportunities are vital to help to meet a wider range of learner needs and learning styles, as a key part of providing a best start in life and reducing the inequalities gap.

Forest School – Forest School is an internationally recognised outdoor learning approach which '**develops confidence and self-esteem through learner inspired, hands-on experiences in a natural setting**.' Forest School sessions are held in school grounds and public open spaces (with required permissions in place) in South Gloucestershire.

Forest School training – The council delivers accredited Forest School training through our setting support team to provide quality assurance and ensure good practice.

Green skills – As part of our green recovery plans, boosting opportunities for work experience, apprenticeships and volunteering for young people is an area of focus as set out in the West of England Regional Recovery Plan and South Gloucestershire Economic Development Strategy.

Active lifestyles

Green infrastructure provides essential spaces and green travel networks which help everyone keep active as part of a healthy lifestyle as set out in the South Gloucestershire Joint Health & Wellbeing Strategy (JHWS) 2017 – 2021 and South Gloucestershire Physical Activity Strategy 2015 - 2020. This includes places for play, sport, exercise, and gardening, as well as routes for walking, running, wheeling and riding.

- **Active green spaces** – See Section 6 – our Green Spaces Asset Management Plan for further information about how the council manages green spaces to support physical activity, health and wellbeing.

- **Active travel networks** – The Joint Green Infrastructure Strategy highlights that we need to '**Improve the network of active travel routes and accessibility to green spaces to support healthy lifestyles and provide more opportunities for people to connect with landscape and nature, and address inequalities in provision**.' Our Local Walking and Cycling Infrastructure Plan 2020 sets out our plans to improve our active travel network. OneYou South Gloucestershire - Move More provides information about local walking, running, wheeling and riding outdoors.

Wellbeing

- **A 'dose of nature'** – Research by the University of Exeter 2019 shows that spending at least 120 minutes a week in nature is associated with good health and wellbeing – a weekly 'dose of nature'. This includes a wide range of activities from walking in nature, practical conservation volunteering to growing your own vegetables. Spending time in nature boosts our mental health and wellbeing, including enjoying natural scenery, trees and woodlands, water, views and immersed in nature helps us relax and unwind.

- **Reducing loneliness** – green spaces for social and nature connection - Green spaces are important social places within our communities, to connect with other people and with nature. We live in an ageing society where healthy and welcoming green spaces are essential for reducing isolation and loneliness, helping us all to lead independent fulfilled lives: South Gloucestershire Ageing Better Plan 2019 -2023. Across the UK increasing numbers of people are reporting that they feel lonely with big impacts on their mental health: Age UK. Whilst loneliness can affect people of all ages, in South Gloucestershire we have a rising older population among whom loneliness is more prevalent. Public open spaces are important social places where we can connect with others and with nature in our communities.

- Case studies by the Woodland Trust in Healthy Woods Healthy Lives (2013), highlights how visiting and being in woods and nature has helped people living with dementia, physical and mental health conditions.

- **Green spaces for social inclusion** – By actively working with residents and our voluntary sector partners we are co-producing solutions to make green spaces more welcoming and to optimise the role of green spaces in socially inclusive communities: Equalities Impact Analysis and Plan and Section 3 – our Green Spaces Asset Management Plan.

Reducing the inequality gap

- **Access to green space** – Access to local good quality green infrastructure is an important 'wider determinant of health', and an important way to help improve health and reduce inequalities in our communities, through providing vital places for recreation, play, sport, relaxation, connection with nature, food growing, gardening as well as networks for active travel including walking, wheeling and riding:

  WHO Urban green spaces and health – a review of evidence (2016)

  Public Health England - Improving access to greenspace – a new review for 2020

  Public Health England (PHE) 2014 Local action on health inequalities: Improving access to green spaces

Climate Change

- Green infrastructure has a key role to play in terms of providing nature based solutions for adaptation and resilience to the changing climate for both people and nature and reducing the inequalities heightened by the changing climate. By optimising the role of green infrastructure, we can reduce negative impacts and inequalities and support the transition to healthier, zero carbon lives for everyone.

Covid 19 recovery, green spaces and resilience

Emerging evidence indicates that the Covid 19 pandemic has further widened the inequalities gap locally, across the West of England, nationally and globally as highlighted in the West of England Regional Recovery Plan

- **Valuing and using our green spaces** – a renewed interest in, role of and valuing of access to green spaces has been highlighted in our engagement work and local and national research during the Covid 19 pandemic, particularly for people without access to private or shared gardens. We want to optimise the contribution of green spaces as part of our Covid response, recovery, and place planning for the future.

'Green Prescribing' – linking nature and health

A key focus of the West of England Nature Partnership is to support the strengthening of links and partnership work between nature, health and social care sectors.

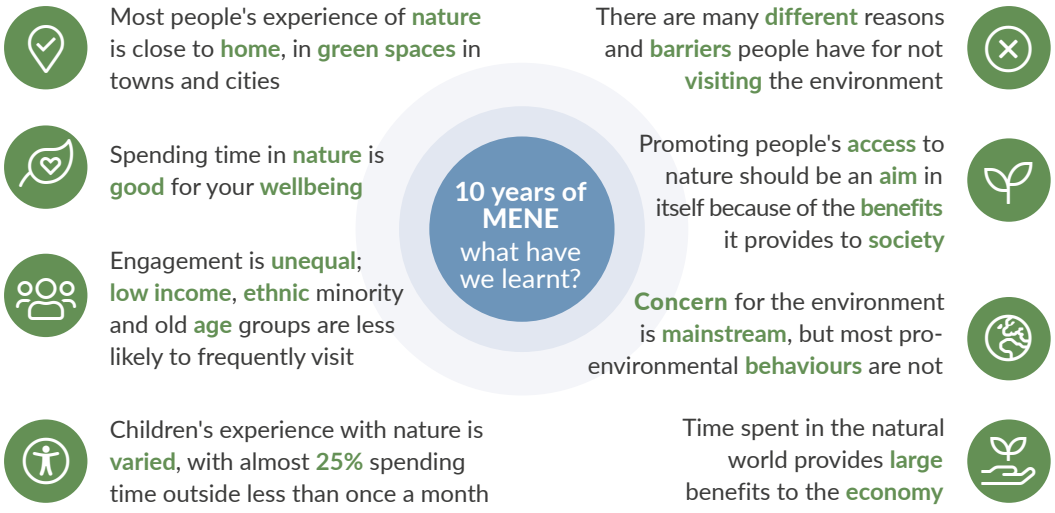
This includes progressing the role of 'green prescribing' to provide 'green care' and engagement in nature to support nature connected, healthier lifestyles, as set out in the West of England Nature Partnership Mainstreaming Green Care Plan.

Green Prescribing is highlighted in the Community Mental Health Framework and work is underway across our regional Healthier Together Bristol North Somerset and South Gloucestershire (BNSSG) Sustainable Transformation Partnership to support integrated work and referral pathways for 'green prescribing' in health and social care.

This includes increasing the role of 'green prescribing' by local social prescribing link workers who are based in many GP practices across our area.

Findings of the Monitor of Engagement with the Natural Environment (MENE) Survey

The Monitor of Engagement with the Natural Environment (MENE) survey 2009-2019 provided a comprehensive assessment over a ten year period of how people across the UK use, enjoy and are motivated to protect the natural environment. Key findings of the survey include:



In particular, the findings from the MENE survey of 25% of children spending very limited time outside in a natural environment is a significant area of concern.

South Gloucestershire utilisation of open space through the MENE survey is summarised at Public Health Profiles - PHE and indicates relatively high levels of use of green space in South Gloucestershire compared to other local authority areas across the South West.

Distance to green spaces from our homes

The Place Alliance 'Home Comforts Report 2020' highlights that proximity to parks or green space is a strong indicator of how satisfied people are with their neighbourhood during the Covid 19 lockdown and concludes that '**The aspiration should be for everyone to live within five minutes**' walk of a significant green space or park, and never more than 10 minutes'. The report found that this was particularly important for households without access to private or shared gardens and residents of social housing and recommends more ambitious standards for access to green space to be a key principle for the planning and design of all new communities.

A Woodland Trust report: Space for People: Woodland Access brings together evidence that accessible, local woodland is vitally important for our health and wellbeing to present a case for a Woodland Access Standard.

These findings align with the South Gloucestershire Council Viewpoint June 2020 survey and Autumn 2020 Greener Places engagement survey findings and the BMJ July 2020 Covid 19 highlighting inequalities in access to high quality green spaces

- **Fifteen minute neighbourhoods** – As set out in our Climate Emergency Action Plan, plotting out essential destinations within 15 minutes of South Gloucestershire settlements including local green spaces, will enable us to understand where the gaps are to ensure essential resources, including green spaces, are within a 15 minute low carbon travel destination of each settlement.

- **Distance to growing space** – In addition to access to green space for recreation and amenity, distance to growing space has a key role to play to improve health, reduce inequalities and support a sustainable lifestyle, particularly for people who do not have access to private or shared gardens. This includes allotments, community orchards and food growing projects. See Section 3: Our Green Spaces Asset Management Plan for steps the council is taking to increase access to growing space for land we are responsible for.

Inclusion priorities – it is not just about distance to green space

The Covid 19 pandemic has highlighted the impacts of inequalities of access to high quality green space, particularly for people without access to private or shared gardens or those living distant from public open spaces who have been significantly disadvantaged. For many people in our communities in addition to spatial distance to green space there are a wide range of other factors which determine local green space accessibility and proximity, particularly for people with protected characteristics.

Information and interpretation

Information to improve access to green space includes:

- Helping people find out where green spaces are, by providing information about public transport routes, cycling and walking routes and practical information such as opening times, maps, and facilities.
- Information and images need to be culturally and socially relevant so that everyone in our communities feel welcome.
- Information needs to be clear, easy to understand, readily available in a range of formats to meet different sensory needs and languages.
- When people arrive at green spaces, information signs and visitor interpretation to highlight the heritage, wildlife interest and other features of the site help people feel welcomed and confident to enjoy, value and make best use of these spaces.

Accessibility

We want all residents to be able to enjoy access to green spaces local to them. We know that not all our spaces are accessible for people with specific access needs, and we want to find ways to improve accessibility to local green spaces for everyone. This includes people who describe themselves as having learning, sensory or physical disabilities, a mental health condition or long standing illness.

Where access to local green space is not possible, we apply a 'social model of disability' and view accessibility as the problem not the disability and work with residents and groups including the South Gloucestershire Disability Equality Network and Disability Action Group to improve the accessibility of green spaces.

Cultural inclusivity

The Black Environment Network, locally Black to Nature and other groups representing people of colour, faith and cultural groups highlight that there are specific cultural and religious considerations for engagement of people from black and minority ethnic groups and certain faith groups in public open spaces as well as other facilities and services. Through working together, we are identifying how we can create and manage green spaces which are more welcoming to everyone in our communities.

Research by Friends of the Earth - access to green space 2020 identifies that 42% of people from England's Black, Asian and Minority Ethnic (BAME) communities live in the most green space deprived neighbourhoods which have less than 9m squared per person. To reduce inequalities action is needed in terms of improving both spatial and cultural access to green space.

Multi-generational spaces

We have an ageing population in South Gloucestershire for whom keeping active, socially connected, and mobile is vital. Older people tell us they value green spaces which have well maintained paths, seating, and access to other facilities, particularly toilets. Green spaces with social facilities such as cafes, tennis and bowling are also highly valued by many older people as well as access to nature. We also need to ensure we cater for the needs of children, young people and families with appropriate facilities in our communities to meet their needs including for play and engagement with nature.

Well maintained, clean, welcoming, and safe spaces

Providing and maintaining key infrastructure including benches, ramps, sight lines and routes are important to optimise access to and enjoyment of green spaces for a wide range of people. This also includes maintaining green spaces so they are clean and clear of litter as South Gloucestershire Council Plan commitment 12.

The Queerantine study and Women & Equalities Parliamentary Committee calls for evidence on the impact of Covid 19. https://committees.parliament.uk/writtenevidence/3868/pdf/ highlights the challenges people with protected characteristics report about feeling safe outside of the home and the role of local high quality well designed and managed green infrastructure to make green spaces and communities feel more welcoming and safer for everyone.

Crime Prevention Through Environmental Design (CPTED)

The Avon and Somerset Police Crime Prevention Through Environmental Design Officer works with the council to apply crime prevention theory regarding tactical design and the effective use of the built and natural environment, which when applied, reduces both crime and the fear of crime.

A main objective of CPTED is to reduce/remove the opportunity for crime to occur in an environment, and promote positive interaction with the space by legitimate users as championed by the Home Office Safer Streets initiative.

CPTED is applied in conjunction with other social, environmental and community-based strategies to prevent and reduce crime.

Secured by Design includes green infrastructure design recommendations for planting in new developments, open spaces and pathways as well as maintenance considerations. South Gloucestershire Core Strategy Planning Policy CS1 and the South Gloucestershire Design Check List set out requirements and best practice to support community safety.

What have residents told us?

The South Gloucestershire Equality Plan 2019-2022 sets out how the council and our partners work together to positively contribute to the advancement of equality and good relations including 'the need to advance equality of opportunity between persons who share a protected characteristic and persons who do not share it' (page 11) as required by The Equality Act 2010 (section 149). As further detailed in Section 2. What people have told us and in our Equality Impact Assessment and Plan, listening to the views of people with protected characteristics, representative groups and organisations has highlighted key issues, barriers and actions to improve accessibility, participation and satisfaction levels regarding planning, design and management of green infrastructure

We will build on and continue this work together, reflecting our commitment to involve everyone in our communities, particularly with people with protected characteristics, to 'improve health and wellbeing and reduce inequalities by creating and maintaining greener places which boost the health and wellbeing of everyone'.

4.5 Sustainable places

Our commitment

We will maximise the multiple benefits of green infrastructure in both new and existing communities to create nature rich, resilient places where people and nature thrive.

Why this matters

Globally 68% of the world population is projected to live in urban areas by 2050, UN Department of Social and Economic Development 2018. In South Gloucestershire around 63% of our population live in the suburban areas to the north and east of Bristol, 17% in the market towns of Yate, Chipping Sodbury and Thornbury and the remaining 20% in the villages and rural areas of the district: Office for National Statistics 2018 data published 2020.

Meeting the needs of our growing population over the next decade and beyond, is a significant area of both challenge and opportunity. We need to balance the need for new housing and infrastructure with the pressures this places on our natural environment.

By working with nature to achieve thriving, nature rich green infrastructure, we can optimise benefits across our priorities for people, places and nature.

What do we want to achieve?

Our green infrastructure vision is for 'greener places were people and nature thrive'. We want to ensure the true value of the environment in supporting our way of life is recognised, protected and enhanced in the creation and maintenance of sustainable places as reflected in our vision in planning policy CS2 of our Core Strategy to:

> **'ensure that existing and new Green Infrastructure (GI) is planned, delivered and managed as an integral part of creating sustainable communities and enhancing quality of life.'** Core-Strategy-2006-2027

This vision aligns with the South Gloucestershire Council – Sustainable Community Strategy 2016 – 2036 Place priority to '**Conserve and enhance our green spaces, networks and countryside for the benefit of people, wildlife and the wider environment.**'

To achieve this vision for management of land for which the council is responsible, our goal is:

'To create and manage a sustainable network of good quality green spaces that are safe, healthy, rich in biodiversity and distinctive in character, celebrating what is special about South Gloucestershire'

Our vision for the creation and management of sustainable places in South Gloucestershire aligns with the following regional outcomes of the Joint Green Infrastructure Strategy and the UN Sustainable Development goals:

Joint Green Infrastructure Strategy 2020 outcome: 'Create and maintain sustainable places: New development which maximises the multiple benefits of GI in delivering resilient, healthy and environmentally friendly places and a net gain in natural capital by investing in GI for the long term'

UN Sustainable Development Goal 11 – Sustainable Cities and Communities: 'Make cities and human settlements inclusive, safe, resilient and sustainable'

The role of green infrastructure

To optimise the multiple benefits of green infrastructure and to protect and enhance environmental priorities for people and nature, an integrated approach from the start of planning and design for new communities and places is essential. This approach enables us to optimise the role of green infrastructure to deliver our priorities for environmental and economic resilience, improving our health and the quality of our lives, and to shape the places that we live, work and socialise in.

Creating sustainable places

In our Local Plan 2020 and Local Plan Core-Strategy-2006-2027, we recognise and highlight that our future prosperity and well-being depends on the health and services we draw from the environment and we need to ensure the true value of the environment in supporting our way of life is recognised.

As set out in our Green Infrastructure SPD 2021, revising our policies in line with new statutory requirements, best practice and guidance regarding new development is a key mechanism for ensuring we create and maintain sustainable places which enable investment in the recovery of our natural resources to flow from the development that is sustained by it.

- **Protect and enhance our environment** – our Local Plan 2020 (page 55), identifies the following priorities regarding protection and enhancement of our environment to:

  - Avoid directing growth to locations which would cause unacceptable harm to natural or historic assets of designated importance, or to areas of highest flood risk.

  - Establish, maintain and enhance the function and connectivity of green infrastructure and Nature Recovery Networks.

  - Apply the mitigation hierarchy and achieve biodiversity net gain in new developments.

  - Increase tree cover by requiring tree-planting and require the replacement of valuable trees lost to development.

  - Protect and enhance the character, distinctiveness, quality and intrinsic features of the local landscape.

- **Greener development and places** – the council has published a suite of Supplementary Planning Documents (SPDs) which set out requirements and provide guidance for green infrastructure considerations in development and will inform future planning policy. These SPDs include: Sustainable Urban Drainage Systems, Trees on Development Sites; Green Infrastructure.

  These SPDs include recommendations to apply standards such as Building with Nature accreditation and BREEAM certification to embed environmental considerations and principles at the start and heart of design.

  It is important to highlight that these and other standards are enablers rather than blockers of development. By setting out clear guidance of 'what good looks like' and how development can fulfil requirements, applying these standards can improve certainty of applications and reduce planning delay. By placing nature at the start and heart of place making and having clear standards, existing processes can be made better, more effective and simpler to deliver high quality sustainable development.

- **Retrofitting for nature** – in addition to new development, these guidelines and standards also have a key role to play for design of green infrastructure enhancements to existing built areas.

- **Nature connected living** – increasing and optimising biodiversity close to where people live in both existing and new communities, also enables richer nature connection opportunities to inspire stronger and wider take up of nature positive behaviour.

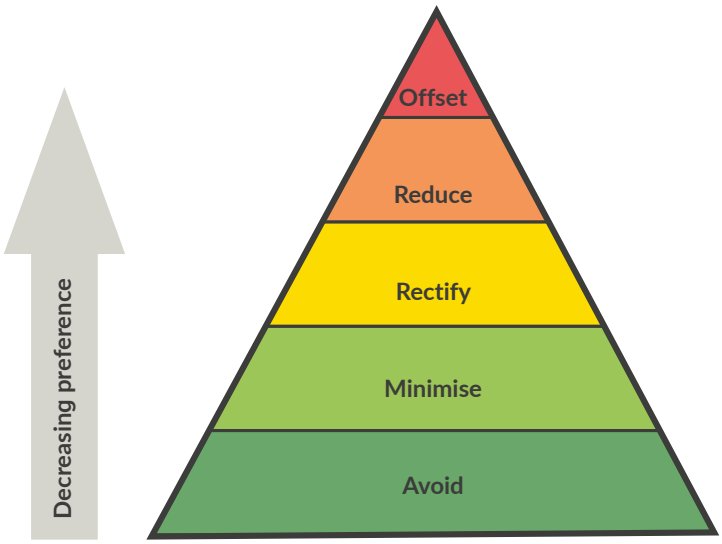
- **Greener urban living** – by focussing development on brownfield sites with high quality green infrastructure, opportunities for greener urban living where people and nature thrive can be optimised and green field locations can be prioritised for other land use functions.

- **Biodiversity net gain (BNG)** in development requires there to be an overall increase in natural habitat and ecological features in any development, works or project. The Environment Bill will introduce new legally binding requirements and targets to enhance and improve biodiversity (biodiversity net gain) in development. BNG will be applied alongside and further to application of the mitigation hierarchy.

  Aligned with anticipated statutory requirements for biodiversity net gain in new development, we seek to be ambitious in applying and continually updating our work and polices to sector leading best practice and standards to apply the mitigation hierarchy and optimise the creation and maintenance of sustainable places.

  The council continues to keep under review progression of the Environment Bill and opportunity to publish a Biodiversity Net Gain SPD. Alongside this to prepare internal technical guidance to test, develop and apply methodology, to ensure the council is prepared for and ready to introduce BNG into planning application determination and project work delivery ahead of statutory requirements, consistent with our Climate Emergency and Council Plan commitments.

- **The mitigation hierarchy** is a method which consists of the following five steps to successfully assess and mitigate environmental impacts in a project or development site to help manage biodiversity risk.



Mitigation hierarchy

The mitigation hierarchy starts with the most beneficial method of mitigation (avoid) and following a set process, only where appropriate, goes on to adopt the least beneficial method of mitigation (offset).

1. Avoid 2. Minimise 3. Rectify 4. Reduce 5. Offset

- **Green belt** – Over 40% of South Gloucestershire is green belt. As set out in the National Planning Policy Framework (NPPF) 2019 (pages 40-43), the purpose of green belt designation is to provide a locational planning tool to prevent urban sprawl rather than an environment protection policy. Green belt designation is not in itself a tool to protect environmental assets, although land with green belt status can also deliver recreational, green infrastructure and biodiversity functions as highlighted in the South Gloucestershire Local Plan 2020 Issues and Approaches (Chapter 3 – pages 36-37 and Chapter 5 pages60-74).

- Our **strategic green infrastructure spatial priorities** – our strategic GI spatial projects and programmes lay out key, spatial and at scale strategic priorities and programmes identified to optimise the multiple benefits and role of green infrastructure across our area to inform place making, decision making and asset management. These programmes include Common Connections and River Frome Reconnected as well as our work to change the management of highway verges and double tree canopy cover as set out in Section 4. Our strategic Green Infrastructure spatial priorities and programmes

Maintain sustainable places

Section 6: Green Space Asset Management Plan sets out our approach to the management of green space assets the council is responsible for. This includes assessing the condition of our green space assets alongside requirements, costs, and priorities to inform decision making, our action plan and service planning. Applying an asset management approach enables the contribution of these assets to be optimised to achieve our agreed Greener Places Strategy priority outcomes for green infrastructure and our vision for '**greener places where people and nature thrive**'.

4.6 Valued healthy landscapes

Our commitment

We will create and manage green infrastructure to conserve and enhance our landscapes, heritage, sense of place and culture.

Why this matters?

The distinctive landscape character, views and unique historic, archaeological, and natural heritage of South Gloucestershire are integral to our sense of place, identity, local culture, and our communities. To protect, conserve, and enhance these important features and areas, the council works closely with our partners and residents. There are also statutory planning policies and management requirements which highlight the role and management of green infrastructure to create and maintain valued and healthy landscapes.

However, our landscapes and heritage are facing rising pressures including:

- **Climate change adaptation and ecological resilience** – within the context of the changing climate and nature loss, changing management of our heritage and landscapes to optimise adaptation and resilience of these features and the green infrastructure in which they are located is essential.
- **Land use pressures** – safeguarding, protecting, and conserving our heritage and landscapes is a challenge within the context of rising land use pressures for housing supply, economic development, community facilities and services, transport infrastructure, agriculture, renewable energy and recreation.
- **Usage pressures** – with increased use of green infrastructure for recreation and travel, heritage features, landscapes and routes are facing increasing usage pressures.
- **Maintenance and restoration costs** – with budgetary pressures across multiple sectors for the council and our partners, funding maintenance and restoration of our heritage and landscapes is a challenge.
- **Valuing our heritage and landscape features** – our heritage and landscapes have high natural capital value in terms of the benefits they bring for our economy in terms of tourism, retail and recreation, and for their value for our wellbeing and sense of identity – our connection to the places where we live.

- **Policy context** – national legislation and policy determine council duties, powers and influence regarding planning and statutory protection and conservation requirements. Changes to legislation can therefore present new challenges or opportunities for these assets and features and the council and our partners responsibilities.

View from the Cotswold Way National Trail

What do we want to achieve?

We want our heritage, culture, archaeological features, and landscapes in South Gloucestershire to be protected, enhanced, enjoyed, cherished, and celebrated.

Through planning, design, and management of green infrastructure, we want to conserve these features and enhance their role and value within our communities as highlighted in our Local Plan 2020: '**to protect and enhance the character, distinctiveness, quality and intrinsic features of the local landscape**'.

We also want to widen engagement in our natural and built heritage so that everyone in our communities feels a deepened sense of connection to their heritage, which positively supports their wellbeing and brings communities together.

Our vision to create and maintain healthy valued landscapes in South Gloucestershire aligns with the following regional outcomes of the Joint Green Infrastructure Strategy and the UN Sustainable Development goals:

> **Joint Green Infrastructure Strategy 2020 outcome:**
> 'Create and maintain valued healthy landscape: Design and deliver high quality Green Infrastructure that improves local sense of place and protects and enhances landscape character and the natural, cultural and heritage services that they provide'

UN Sustainable Development Goal 15 – Life on Land:
'Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss'

The role of green infrastructure

Our landscapes

The landscapes of South Gloucestershire underpin the feel, shape and character of our places and communities. Landscape character assessment is a method of identifying, mapping, and classifying the special qualities of landscapes across an area and identifying what gives a distinctive sense of place. This helps inform decisions about how to plan, design and manage green infrastructure, land use and development considerations in an area.

The adopted South Gloucestershire Landscape Character Assessment provides a statement of the character of South Gloucestershire's landscapes, their distinctive attributes and features, together with an assessment of the changes that are taking place in the landscape alongside guidance and recommendations to help steer future evolution.

There are 21 distinct landscape character areas across South Gloucestershire as shown on the map in Section 5: our strategic green infrastructure spatial priorities and programmes. These include the Cotswold Scarp, Yate Vale, the Marshfield Plateau, the Severn Shoreline and Estuary, and major areas of settlement such as Kingswood.

Complementing and informing our Landscape Character Areas there are also three National Character Areas (NCAs) which cover our area. These are Bristol, Avon Valley and Ridges NCA, Cotswold NCA and Severn and Avon Vales NCA.

Our heritage

Protecting, conserving and enhancing our heritage is an integral part of considerations for the planning, design and management of our green infrastructure and in design and planning for new communities.

Our area has seen continuous occupation from the Iron Age onwards, through Roman occupation and later home to Saxon kings, Norman invaders and large Monastic estates. The Forest of Kingswood was once an extensive Royal forest until the Dissolution of the Monasteries in 1536 by Henry VIII, which began a period of extensive change in land ownership that changed the face of the entire area, leading to the establishment of some of the large country estates and important landscaped gardens of the 17th and 18th centuries, such as National Trust owned Dyrham Park. Non-conformist Wesleyan heritage is also found across our area including the Whitfield Tabernacle and Hanham mount where John Wesley preached.

The Industrial Revolution left a rich heritage across our communities and local landscapes including a legacy of colliery sites, such as Ram Hill and transport routes, such as the Dramway supplying the Bristol area and beyond with coal.

Warmley Gardens was once home to the first commercial production centre for zinc and brass in the UK at Warmley Brassworks. Nearby, Golden Valley Local Nature Reserve in Wick was a key site for ochre mining. The 20th century also saw the establishment of an aeronautical industry at Filton that was instrumental to the aviation history of World War I and World War II, and is an industry that continues at Filton to this day. This historic industrial heritage has helped to shape our communities and is integrated within our green infrastructure and landscapes today.

Whilst much of our heritage can be seen today as standing remains or historic settlements and landscapes, much still remains hidden beneath the soil. Archaeological remains can include buildings, landscapes, sites and wrecks as well as other types of heritage asset such as the iron age hill fort at Horton Camp. Not all nationally important archaeological remains are mapped or scheduled and there are many nationally, regionally and locally important sites within the district, with new discoveries constantly being made.

The Know your place project features extraordinary images from archives, museums and heritage collections across South Gloucestershire, to give a unique insight into the history of the places where we live, work and visit every day and how our area has changed over time.

Many of our local historic assets are associated with or set within our landscapes and green infrastructure including parks, woodlands, orchards, historic field and hedgerow patterns. Historic public rights of way such as the Dramway and the Cotswold Way connect historic features and places providing important recreational routes and tourist attractions. Heritage walks and trails are localised or themed to link key sites of interest: Museum and Heritage Sites.

South Gloucestershire also has a thriving network of independent local museums, a South Gloucestershire Museums Group, heritage partnership and many local history societies.

The A Forgotten Landscape project is a good example of the council and our partners successfully working together to protect, conserve, enhance and celebrate local heritage, culture and landscapes.

Our designated sites, buildings and areas

South Gloucestershire includes a diverse range of designated sites, buildings and areas which are protected through a range of legislation for their rich heritage, biodiversity, geology or amenity value. Green infrastructure plays a key role as part of or to provide the setting and context for these features which include:

- 30 conservation areas to protect historic town centres, rural villages, urban churchyards and country estates.
- 2,085 listed buildings, 1,470 locally listed buildings.
- 38 scheduled monuments across our area including bronze age burial mounds and roman villas.
- 8 registered parks and gardens including English Landscape' parklands such as Badminton Park, Dodington Park and Dyrham Park, as well as a rare example of an 'Industrial Utopia' landscaped garden surrounding Warmley House and Brassworks.
- Archaeological sites including hillforts such as Horton Camp.
- Many public open spaces including sites with important heritage features such as Barrs Court Moat.
- The Severn Estuary which is designated a Special Area of Conservation (SAC), Special Protection Area (SPA) and Ramsar site due to its international importance for wildlife.
- The Cotswolds National Landscape, Area of Outstanding Natural Beauty (AONB) covers 11,800ha (22%) in the east of the district includes dramatic landscape ridges, hillsides, and views and the 102 mile (163km) long Cotswold Way National Trail.
- 22 nationally important Sites/Areas of Special Scientific Interest (SSSI) across the district, with the most significant concentrations found near Cold Ashton and Wickwar. The Severn Estuary comprises the largest SSSI in our area.
- 271 locally designated Sites of Nature Conservation Interest (SNCIs) and 64 Regionally Important Geological Sites (RIGS) which together form a network of what are known as Local Sites. The biggest concentration of SNCIs is located around Cold Ashton and Wickwar. Improving the condition of these rich and sensitive habitats is a key priority in our plans for nature recovery.
- 9 Local Nature Reserves (LNRs). See Section 6 Our Green Space Asset Managment Plan.

- 75 registered commons cover 1.17% of the district and include areas of species rich grassland which are vital for pollinating insects and other wildlife. These historic green spaces are under pressure and a programme of work is being developed to protect, restore, and connect these distinctive areas and habitats.

- 175 hectares open access land across 42 sites and 600 hectares as registered commons.

Our culture

Our landscapes built and natural heritage, public open spaces and historic land use, carry much of the cultural legacy of our area. Many of our local seasonal traditions, festivals and events are linked to the land, food growing traditions and local nature. This includes apple day and wassailing events to celebrate our orchards and seasonal May Day and autumn harvest celebrations. These celebrations are a rich part of our local culture and provide important opportunities for bringing communities together and connecting to our roots, heritage and nature.

Public art located within green infrastructure has a key role to play to enhance, interpret and celebrate local culture and heritage, contributing to our sense of place and community, identity, belonging and cohesion.

View from the Cotswold Way across South Gloucestershire

4.7 Sustainable local food production

Our commitment

We will protect the best agricultural land and enhance our pollinator network and increase opportunities for local food production and food markets.

Why this matters

In South Gloucestershire, agricultural land use covers approximately half of our area. This includes land managed for pasture, cropping and mixed farming. There is also a rich heritage of orchards and market gardens as well as allotments and vibrant community food growing networks across our area.

National agricultural and environmental policy are the main drivers for agriculture practice in the UK. Since World War 2, policy, mechanisation and incentives to increase food production have created a legacy of intensive grazing, pesticide use, removal of hedgerows, alongside climate change and habitat loss which have degraded our environment and landscapes.

Supporting a transition to sustainable land management and regenerative agriculture has a vital role to play in:

- **Protecting and improving soil health** – to boost biodiversity and productivity
- **Improving water quality** – reducing nitrates and pesticides in water catchments
- **Restoring our ecological networks** – including hedgerows, woodlands and species rich meadows
- **Increasing pollinator habitat and networks** – to boost biodiversity and productivity
- **Adaptation and resilience** – of our natural environment and our local food production to the climate, socio economic and legislative changes
- **Storing carbon** – soil is vital carbon 'sink' and sustainable land management plays a key role in locking in carbon. When soil is disturbed or removed, carbon is released
- **Delivering our vision for net zero South Gloucestershire** – local food has a low 'food miles' carbon footprint

- **Improving our health** – fresh, in season local food is great for our health as well as the healthy lifestyle benefits of gardening and 'growing your own'
- **Improving our economy** – boosting local agricultural, food processing and catering jobs and businesses
- **Community cohesion** – community food growing initiatives and allotments play a key role in bringing our communities together

To support these changes, the Agriculture Act 2020 introduces the concept of 'payment for public goods', through the Environment Land Management Scheme (ELMS). ELMS introduces agricultural subsidies to be directed towards public goods 'protecting or improving the environment' (such as tree planting) that are not otherwise rewarded through the market including, 'mitigating or adapting to climate change', 'reducing or protecting from environmental hazards', and 'protecting or improving the quality of soil'.

'Soil is not seen as the wealth and resource it is. 33% of our soils are degraded. In what other area would you allow 33% of your asset to be degraded?'

Prof. Chris Collins, Soil Security Programme, University of Reading
Sustainable Soils Alliance

'Considering that just one teaspoon of soil can hold more organisms than there are people on the whole planet, we think that our soils are well worth protecting!'

The UK Soil Association

Soils in focus

Soil is a combination of minerals, organic matter, air, water and living organisms.

Healthy soil is a precious living resource, vital for healthy natural ecosystems, water and air quality, food production, locking in carbon, climate change resilience and adaptation. One teaspoon of healthy soil contains more than nine billion living organisms which is more than the total number of people on the planet! The health of our soil underpins the health of our green infrastructure and the quality of our water and air as well as providing a vital role as a carbon 'sink'.

A single hectare of soil has the potential to store and filter enough water for 1000 people for one year and yet of the three environmental pillars (water, air and soil), significantly less is spent monitoring the health of soils, compared to monitoring air and water quality: Sustainable Soils Alliance.

95% of the food that we eat comes from the soil. However, around the world, we are losing soil between 10 and 40 times faster than it's formed, placing growing pressures on our food supply, our health and the environment. Save Our Soil | Soil Association.

> **'Soil is the heart and soul of our planet. Put simply, we can't live without it. It sustains us, captures carbon, provides a home for billions of organisms and can help defend us against flooding and drought, but too often we're taught to think of it as dirt! As a result, many of the world's soils are now in crisis – degraded and eroding, often as a result of intensive farming practices.**
>
> **The good news is that, by changing the way we farm and eat, we can help protect our soils, for generations to come.'**
>
> Save Our Soil | Soil Association

What do we want to achieve?

We want to protect the soils and highest quality agricultural land in our area, to optimise their role in restoring nature, sustainable food production, and contributing to climate change adaptation and resilience across our area. We want to boost our local food production and food markets to contribute to our economy and a zero carbon future.

Our vision to support local and sustainable food production in South Gloucestershire aligns with the following regional outcomes of the Joint Green Infrastructure Strategy and the UN Sustainable Development goals:

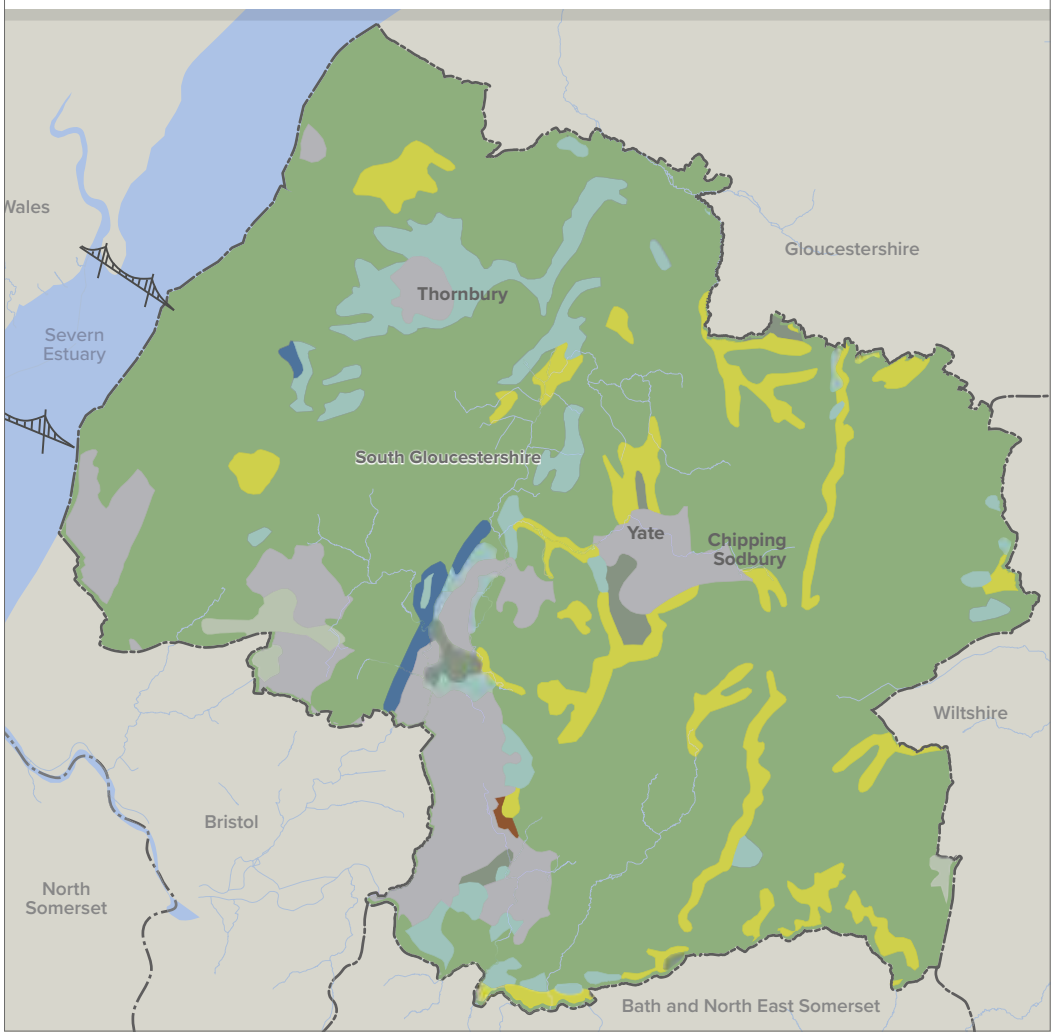
> **Joint Green Infrastructure Strategy 2020 outcome:**
> 'Support sustainable and local food production - Increase opportunities for local food production in urban and rural areas and increase food sovereignty by, for example, protecting the best and most versatile agricultural land and enhancing our pollinator network.'

> **UN Sustainable Development Goal 2 - Zero Hunger:**
> 'End hunger, achieve food security and improved nutrition and promote sustainable agriculture'

The role of green infrastructure

The map below highlights the areas of highest agricultural grade land (grades 1 and 2 in blue). Optimising the use of high grade agricultural land for local food production is important, especially as soils can take hundreds of years to form.

Soil/agricultural land classification



Imagery copyright Getmapping PLC 2021, © Crown copyright and database right 2021. OS 100023410.

Key

Agricultural Land Classification:	Grade 5
Grade 1	Grade 6
Grade 2	Grade 7
Grade 3	South Gloucestershire Boundary
Grade 4	

Soils of low agricultural land grade however often provide the best conditions for many of our native flowering plants and for woodland creation. Decisions around land use need to consider soils, to maximise the benefits achieved by a planned and holistic approach to green infrastructure and planning.

The role and value of high grade agricultural land is an important consideration as we prepare our Local Plan to support sustainable local food production and contribute to restoring nature across our area. The majority of land across South Gloucestershire is owned and managed by other landowners and working together is essential to achieve our climate and nature emergency goals. This includes work to boost supply and consumer demand for local sourced food, supporting community supported agriculture as well as 'growing our own' to reduce 'food miles' is an important and rising area of focus.

Alongside optimising protection of high quality soils within green infrastructure, planning and land use decision making, there are important opportunities to progress joint work with partners and residents which support an integrated approach to sustainable and local food production including:

- **Allotments** – allotments provide important access to local growing space and green space particularly for people who do not have access to private or shared outdoor space. Provision for allotments in new communities is through planning policy CS24.

- **Local Food** – supporting local food production and local consumer demand to optimise food supply resilience, reduce the carbon footprint of food transport, boost the local economy, the environment and our health as championed by the South West Food Hub

- **Environmental Land Management Scheme (ELMS)** – working with local farmers and landowners to prepare for the ELMS scheme Agriculture Act 2020 which will provide payments for measures to improve and change management of land for nature from 2024. This includes supporting changes to more extensive livestock grazing which benefit biodiversity, water catchments and climate change adaption and resilience.

- **Field boundaries** – hedgerows, dry stone walls and field margins are key features of the landscape character and heritage of our area. Well managed field boundaries provide vital habitat corridors for wildlife, connecting our larger green sites and so helping to form our nature recovery network, supporting the health and resilience of habitats, our soils and land productivity.

- **Pollinator habitat and 'B Lines'** – as set out in the WoE Pollinator Strategy and the DEFRA National Pollinator Strategy, creating bigger, better, more and connected species rich grassland habitat will boost populations of pollinating insects who play a key role in pollinating crops and the health of local ecosystems. B Lines are a series of priority 'insect pathways' running across the UK which have been identified by national charity Buglife.

- **Water catchment** – as highlighted in Section 4.3 Sustainable water management, the levels of nitrates, pesticides and pollution in our water is significantly affected by how land is used and managed, particularly within our river catchments by agriculture, industry and our built communities. Soils provide a key role in naturally filtering our water, so healthier soil will help improve the quality of our waters. Sustainable land management methods such as ditches provide natural drainage and storage of water which supports our adaptation and resilience to the changing climate.

- **Working together** – the South Gloucestershire Local Food Plan sets out our priorities for working together with our partners to support local sustainable agriculture. This includes partners in the local farming sector, local food producers, catering sector and consumers as well as community supported growing and food initiatives.

- **Landscape, heritage, culture, and distinctiveness** – as highlighted in section 4.6 Create and maintain healthy valued landscapes, agricultural land management plays a key role in the management and distinctiveness of our landscapes and heritage. Working with statutory agencies, and regional partnerships including the Cotswolds National Landscape, Bristol Avon Rivers Trust and West of England Nature Partnership are key ways we are progressing integrated work and action to progress and support sustainable land management alongside other priorities.

Conservation grazing is an important way of managing land for nature and supporting local food production. The council is working with StreetGoat at Parkway North Park and Ride car park to provide conservation grazing to help manage the site for the small blue butterfly as it is the only site in South Gloucestershire where the butterfly has been recorded.

Conservation grazing at Parkway North Park and Ride car park

4.8 A green and resilient economy

Our commitment

We will optimise the role and contribution of green infrastructure to support a green and resilient economy.

Why this matters

> **Over half the world's income, equating to £31 trillion (£31,105,000,000,000) of Gross Domestic Product (GDP), is dependent on nature and the resources nature provides.** World Economic Forum New Nature Economy Report 2020

This includes direct extraction of materials from forests and oceans as well as the provision from ecosystems such as healthy soils, clean water, pollination and flood and drought resilience. The report highlights that there is potential for a win-win-win for nature, climate, people and the economy if businesses and governments can respond with urgency to protect and restore nature by regularly identifying, assessing, and mitigating nature-related risks.

The Global Assessment Report on Biodiversity and Ecosystem Services (IPBES) highlights that since the 1970s per-person consumption has increased by 45%, global economic activity has increased by more than 300% and global trade by around 900%. However, whilst the flow of material contributions from nature has accelerated to keep up with rising demand, measures to protect and restore nature have not kept pace. This is bad for nature, human health and the economy. Furthermore, the report identifies that the benefits of the expanding global economy and the costs of nature's declining benefits are unequally distributed, with the poorest areas also being subject to highest levels of environmental degradation.

A milestone UK HM Treasury commission report: 'The Economics of Biodiversity' by Professor Sir Partha Dasgupta, identifies the 'extreme risk' by the failure of economics to consider the natural world and sets out a road map for a green economics and a sustainable future. Key recommendations of the HM Treasury Dasgupta Review 2021 include:

- '**Ensure that our demands on Nature do not exceed its supply, and that we increase Nature's supply relative to its current level**

- **Change our measures of economic success to guide us on a more sustainable path**

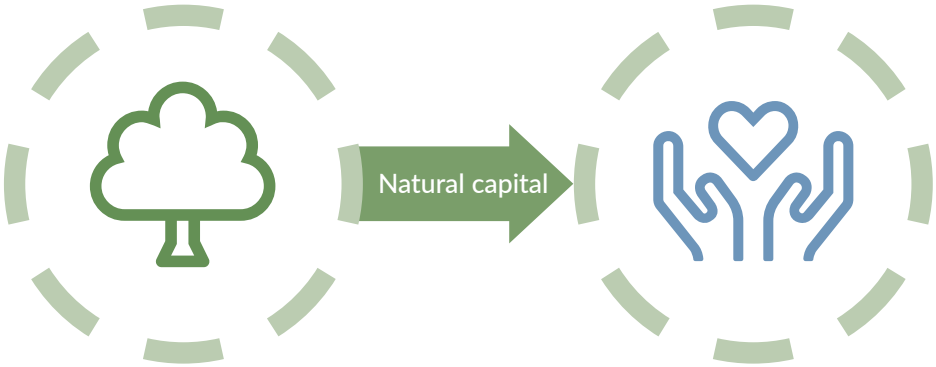
- **Transform our institutions and systems – in particular our finance and education systems – to enable these changes and sustain them for future generations.**'

In response to this evidence, the government's Green Finance Strategy and 10 point plan for a green industrial revolution sets out plans for greening our economy and finance to support the delivery of the UK's de-carbonisation and nature restoration targets. At local, regional and national levels, work is underway to apply natural capital accounting to inform our decision making and place environmental and public health at the heart of our measures of success.

Understanding natural capital

The multiple benefits, resources and 'ecosystem services' which nature and green infrastructure provide is known as 'natural capital value'.

'Natural capital value' includes the ecosystem services, resources and elements of nature that directly or indirectly produce value to people. Natural capital is fundamental to human health, wellbeing and to our economic activity:



In our decision making, the contribution, multiple benefits, and 'natural capital value' of green infrastructure needs to be considered alongside costs for design, creation and maintenance to calculate the full value of the benefits, resources and services green infrastructure provides for our health, wellbeing, the environment and economy.

Natural capital accounting

The Joint Green Infrastructure Strategy (page 34) defines natural capital accounting as 'Providing an overall assessment of the value of a stock of assets.'

For example, Public Health England Improving access to green space 2020 review estimate the following cost savings can be achieved through investment in high quality green infrastructure:

Examples of financial cost benefits through investment in green infrastructure*:

- **£2.1 billion per year could be saved in health costs if everyone in England had good access to green space, due to increased physical activity in those spaces**
- **in Birmingham, the annual net benefit to society of their parks and greenspace is nearly £600 million, which includes £192 million in health benefits**
- **in Sheffield, for every £1 spent on maintaining parks, there is a benefit of £34 in health costs saved, with local residents being the primary beneficiaries**

Public Health England – improving access to green space 2020 review

*__note__ - this review was undertaken in 2019 prior to the Covid-19 pandemic which has further highlighted the importance of access to green spaces. Further research will be included in a future PHE evidence review which is anticipated to identify an increased value and return on investment for green space funding compared to before the Covid 19 pandemic.

Understanding the natural capital value of green infrastructure, the role of healthy green and blue spaces for our health, wellbeing and economy is transforming previously held perceptions of green infrastructure as a 'nice to have' to recognition of the role of the environment at the heart of our lives and communities. In particular, the Covid 19 pandemic has highlighted the importance of green infrastructure for our health and for emerging green economic recovery plans.

What do we want to achieve?

By working with our partners, businesses and residents we want to achieve attractive, thriving, resilient and greener places where people want to live long term and conduct business. We want to optimise the role and contribution of green infrastructure for our economy and to transform how we value the benefits of investing in a thriving, resilient and nature rich green infrastructure network to deliver our priorities. This includes benefits for our health, wellbeing, the environment and economy, creating healthier, safer, stronger and more sustainable communities and development.

Our vision to support a green and resilient economy in South Gloucestershire aligns with the following regional outcomes of the Joint Green Infrastructure Strategy and the UN Sustainable Development goals:

> **Joint Green Infrastructure Strategy 2020 outcome:** '**Build a resilient economy**: Create attractive areas for investment and job creation and support the environmental resilience of economic sites by enhancing Green Infrastructure relating to housing, businesses and other associated infrastructure.'

> **UN Sustainable Development Goal 8 – Decent Work and Economic Growth** – 'Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all'

The role and contribution of green infrastructure to a green and resilient economy

Green Infrastructure has a key role to play in contributing to a green and resilient economy. This includes:

- **Attractive, well connected, greener, healthier places** – enabling residents to access and enjoy healthier lifestyles with less pressures and costs on health and social care and increased natural, social and wellbeing 'capital'. High quality green infrastructure creates more attractive places for businesses and investors, boosting sustainable economic development, employee health, green skills, jobs and industries including agriculture, tourism and recreation.

- **High street regeneration** – green infrastructure embedded within the design of retail areas forms a key role in our high street regeneration plans, making them more attractive, better connected and healthier which helps to increase consumer 'dwell time' and spend:

> **'Green environments increase businesses' patronage by 30-50% and willingness to spend by 10-50%'**
>
> (Forest of Avon Plan citing: Literature Review, Greater Manchester Combined Authority: https://www.youtube.com/watch?v=u8RzZ3kdwUs

With masterplans being prepared for Kingswood, Yate, and other communities alongside Covid 19 recovery priorities, green infrastructure is central to plans has a key role to play in supporting high street and town centre regeneration and recovery. For example, Lottery investment in the restoration of Page Park is helping to regenerate the area and Staple Hill high street.

- **Climate change adaptation and resilience** – adapting to extreme weather due to climate change is vital to underpin infrastructure and economic resilience. Trees and woodland play a key role in air quality improvement, cooling, shading, and storing carbon. Grassland and highway verges provide key natural flood drainage and managed for biodiversity provide vital habitat and are rich in flowering plant species, providing vital food for pollinating insects which are essential for pollination of 75% of food production globally (IPBES 2019). For example:

> **'The cooling shade of trees and water saved the UK £248 million by maintaining productivity and lowering air conditioning costs on hot days in 2017.'**
>
> ONS natural capital accounts 2019

- **Agriculture** – is the largest form of land use in South Gloucestershire as further detailed in Section 4.7 Support sustainable and local food production. Working with land owning partners and residents to support local sustainable food production will reduce food miles and carbon emissions, improve health, reduce inequalities and support local economic development priorities and is an important area of opportunity. As part of the Agriculture Bill, the new Environmental Land Management Scheme (ELMS) is anticipated to introduce new requirements and incentives regarding sustainable land management and food production.

- **Green skills** – such as food growing, horticulture, traditional crafts and woodland management support sustainable lifestyles, green businesses and our climate and nature emergency priorities as well as providing wider employability skills.

- **Green tourism** – South Gloucestershire hosts key green tourism attractions such as the Cotswold Way, the Wave, Bristol Zoo Wild Place and the National Trusts Dyrham Park. Boosting green tourism opportunities linked to access to the countryside presents key green infrastructure business opportunities across our area.

- **Green volunteers contribution** – the many volunteers of our Community Spaces Network, public rights of way, engagement and wildlife conservation voluntary groups generously give their time to help care for our green spaces which is a significant in-kind contribution to the management of green infrastructure as well as boosting green and heritage skills locally.

- **Green apprenticeships and work placements** – the council hosts apprenticeships and work placements in green skills including parks management, horticulture and animal husbandry including at Page Park and Grimsbury farm.

- **New investment opportunities** – biodiversity net gain, carbon credits, habitat banking, tree nurseries, renewable energy production, and corporate social responsibility are all new opportunities for investment in green infrastructure which can deliver multiple benefits and contribute to a green and resilient economy.

- **Transformed measures of success** – by applying natural capital valuation of our green infrastructure and placing the health of the environment and people at the centre of our measures of success, the role and high return on investment natural capital value of high quality green infrastructure can be recognised and valued through its contribution to council priorities and a sustainable and resilient economy.

Delivering value for money

Optimising natural capital to achieve our priorities

Delivering value for money is an overarching theme of our Council Plan 2020 - 2024 and is a primary function and role of the council. This involves identifying how we can make best use of our resources to optimise levels of satisfaction with our work and services to progress our priorities. In Section 6 - our Green Spaces Asset Management Plan we set out our priorities for how we will manage the green space assets we are responsible for to deliver priorities for users, the environment, our communities and economy through efficient and effective use of resources and operations.

Within the context of the climate and nature emergency and clear evidence that our economy is reliant on the health of our environment, transforming how we value and optimise green infrastructure and environment across all aspects of our lives is a defining challenge and opportunity of our time.

4.9 Stronger working together

Our commitment

We will work with everyone to deliver our commitments to achieve shared goals for green infrastructure.

Why this matters?

Well designed and managed green infrastructure provides multiple benefits for people, our places and nature. We are living in a time of rising pressures for our environment, including the changing climate, the nature crisis, development, pollution and changes in land use. We are also facing increasing challenges for our health and widening inequalities which have been deepened by the Covid 19 pandemic.

Working together underpins the 'joined up' approach required to understand these challenges and to optimise the role of green infrastructure, by the council, residents, communities, businesses, and our partners. Working together also enables us to respond to new opportunities, to share expertise and resources, find solutions and take action to achieve shared priorities and deliver our vision for '**greener places where people and nature thrive**'.

What do we want to achieve?

We want to work together to achieve well designed, connected and managed green infrastructure which achieves our priorities and meets the needs of everyone in our communities.

Working together in the design, creation and management of green infrastructure will enable us to:

- achieve well managed green spaces and networks which are integral to places that build community and environmental wellbeing for people, places and nature
- prepare for the future, respond to the climate and nature emergency, and optimise the role of green infrastructure to reduce inequalities, care for our heritage, and contribute to a green economy
- enable everyone to be able to have their say, get involved, be empowered to contribute and know that their contribution is recognised and valued.

- develop shared understanding and knowledge to inform and inspire our work together and progress our outcomes for green infrastructure
- work with residents and our partners to co-develop sustainable solutions which enhance our lives, communities, the natural environment, and our economy
- make the best use of our resources, sharing skills, knowledge, and experience to strengthen our resilience, deliver value for money and achieve our shared vision for '**greener places where people and nature thrive**'.

Our vision to support and strengthen our work across the council with residents, communities, businesses, and our partners aligns with the global goal for partnership of UN Sustainable Development Goal 17:

> **UN Sustainable Development Goal 17 - Partnerships for the Goals -** 'Strengthen the means of implementation and revitalize the global partnership for sustainable development'

The role of working together to deliver our green infrastructure outcomes

Effective design, planning, creation and management of green infrastructure requires an integrated approach. This requires the bringing together of a wide diverse range of interests, needs, requirements, information and expertise to inform decision making.

The partners who we work with to progress our 'greener places' outcomes include:

Residents

Working with and for the residents of South Gloucestershire is at the heart of our work. Community led decision making enables priorities and solutions to be based on the views and ideas of local people. Tackling challenges like reducing litter and increasing land managed for nature are examples of some of the priorities where we work closely with residents.

With a population of 282,600 in South Gloucestershire (Office for National Statistics 2018 data published 2020) it is inspiring what can be achieved when we work together. For example, across the UK residential gardens and yards in urban areas account for 29.5% of the total urban area, which is approximately 520 thousand hectares, an area nearly ten times the size of South Gloucestershire (953,665 hectares). From window boxes and patio pots, to feeding the birds or making insects welcome over winter, all these actions make a difference to our green infrastructure network and highlight the significant potential we can all contribute to restoring nature.

Working towards net zero carbon emissions by 2030 will require changes in how we live day to day. Making the most of our local green and blue spaces for recreation and leisure and using green infrastructure routes for walking, wheeling and cycling rather than travelling further afield by car will also help us live healthier lifestyles.

Community and voluntary sector

In South Gloucestershire our Community Spaces Network of community site friends of groups, public rights of way volunteers, local nature groups and 'In Bloom' groups work with the council and our partners to care for local green spaces, contributing many considerable hours of vital work each year. Find out more about this network and the invaluable work of our Community Spaces Network volunteers in Section 6 – Our green spaces asset management plan

Other groups in our communities who play a key role in managing and caring for local green spaces and gardens include allotment associations, faith groups, community centres, green dog walkers, Rotary Clubs, children and young people's groups including scouts and cadets.

Working closely with community groups, the council supports applications to many sources of additional funding, bringing further investment into our communities for improvements to parks and green spaces and events. This would be impossible without the volunteers who work with us to develop and deliver these projects.

Community groups also play a key role in supporting and empowering local people to get involved. The council works closely with CVS South Gloucestershire to involve and support everyone to have their say and get involved in their community through the South Gloucestershire Equalities Forum

Town and parish councils

There are 44 town and parish councils in South Gloucestershire and three communities that hold an annual parish meeting. In addition, there are two unparished areas of Kingswood and Staple Hill. Town and parish councils own and maintain parks, sports pitches, allotments and other green spaces. See **Section 6 – Our green spaces asset management plan** for more information about how the council and town and parish councils work closely together regarding management of green spaces across our area.

We are working with Town and Parish Councils to prepare Local Nature Action Plans to restore nature in our communities.

South Gloucestershire Local Strategic partnership

Our South Gloucestershire Local Strategic Partnership (LSP) brings together many different organisations and businesses who work within our communities, to co-ordinate and help deliver the priorities and actions of the Sustainable Community Strategy. The partnership is made up of voluntary sector organisations, community groups, local businesses, the council and other public sector agencies and is coordinated by the council climate emergency team.

The LSP owns and oversees the governance and implementation of the South Gloucestershire Climate Emergency Action Plan. Members of the LSP are preparing and implementing climate emergency action plans which include actions for nature recovery. These plans will be published on the LSP website.

West of England Nature Partnership (WENP)

The West of England Nature Partnership (WENP) is the designated Local Nature Partnership (LNP) for the West of England. WENP is a cross-sector partnership working to restore the natural environment in the West of England through embedding the value of nature in decision making across spatial planning, public health and economic development. WENP is hosted by Avon Wildlife Trust and funded by North Somerset Council, Bristol City Council, South Gloucestershire Council, Bath and North East Somerset Council, Wessex Water and Bristol Water.

Cotswolds National Landscape (Area of Outstanding Beauty)

The Cotswolds National Landscape is a designated Area of Outstanding Natural Beauty. We work with team at Cotswolds National Landscape and our partners on the Cotswolds Conservation Board to deliver the Cotswolds AONB Management Plan 2018-2023. This includes work to prepare a Nature Recovery Plan in response to the Colchester Declaration and set out a strategy and actions to restore nature across the AONB. The Cotswolds National Landscape is an independent statutory body that works to conserve and enhance the natural beauty of the Cotswolds to increase understanding and enjoyment of its special qualities; and to foster the social and economic well-being of local communities.

Bristol Avon Catchment Partnership

The Bristol Avon Catchment Partnership (BACP) comprises a range of organisations, groups, authorities and individuals dedicated to working together to improve the water environment and provide wider benefits for people and nature across the River Avon catchment which includes the River Frome. The partnership has produced a catchment plan and launched an Online Projects Map, which provides a geographical display of the BACP Action Plan.

The Joint Local Access Forum (JLAF)

The Joint Local Access Forum (JLAF) is an independent statutory group that advises on access to the outdoors in Bath and North East Somerset, Bristol City and South Gloucestershire. The JLAF consists of 21 voluntary members representing users, landowners and other interests (e.g. those of disabled people) who advise the councils and other organisations in the area.

Health and wellbeing, integrated care, voluntary and community sector partners

With increasing awareness and evidence of the role and benefits of green infrastructure for health and wellbeing and reducing inequalities, an integrated approach working with partners from across service areas is key. This is a growing area of partnership work across health, integrated care, voluntary, community and environment sector partners including the work of the South Gloucestershire Health and Wellbeing Board.

Local Economic Partnership - businesses and other employers

Working to 'green' our high streets, retail, business and industrial centres are important ways we are working with partners to support a thriving and sustainable economy, clean economic growth and achieve our Climate Emergency Declaration goals for net zero carbon emissions by 2030.

Local businesses and other employers have vital roles to play in achieving our green infrastructure and sustainability goals as landowners/managers, buyers, importers/exporters of goods and services. Through greening the workplace and creating opportunities for green volunteering and corporate social responsibility, employers can improve the environment and support wellbeing in the workplace. Workplace wellbeing and green space | Centre for Sustainable Healthcare

Landowners – agricultural land and estate owners

Agricultural land covers around half of South Gloucestershire and is the largest component of our overall green infrastructure network. This includes several large estates such as the Badminton and Tortworth estates. These historic estates are an integral part of the landscape, heritage, economy and culture of our area.

Working with third party landowners to seek opportunities for strengthening the connectivity, quality and benefits of our green infrastructure network is essential to underpin climate change adaptation and resilience, nature recovery, healthy pollinator habitat and healthier greener places. The public rights of way network is mostly on private land and a key area of the councils partnership work with landowners. New funding opportunities including ELMS (Environment Land Management Scheme) and funding for tree planting and renewable energy are other key areas where working together we can optimise outcomes and investment across our area.

Regional and national government

South Gloucestershire Council plays a key role in working with regional and national government to champion local priorities and influence regional and national policy. With the rising profile of green infrastructure to provide integrated solutions and multiple benefits to address many of the challenges we face, working together with residents, our partners and all levels of government is increasingly important to create a greener and healthier future together.

5

Our green infrastructure network

5 Our green infrastructure network

5.1 Introduction

A co-ordinated, planned and strategic approach is required to achieve our vision for a thriving and resilient green infrastructure network across our area. To achieve this vision and our green infrastructure outcomes, we need bigger, better, and more joined-up functioning green/blue spaces and ecological networks, contributing multiple benefits for people and nature across our area.

Identifying and mapping the key green infrastructure assets, features, areas, gaps and opportunities across our network is central to preparing plans to deliver this vision.

Our strategic green infrastructure spatial projects and programmes set out key, spatial and at scale priorities and programmes to optimise the multiple benefits and role of green infrastructure across our area to inform place making, decision making and asset management.

5.1.1 Key principles which inform our spatial green infrastructure priorities

Through our Local Plan 2020, the following emerging guiding principles inform our work, including how 'we look to protect and enhance key green infrastructure elements and assets, whilst also improving connectivity of the emerging GI and nature recovery networks.'

1. Locate new homes, jobs or settlements in places where key services and facilities are easily accessed by walking and cycling or effective public transport, or alternatively in locations where key services and facilities are capable of being provided as part of the new development

2. Sequential approach to building on areas at a high risk of flooding

3. Protect and enhance ecological, landscape and heritage designations and their settings.

4. Protect and enhance the function and connectivity of our Green Infrastructure and Nature Recovery Networks.

5. Plan for a better balance between local jobs and resident workers in our communities

6. Ensuring that we protect a ‘sense of place and character’ when we plan for new development

Complementing the above, key principles for green infrastructure which inform our spatial green infrastructure priorities are:

Connectivity – this includes identifying projects and areas for protecting and improving connectivity for nature, landscape, access and recreation. Improving connectivity also includes making connections between urban and rural areas, for people and for nature, and enhancing the water quality, ecosystems and functions of our 'blue infrastructure'.

- **For nature –** identifying key gaps in connectivity and the opportunities for improving links to extend our nature recovery networks for woodland, grassland and wetland habitat and our B lines pollinator networks.

- **For people –** identifying gaps and opportunities to improve green infrastructure connectivity and access for people, including public rights of way and cycle ways.

Quality – identifying opportunities for quality improvements to enhance the green infrastructure network to deliver priority outcomes for people, place, nature.

Functionality, value and contribution – opportunities to optimise the value, multiple and 'stacked' benefits of well-planned and managed green infrastructure, and the natural capital value contribution of green infrastructure to deliver priorities and outcomes.

5.1.2 Regional context

Green infrastructure networks operate across boundaries and at multiple scales for both people and nature. We recognise that a co-ordinated regional approach for identifying spatial priorities is required.

We work with our partners across the West of England to deliver progress on the shared green infrastructure outcomes and priorities of the Joint Green Infrastructure Strategy, West of England Nature Partnership Nature Recovery Network and Forest of Avon Plan. As further detailed in **Section 4.9 Stronger working together**, our partners include the West of England Combined Authority (WECA); the unitary authorities of Bristol, Bath & North East Somerset, and North Somerset; statutory partners such as the Environment Agency; and environment partners in the West of England Nature Partnership including Avon Wildlife Trust and the Forest of Avon Trust.

With preparation of the regional Spatial Development Strategy and South Gloucestershire Local Plan underway, taking action together to deliver shared regional priorities, opportunities and outcomes for our green infrastructure network is required. A strong evidence base and understanding of strategic green infrastructure priorities enables well informed choices to be made regarding land use decision making and asset management aligned with wider shared priorities.

This joined up and planned approach to green infrastructure is particularly important to achieve our goals for restored, connected and climate change resilient ecological networks, balanced with requirements to fulfil supply of new housing and infrastructure.

5.2 The evidence which informs our strategic green infrastructure priorities and programmes

The data and evidence to inform our green infrastructure priorities and decision making is drawn from a range of sources. This includes aerial and phase 1 (on the ground) habitat surveys, South Gloucestershire Planning Policies, the West of England Nature Partnership, Bristol Regional Environment Records Centre, Ancient Tree Inventory, Environment Agency, Natural England, Avon Wildlife Trust, Forest of Avon Trust, Buglife and the work of wildlife conservation groups such as Avon Bat Group.

The Joint Green Infrastructure Strategy action plan (Action S1) identifies the need for a shared West of England environmental and ecological data platform and interactive map. We are working with our partners to establish this platform which will be kept updated and used for planning, delivery and monitoring purposes. This platform will be used to support strategic planning for the natural environment as well as used to monitor new requirements and objectives set within the Environment Bill including biodiversity net gain and Local Nature Recovery Strategies.

5.2.1 Our Landscapes

Landscape character assessment

Landscape character assessment is a method of identifying, mapping and classifying the special qualities of an area of landscape. This helps us make informed decisions about how to manage GI, land use and development considerations in an area, taking into account landscape character considerations including views and visually important hillsides.

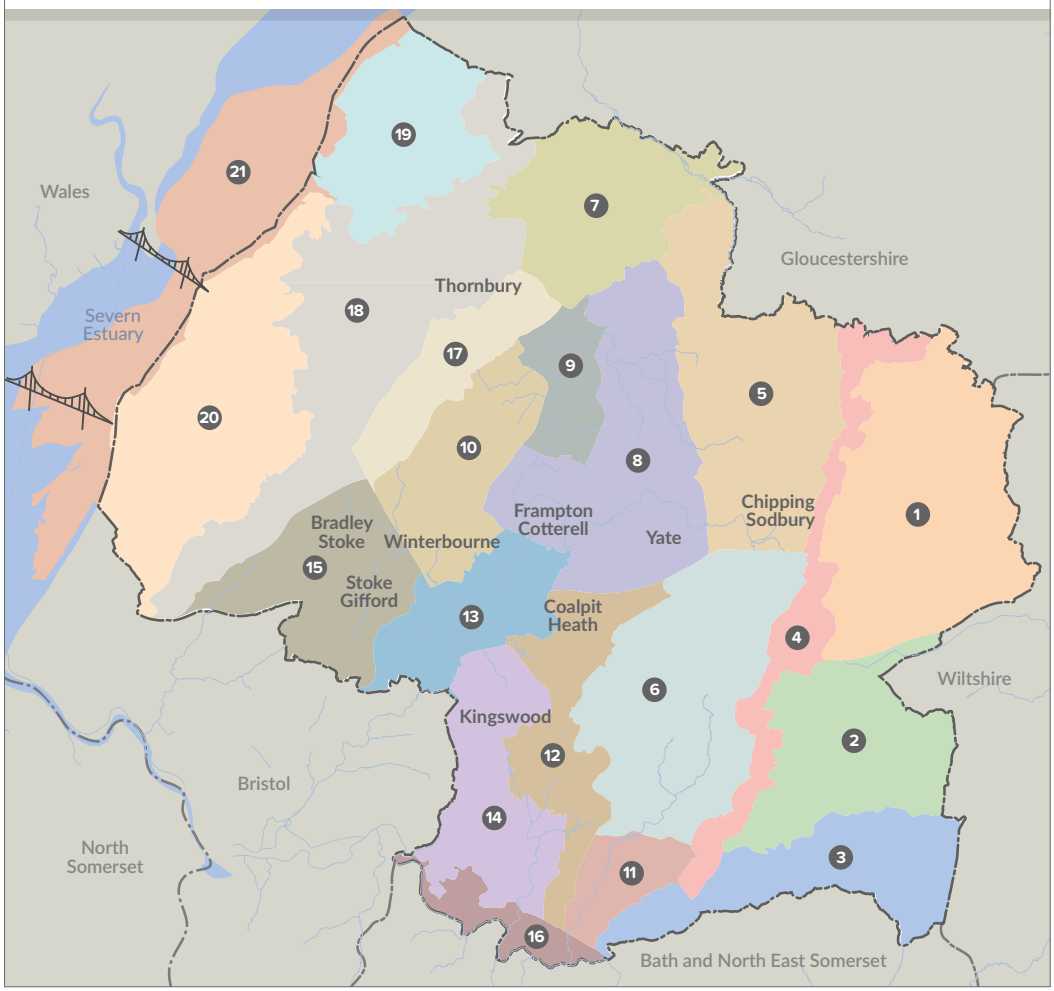
The adopted South Gloucestershire Landscape Character Assessment (2014) provides a statement of the character of South Gloucestershire's landscapes, their distinctive attributes and features. This assessment also identifies the changes that are taking place in the landscape and strategic guidance and recommendations to help steer future evolution.

There are 21 distinct Landscape Character Areas across South Gloucestershire as summarized in the map below. These include the Cotswold Scarp (4), Yate Vale (8), the Marshfield Plateau (2) the Severn Shoreline and Estuary (21) and major areas of settlement such as Kingswood (14).

Three National Character Areas (NCAs) cover South Gloucestershire and have informed identification of our Landscape Character Areas:

- Bristol, Avon Valleys and Ridges NCA
- Cotswold NCA
- Severn and Avon Vales NCA

South Gloucestershire Landscape Character Assessment (2014)



Source Information based on British Geological Mapping
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Key

- South Gloucestershire Boundary
- Badminton Plateau 1
- Marshfield Plateau 2
- Ashwicke Ridges 3
- Cotswold Scarp 4
- Wickwar Ridge & Vale 5
- Pucklechurch Ridge & Boyd Valley 6
- Falfield Vale 7
- Yate Vale 8
- Tytherington Plain 9
- Earthcott Vale 10
- Golden Valley 11
- Westerleigh Vale & Oldland Ridge 12
- Frome Valley 13
- Kingswood 14
- Patchway & Filton 15
- Avon Valley 16
- Rudgeway & Tytherington Ridge 17
- Severn Ridges 18
- Oldbury Levels 19
- Pilning Levels 20
- Severn Shoreline & Estuary 21

nature people places

5.2.2 West of England Green Infrastructure Areas

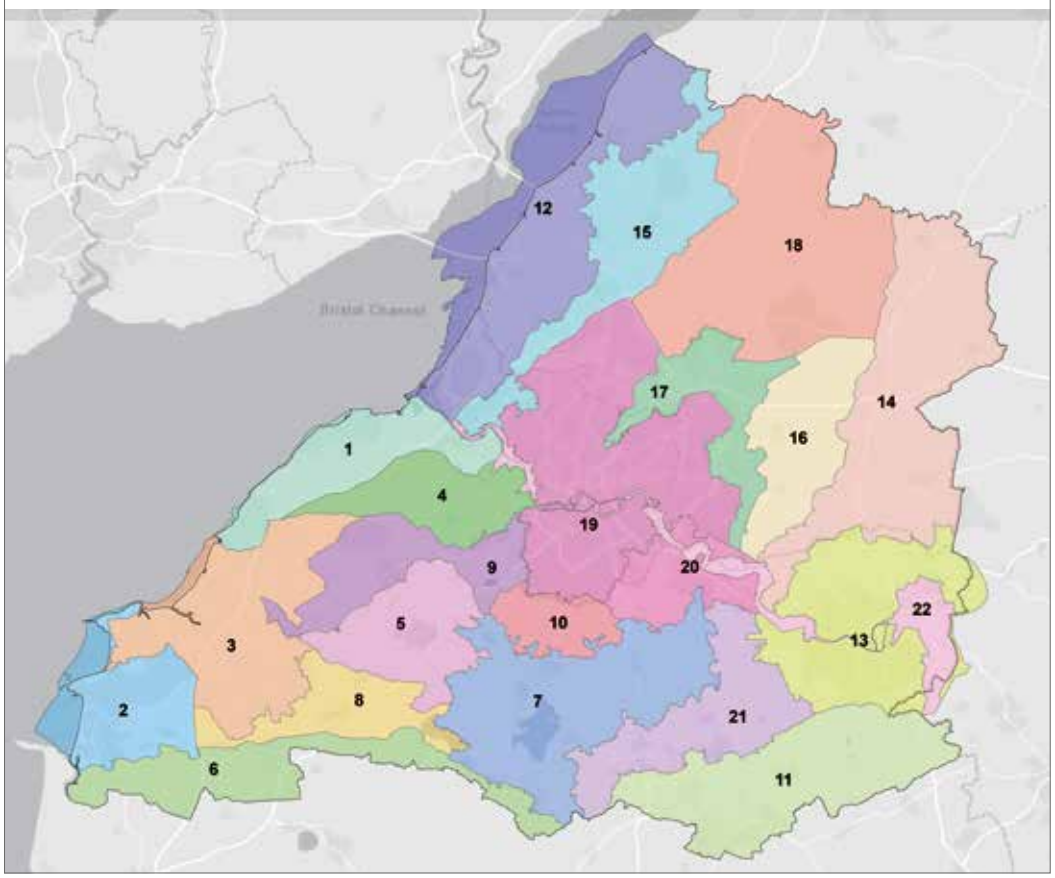
The Joint Green Infrastructure Strategy sets out 22 green infrastructure areas across the region informed by landscape character, heritage, ecological and other considerations.

Well designed and high quality green infrastructure can protect and enhance connectivity for nature, public access and sense of place. Understanding the origins and history of the semi-natural and designed landscapes can provide information on how these areas can be managed, conserved and protected. It is crucial that a holistic approach is taken towards the management of green spaces that incorporates an understanding of their intrinsic heritage values.

These green infrastructure areas are used to assist:

- Planning of new development, for linking with existing and consideration of new green infrastructure that new development could further enhance/ support or link with
- Identifying opportunities for landscape scale cross boundary working and joint working between different authorities/bodies/ communities
- Highlighting key issues e.g. loss of habitat, incidence of flooding or low flows, and other risks and opportunities that may lend themselves to different green infrastructure interventions to inform planning and decision making
- Identifying priorities for targeting resources/bidding for funding

West of England Green Infrastructure Areas



Source: South Gloucestershire Local Plan Core Strategy 2006-2027 Policy CS2: Green Infrastructure

Key - Areas in South Gloucestershire highlighted

1 Clevedon Portishead and Gordano

2 Weston-super-Mare and Environs

3 North Somerset shoreline and Moors

4 Wooded uplands, Abbots Leigh, Tickenham, Failand

5 North Somerset Open Plateau and wooded slopes

6 Mendip Slopes and outliers

7 Chew Valley

8 Yeo Valley and Spring line villages

9 Nailsea, Backwell, Long Ashton and Environs

10 Dundry Hill

11 Cam, Wellow and Somer Valley around Norton Radstock

12 Severn Estuary Shoreline and levels

13 Bath and Environs – Bathscape

14 Cotswold Scarp and Dip Slope

15 Ridges, Shirehampton to Tytherington

16 Pucklechurch Ridge, Boyd and Golden Valleys

17 Frome Valley – Westerleigh Vale – Oldland Ridge

18 The South Gloucestershire Vales

19 Greater Bristol

20 Keynsham and Environs

21 Undulating plateau Newton St Loe to Hinton Blewett

22 River Avon Valley

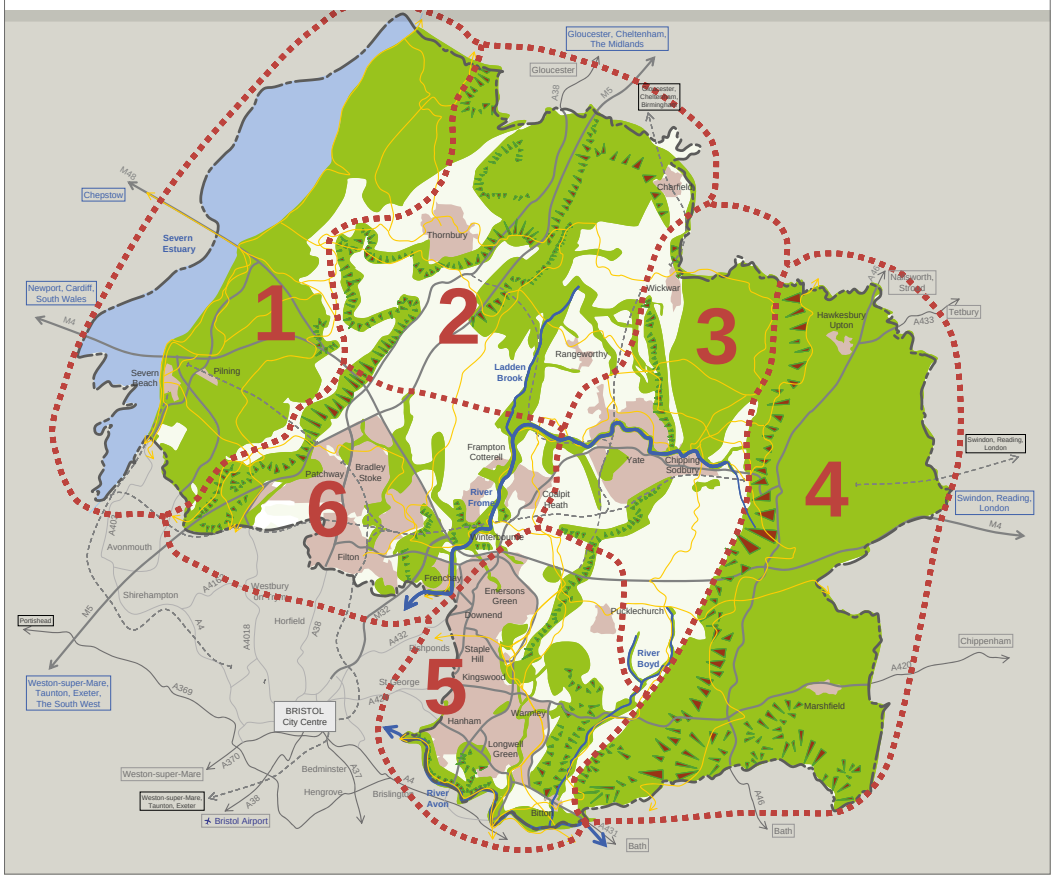
Highway verge – Tytherington, South Gloucestershire

5.2.3 South Gloucestershire Planning Policy

The Core Strategy and Local Plan

The **South Gloucestershire Local Plan Core Strategy 2006-2027 Policy CS2: Green Infrastructure**, sets out the evidence which informs the council's current strategy, approach and strategic green infrastructure areas. The map below illustrates the Strategic Green Infrastructure Network which supports policy CS2. The 'zones' include current and potential strategically important green infrastructure assets. 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 introduce enhancements to the network.

Green Infrastructure and Nature Networks



Source: South Gloucestershire Local Plan Core Strategy 2006-2027 Policy CS2: Green Infrastructure

Key

- South Gloucestershire Boundary
- Zones
- Green infrastructure and nature
- Visually important hillsides
- Urban areas and market towns
- Rural settlements
- Strategic recreation & cycle routes
- Main water courses
- Motorway
- A roads
- Railway

ZONE 1

Severn Estuary; SPA/SAC/RAMSAR; Floodzones2&3; Strategic Nature Areas; Severn Way, Monarch'sWay & Jubilee Way; Landscape Character Areas 19,20,21

ZONE 2

Strategic Nature Areas; SNCIs; Open Access Areas; Ladden Brook; Floodzones2&3; Visually Important Hillsides; Historic Parks & Gardens; Strategic Paths & Cycleways; Landscape Character Areas 7,8,9,10,17,18

ZONE 3

Commons; Local Nature Reserves; Strategic Nature Area; SSSI; Lower Woods Nature Reserve; Frome Valley; Floodzones2&3, Strategic Paths & Cycleway; Visually Important Hillsides; Historic Parks & Gardens; Landscape Character Areas 5,6,8,12

ZONE 4

Cotswold AONB; Strategic Nature Area; Historic Parks & Gardens; Visually Important Hillsides; National Trail; SSSIs; Open Access Lane; Landscape Character Areas 1,2,3,4

ZONE 5

Visually Important Hillsides; Strategic Paths & Cycleways; Local Nature Reserves; Commons; OverscourtWood; Warmley Forest; Hanham Hills; River Boyd; Avon Valley, Floodzones2&3; Landscape Character Areas 6,11,12,14,16

ZONE 6

Visually Important Hillsides & Landscape; Commons, Frome Valley; Strategic Paths; Local Nature Reserve; M32 Corridor;Haw Wood; Stoke Park; Historic Parks & Gardens; Landscape Character Areas 13,15,18

nature people places

The new **Local Plan** will set out a new green infrastructure policy for South Gloucestershire. The **Green Infrastructure Supplementary Planning Document 2021** introduces the emerging and anticipated guidance and requirements which will inform preparation of this future planning policy. One of the key issues identified for our new Local Plan is '**Connecting and enhancing wildlife habitats**' which introduces the need to provide for the Nature Recovery Network and biodiversity net gain when land is developed, responding to anticipated forthcoming Environment Act statutory requirements and new national planning policy.

Work has started to update the evidence base to inform and identify strategic green infrastructure corridors and areas aligned with our green infrastructure outcomes. This includes mapping information and evidence such as landscape character, heritage, ecology and biodiversity, hydrology, recreation and access, areas of multiple deprivation, soil, air and water quality.

Please refer to Section 9: Maps, for maps which present green infrastructure features and evidence that inform preparation of our strategic green infrastructure programmes, climate and nature emergency adaption and resilience work, planning and place making in our Local Plan.

5.2.4 West of England Nature Partnership – Nature Recovery Network and Access to Green Space evidence and mapping

Nature Recovery Network

> **'To reverse the declines in biodiversity and realise nature's recovery at scale, we need to work together and on the landscape-scale to embed the Lawton principles of Bigger, Better, More and Connected into our policies and strategies'.**
>
> West of England Nature Partnership

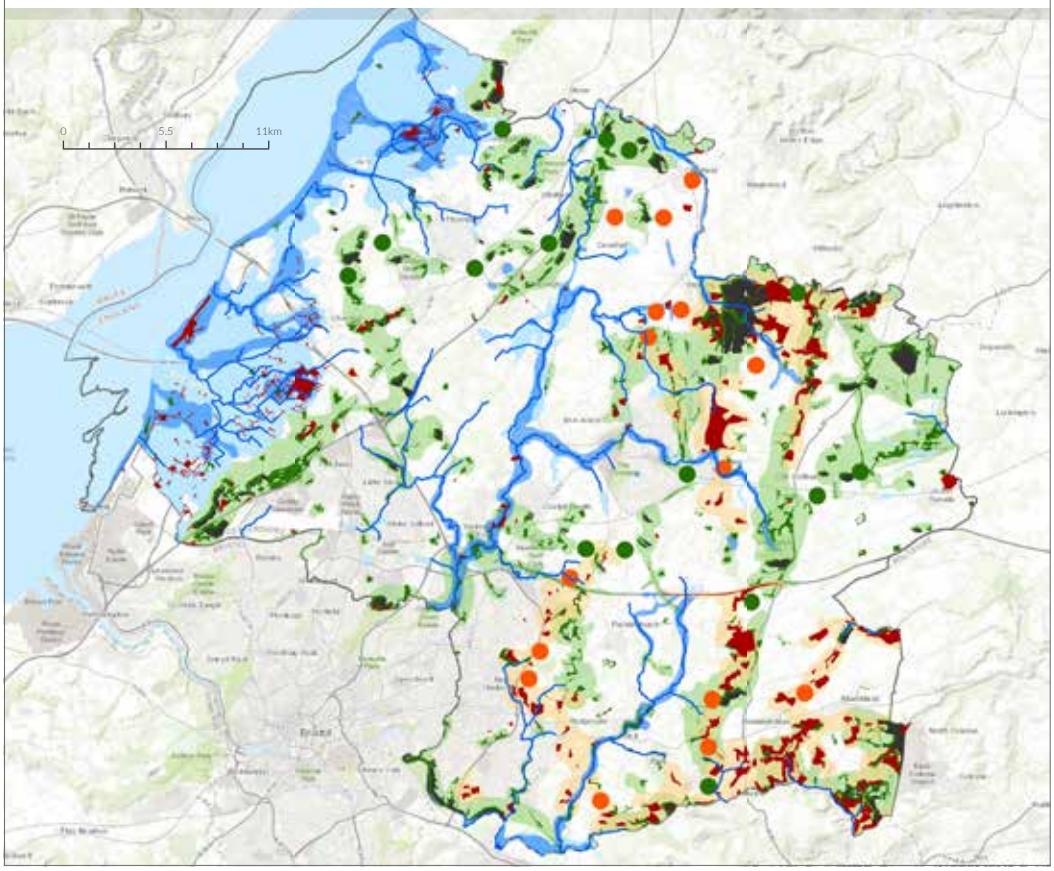
The West of England Nature Recovery Network (NRN) is a joined-up network of strategic woodland, wetland and grassland habitat across our region. The NRN map highlights the gaps and opportunities in our ecological networks where we can improve connectivity, and helps prioritise work for habitat enhancement, creation and restoration in areas that provide the best opportunities to deliver nature's recovery.

Restoring our Nature Recovery Network involves protecting, enhancing and extending our existing natural habitat to create 'complex and dynamic' species rich habitats where nature can thrive, in functional, connected and resilient ecological networks.

Nature Recovery Network maps for the West of England and a detailed overview of the methodology used is available at: Nature Recovery Network - WENP

The NRN is used across the West of England as a tool to focus efforts to restore nature.

South Gloucestershire Nature Recovery Network



Map © WENP except: River Barriers © BACP. Flood zone 2, Floodplain connectivity, Water quality and chemical status (WFD) © Environment Agency. Ancient woodland © Natural England. All woodland and grassland data, and the water strategic network contain data © Crown copyright and database rights 2018 Ordnance Survey 100024198. Rivers and streams contains OS data © Crown copyright and database right 2021. River barriers, Flood zone 2, Floodplain connectivity, Water quality and chemical status (WFD) contain public sector information licensed under the Open Government Licence v3.0.

Key

Grassland

- Existing grassland
- Grassland connectivity opportunities
- Grassland strategic network

Woodland

- Existing woodland
- Woodland connectivity opportunities
- Woodland strategic network

Water

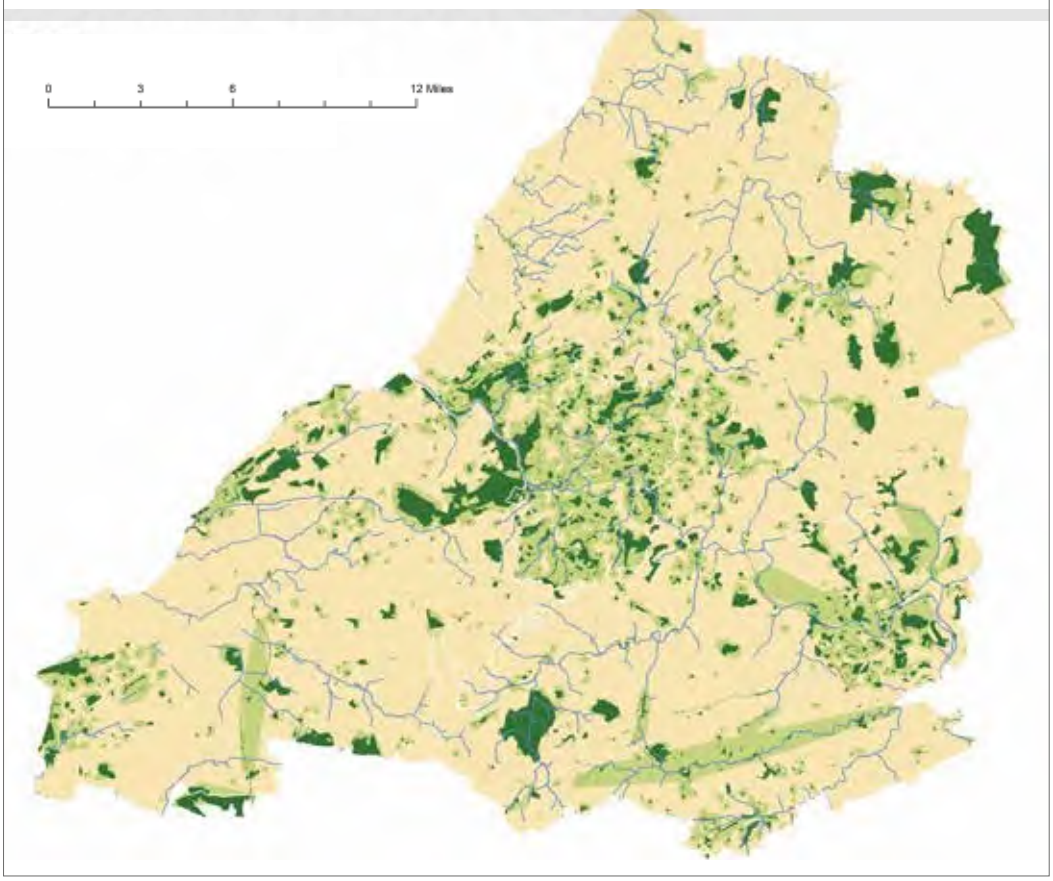
- Wetland strategic network
- Rivers and streams
- Indicative wetland opportunities

Map: South Gloucestershire Nature Recovery Network (NRN):
South Gloucestershire NRN for woodland, grassland and wetland habitat including gaps in the network (indicated by dots) which are priorities to improve connectivity and join up the network. www.wenp.org.uk/nature-recovery-network

Access to green space across the West of England

The West of England Nature Partnership (WENP) has also mapped green space across the West of England and areas within 300m (approximately a five minute walk) of local green space, taking into account that access is not always direct due to entrance locations and other barriers Access to Green Space in the West of England. It is important to note that this mapping is based on different criteria and open space definitions to those used in our planning policy CS24. For example it includes golf courses and does not include Public Rights of Way which may help explain the differences between rural and urban areas.

Accessibility to open green space in the West of England



© WENP 2018. Data sources used with permission include: Avon Wildlife Trust, Woodland trust, national Trust, Natural England, OS Green Space

Key

- Open green space
- Acessible to open green space (within 300m walk)
- Deficient in access to open green space
- Rivers

There are two key planning policies that relate to green space requirements for new development in South Gloucestershire. Policy CS2 covers Green Infrastructure while Policy CS24 covers Green Infrastructure, sport and recreation standards. Appendix 5 gives accessibility standards that include minimum quantity and accessibility requirements for informal recreational open space, natural and semi natural green space, outdoor sports facilities, provision for Children and Young People and allotments. These are all set out in Core Strategy 2006-2027 and will be reviewed as part of the new Local Plan.

> **Data and Access Profiles (DAPS), is the technical evidence we are using to support analysis of key services and facilities within appropriate walking distances in our Local Plan 2020: Data and Access Profiles (DAPs)**
> South Gloucestershire Online Consultations (southglos.gov.uk)

5.2.5 West of England habitat mapping

To prepare for implementation of BNG, and support our Nature Recovery Network ambitions, robust evidence and mapping of our existing habitats is needed. To achieve this, a West of England Geographic Information Systems (GIS) Habitat Map has been commissioned by the West of England Combined Authority (WECA). WSP consulting and Bristol Regional Environmental Records (BRERC) are delivering this project to check existing and gather new habitat data.

This map will provide baseline information, alongside other data to inform our work. Notably, this includes a review and update of the West of England's Nature Recovery Network to inform setting our nature recovery goals, and to provide a basis for achieving anticipated statutory requirements to ensure Biodiversity Net Gain (BNG) for new development. The habitat map will also be used to support regional and Local Plan making.

5.3 Green infrastructure spatial priorities and opportunities

Aligned with local, regional and national requirements and priorities, strategic green infrastructure spatial priorities are being identified, prepared and implemented. This includes identifying key green infrastructure, to protect and enhance existing assets, whilst also improving connectivity and extending our green infrastructure and nature recovery networks, particularly to achieve our nature recovery goals.

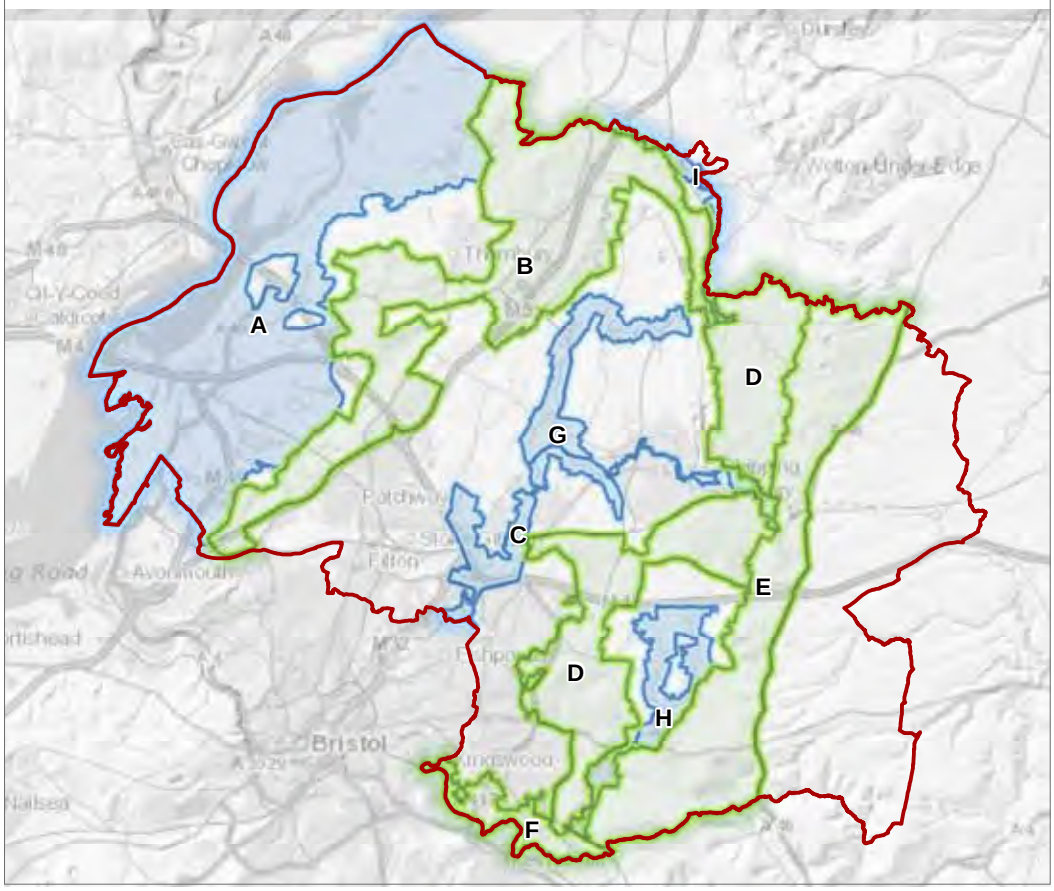
5.3.1 Our emerging green infrastructure corridors

Building on the evidence available and research undertaken to prepare the Green Infrastructure Supplementary Planning Document (SPD) 2021, nine potential strategic green infrastructure corridors are being investigated for South Gloucestershire, which take in the majority of identified significant green infrastructure assets and areas.

Methodology and evidence to inform further detailed identification of these corridors is being scoped, with the aim of supporting planning and place making as we prepare our Local Plan. To fulfil requirements for new development and respond to our climate and nature emergency commitments, having access to more detailed information and data will inform, support and strengthen decision making. Understanding the priorities, risks and opportunities for green infrastructure plays a key role to inform smarter decision making to inform development location considerations, and achieve our ambitions across these integrated priorities.

It is important to highlight that these potential corridors will be defined by their landscape and environmental contribution (or potential) and accordingly will serve a different purpose to and are not additional green belt. The methodology being prepared will provide a tool which presents evidence and information to inform decision making, to support a vision where both built and green infrastructure are effectively planned through an integrated approach aligned with our planning policy and commitments to deliver 'greener places where people and nature thrive'.

Potential strategic green and blue infrastructure corridors within South Gloucestershire



Key

- South Gloucestershire Boundary
- Blue Infrastructure Corridor
- Green Infrastructure Corridor

A: Shepperdine-Oldbury on Severn- Severn Beach (Severn Estuary and Levels)

B: Charfield-Alveston-Hallen (Western Scarp/Severn Ridges)

C: Winterbourne-Kendleshire- Hambrook (River Frome Corridor)

D: Wickwar-Westerleigh-Bitton (Westerleigh Vale/ Oldland Ridge/East Fringe)

E: Hawkesbury-Old Sodbury-Upton Cheyney (Cotswold Scarp)

F: Hanham Green-Hanham Abbots- Bitton (Avon Valley)

G: Wickwar-Iron Acton-Yate (Ladden Valley)

H: Hinton-Doynton-Bitton (Boyd Valley)

I: Huntingford-Charfield-Wickwar (Little Avon River Corridor)

Names in brackets cross reference to descriptions within the Greener Places: Green Infrastructure Strategy 2021, which highlight the key geomorphological features that the corridors are associated with.

5.3.2 Our green infrastructure programmes and projects

Introducing our green infrastructure programmes

To focus work, action and investment to achieve our green infrastructure priorities and outcomes, we are working with our partners to prepare, fund and deliver a portfolio of strategic green infrastructure programmes for South Gloucestershire. This portfolio includes two broad categories of programmes:

1. **Location specific programmes** – in a particular area/location, such as the River Frome Reconnected and Kingswood Park restoration programmes.

2. **Network scale programmes** – for a particular type of green infrastructure asset group or habitat type across South Gloucestershire, such as our programmes to change highway verge management and doubling of tree canopy cover.

For each programme, a detailed suite of projects is being prepared to deliver green infrastructure investment on the ground, within a specific area, or across the network.

Current location specific programmes:

- **Common Connections** – Bristol Eastern fringe
  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

- **River Frome Reconnected** – River Frome catchment
  A partnership programme to restore and improve the health and resilience of the Bristol Frome river and its catchment, to provide multiple benefits including to make sure the river can be accessed and enjoyed by all.

- **Avonmouth and Severnside Enterprise area (ASEA) Flood Resilience and Ecological Mitigation project - Severnside**
  To improve flood defence, wetland habitat and public access across the Severnside area.

- **String of Pearls** – Severn vale and estuary
  At concept stage, this programme aims to connect and restore wetland habitat of the protected Ramsar area of the low lying vales and coast of the Severn Estuary, support resilience of the area and improve public amenity.

- **Water Space** – River Avon catchment
  A partnership programme of work to improve the green spaces and rights of way along the River Avon including improvements

- **Lower Woods and vale** – increasing woodland connectivity
  At concept stage, 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.

- **Kingswood Park** – Our Park at the Heart of Our Community
  To restore and enhance the heritage, landscape and facilities of Kingswood Park to create an accessible green space which is resilient to the changing climate and where people can come together. The project will also link to the Kingswood Town Centre regeneration programme, making Kingswood a better place to live, work and visit.

- **Grimsbury Community Farm** – Centre for nature restoration and climate change adaption
  A council owned and managed community farm, providing a key public open space resource and facilities for play and recreation, reducing health inequalities, farming education, skills and training and a showcase for sustainable land management.

- **Hawkesbury and Inglestone Common** – Countryside Stewardship Scheme
  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.

- **Yate spur shared use path - Yate**
  To connect Yate with the Bristol and Bath Railway Path, by providing a continuous off carriageway 'green corridor' for commuting, leisure and recreation.

Current network scale programmes:

- **Tree planting** – doubling of tree canopy cover

- **Nature Recovery Network** – working with our partners locally and regionally through the West of England Nature Partnership to achieve a bigger, better, more and connected ecological network across our area.

- **Highway verges for Nature** – changes to management of highway verges and council owned green spaces

- **Retrofit for nature** – making space for nature within existing built assets and infrastructure

- **Greener communities** – greening our priority neighbourhood communities to optimise the role of green infrastructure to reduce inequalities and improve the environment for people, place and nature

Preparing, funding and implementing our strategic programmes

Our strategic green infrastructure programmes are at differing stages of preparation, 'investment readiness', funding and implementation. The above portfolio is not exhaustive, and together these programmes form the start of a continuous new 'pipeline' of strategic green infrastructure programmes. These programmes are at various stages of project life cycle, alongside further new programmes will maintain an ongoing programme of delivery and investment through our pipeline.

The council has a strong track record of successful preparation and delivery of externally funded green infrastructure programmes including 'A Forgotten Landscape' and 'Page Park'. By preparing programmes in this pipeline with our partners, we will be able to respond proactively to new funding and investment opportunities, deliver high return on investment, and multiple benefits for shared priorities.

To further progress this pipeline, we are working with our partners to establish a new environment investment mechanism/scheme, which will support and champion local strategic green infrastructure programmes for investment from a range of sources.

Through implementation of Greener Places Strategy commitments, work to develop our Nature Recovery Network, implementation of our Climate Emergency action plan and preparation of our Local Plan, further strategic green infrastructure programme opportunities will be identified and progressed as appropriate through this pipeline.

Governance and monitoring

Governance and monitoring of progress for programmes within our strategic green infrastructure portfolio and pipeline is through the South Gloucestershire Green Infrastructure Board. This includes regular programme updates regarding milestones and outcomes progress, risk log, partner and funder requirements. Many programmes are managed by steering groups of partners who report on progress to the Board.

Key considerations to inform prioritisation

An important part of managing and co-ordinating our pipeline, is prioritisation of resources, particularly officer time, to support preparation of programmes. Considerations which will inform this process include:

1. **Anticipated new legislation and associated statutory requirements, considerations and opportunities** – this includes anticipated enactment of the 25 Year Environment Plan through the Environment Bill, the Agriculture Bill 2020 (including the Environment Land Management Scheme), anticipated updated national planning policy and green infrastructure national design guide, English Tree Strategy and EU Exit related legislation.

2. **Time critical pressures, considerations and risks** – for some of these programmes there are time critical considerations. For example for the Bristol eastern fringe (Common Connections) and River Frome catchment (River Frome Reconnected programme) there are Local Plan timetable considerations.

3. **Critical resilience pressures and risks** – many of our strategic green infrastructure programmes respond to and mitigate critical built infrastructure risks and provide important 'nature based solutions' to support adaptation and resilience to the changing climate. This includes the role of and need to implement river catchment resilience programmes for the Rivers Frome, Avon and tributaries to underpin new development as part of the Local Plan and local Master Plans, through the River Frome Reconnected and Water Space programmes.

4. **Identification of programmes which maybe in scope for specific funding streams** – in response to the climate and nature emergency and Covid 19 recovery there are new funding streams from national government and WECA, alongside increasing demand from businesses and private investors to fund green initiatives and programmes.

5. **New funding and emerging market considerations** – there are a growing number of local, national and international funding portfolios for green infrastructure, with risks of duplication and conflicting interests, as well as opportunities to lever in more investment through partnership work.

Within a fast paced changing local and global context, alongside reframing of the role and value of green infrastructure, applying an ambitious approach to setting, funding and implementing our strategic spatial priorities is essential to achieve the 'magnitude change' required across our work, lives, asset management and place making to deliver our vision for '**greener places where people and nature thrive**'.

6 Our Green Spaces Asset Management Plan

6 Our Green Spaces Asset Management Plan

6.1 Introduction

Within the wider green infrastructure network, publicly accessible green spaces are vital 'hubs' for people and nature which deliver multiple benefits for our communities.

Our green spaces provide essential places for leisure, exercise, relaxation and play, as well as critical habitat for nature. They also play a key role in providing natural drainage, shading, cooling and air quality benefits to support adaption and resilience to the changing climate across our area.

Parks and green spaces are a key part of our local culture and heritage and come in a wide range of shapes and sizes from urban parks, play areas, and allotments, to extensive woodlands, commons, and nature reserves. The Public Rights of Way network connects our green spaces and communities and provides vital 'arteries' in our green infrastructure network.

6.1.1 Green spaces the council is responsible for

South Gloucestershire council owns and/or manages over 11 thousand areas of green space across our area. Teams from the council's StreetCare service work with other council services, our partners, and residents to care for these spaces. Managing and maintaining these green spaces is essential to keeping them safe for all users and to optimise multiple benefits for people, places, and nature to achieve healthy and sustainable communities.

There are also publicly accessible green spaces which are owned and managed by other landowners including Town and Parish Councils, the Wildlife Trusts and Forestry Commission. The council works closely together with these partners to enable everyone to access and enjoy these vital places. Public Rights of Way extend across a wide range of land ownership. Maintaining this green infrastructure network is an important area of partnership work between the council, local landowners, and voluntary groups.

We also need to consider and prepare for the future in our management of green spaces now. This includes managing and improving our green spaces to respond to the rising challenges of the changing climate and the nature crisis. New communities need high quality, connected green and blue infrastructure designed into new developments with clear responsibility for maintenance.

6.1.2 The role, benefits and value of our green spaces

The multiple benefits, contribution, and value of our green spaces for people, places and nature has been highlighted in recent years. See: section 4.4 Health and wellbeing for all and section 4.8 Build a green and resilient economy. In particular, the Covid 19 pandemic has led to increased use of green spaces, and shone a light on their role, value, and the need for investment in maintenance and improvement.

There are a range of tools the council and our partners use or are developing to identify and calculate the contribution and value of our green spaces. This includes:

Natural capital value

Identifying the natural capital value and contribution of our green spaces is vital to consider alongside the costs of managing these spaces to calculate the net return on investment.

Public Health England in Improving access to green space 2020 review:

- **in Birmingham, the annual net benefit to society of their parks and greenspace is nearly £600 million, which includes £192 million in health benefits**
- **in Sheffield, for every £1 spent on maintaining parks, there is a benefit of £34 in health costs saved, with local residents being the primary beneficiaries**

Public Health England – improving access to green space 2020 review

We are working with WECA, our neighbouring local authorities and other partners across the West of England to apply a shared method to calculate the natural capital value of green infrastructure including green spaces across the region. This will enable the full contribution and multiple benefits of our green infrastructure, natural assets and associated 'ecosystem services' to be recognised and valued to inform our decision making, planning and asset management.

Capital Asset Value for Amenity Trees (CAVAT)

CAVAT is a method used to calculate the economic value and contribution of trees across a range of key functions as set out in our **Trees on Development Sites Supplementary Planning Document**. Our tree officers assess planning applications, and for approved development sites, firstly apply the mitigation hierarchy to avoid removal of trees. In specific circumstances, and as a final resort where removal is approved, CAVAT is applied to calculate the value of the tree. CAVAT calculates the costs for retention or replacement of trees as close as possible to the original location. With increased demand for trees to achieve local, national and international tree planting ambitions, the cost and CAVAT value of trees is increasing. This rising value needs to be reflected in contingency budgets for all infrastructure projects and development to ensure projects are future proof to deliver and keep pace with increasing requirements aligned with climate and nature emergency commitments.

Biodiversity net gain (BNG)

As explained in **4.5 Create and maintain sustainable places**, biodiversity net gain in development requires there to be an overall increase in natural habitat and ecological features in any development, works or project. The anticipated Environment Bill will introduce new legally binding requirements and targets to enhance and improve biodiversity (biodiversity net gain) in development. Biodiversity net gain will be applied alongside and further to application of the mitigation hierarchy.

Health Audits

Health audits are a method of assessing the specific health and wellbeing facilities, benefits and value of green spaces, alongside analysis of the specific health need priorities of a neighbourhood. Findings help to identify priorities for investment to improve health and reduce inequalities which match local health needs. For example, in areas where increasing physical activity levels in children is a priority, increasing investment in play facilities could be identified as an effective prioritisation of resources to improve specific local health needs.

6.1.3 Our responsibilities

Fulfilling statutory requirements in the management of green spaces is a central priority to deliver our responsibilities, particularly regarding health and safety for users, our staff and the environment.

The following national government legislation sets out the key standards, maintenance and condition requirements that apply across all green space asset management:

- DEFRA 25 year Environment Plan 2018
- Environment Act 2021 (once passed by government)
- Natural Environment and Rural Communities Act 2006 (NERC)
- Environmental Protection Act 1990
- Equality Act 2010
- Disability Discrimination Act 1995 and 2005 (Superseded)
- Health and Safety at Work Act 1974
- UK Biodiversity Action Plan BAP
- Wildlife and Countryside Act 1981

Please see References for a more extensive list of national legislation and local policies.

6.1.4 Our challenges and opportunities

Key challenges we face for the management of green spaces:

- **Usage pressures** – increasing numbers of people accessing green spaces or changing how they use them brings management challenges, particularly regarding antisocial behaviour. Increased and changed use of green spaces during the Covid 19 pandemic has highlighted the pressures on green spaces regarding changes in user volumes, usage and patterns.
- **Reactive pressures** – we aim to take a proactive approach to managing our green spaces so we can anticipate and manage issues before they are a problem. Responding to site based and service level incidents including antisocial behaviour or emergency works and repairs requires emergency response planning, effective risk assessment protocols and an agile workforce and capacity.
- **Responding to the climate emergency** – managing green spaces to enable adaptation and resilience to the changing climate, decarbonising our operations and optimising the contribution of our green spaces to thriving, resilient, zero carbon communities.

- **Responding to the nature crisis** – change green space management to restore and improve habitat for biodiversity and to identify and deliver nature improvement opportunities.

- **Rising budget pressures** – reduced budgets alongside rising pressures, requires effective prioritising and financial management to deliver best value for money, alongside highlighting the natural capital value contribution of our green spaces.

- **Capital budget** – management of our public open spaces is undertaken with revenue funding only (general running costs budget) and no capital budget. To secure capital funding to improve and enhance our public open space assets we work with our communities and other partners to actively seek opportunities to secure external funding.

- **Lifespan of equipment and facilities** – to maintain required standards, particularly for safety, effective inspection and maintenance schedules and clear standards are essential, particularly to track lifespan of facilities or parts and to plan and budget for repair and or replacement.

- **Responding to changes in legislation and standards** – due to the wide diversity of green spaces and associated requirements and functions, as a service we need to keep up to date and implement any changes across a wide range of legislation.

- **A wide diversity of assets with differing purposes, needs and requirements** – presents a challenge for consistency in approach to asset management and clear responsibilities. For statutory considerations including safety and heritage a multi disciplinary and co-ordinated approach is needed within specific timeframes and associated reporting requirements.

- **Inspection, care and maintenance of structures / buildings/paths/drainage** – securing resources required to ensure cyclical structural surveys and maintenance are undertaken rather than reactive responses for structures to maintain safety standards, access, heritage and other considerations.

- **Tree maintenance** – need for regular tree condition surveys and site tree management plans. Rising challenges regarding response to ash dieback and other disease alongside goals to increase tree canopy cover as well as manage existing tree stock

- **Heritage features and sites** – due to additional statutory safeguards for heritage sites, consultation with a range of organisations and council departments is required and consents are needed to carry out projects e.g. Scheduled Monument Consent. This adds to administrative time costs for management of these features and sites.

1. **Conflicting interests between heritage and wildlife** – for example preservation of some heritage features may place a challenge for wildlife e.g bat colonies

- **Forward planning (Revenue)** – there is a need to consider ongoing revenue maintenance costs when installing any new capital projects, equipment or planting. Appropriate budgets to meet the aims and objectives of management and maintenance plans need to be established from the outset of project development.

- **Anti social behaviour including litter, dog fouling and vandalism** – these issues are on-going challenges across all public open space sites

Alongside these challenges for green space management, there are also rising pressures and challenges across wider council service areas which green spaces can play a key role to support. The increasing evidence and awareness of the multiple benefits and natural capital value of green spaces, presents a key opportunity to transform how they are valued, and to champion investment to achieve high return on investment across diverse priorities.

6.2 What is Asset Management?

The international Asset Management Standard ISO 55000 2014, defines 'assets' and 'asset management' as:

> **Assets:**
> 'an asset represents an item, thing or entity that has potential or actual value to an organisation. The value will vary among different organisations and their stakeholders and may be tangible or intangible, financial or non-financial'.

> **Asset management:**
> 'the coordinated activity of an organisation to realise value from its assets'

An asset management approach is used world-wide to enable businesses and organisations including local and national government to identify and deliver priorities for managing assets effectively and to balance long and short term goals with the contribution and costs of assets.

South Gloucestershire Council has achieved ISO accreditation for international Asset Management Standard ISO 55000, ISO 14090 adaptation to climate change, ISOs 55000 asset management, 9001 quality and 14001 Environment.

An Asset Management approach has been applied in development of the South Gloucestershire Council Property AMP, Highways AMP and Tree AMP

6.3 The purpose of our Green Spaces Asset Management Plan

The purpose of our green space asset management plan is to support our work to manage our green spaces effectively by assessing the condition of our assets alongside requirements, costs, and priorities to inform decision making. This approach enables the council to:

- **Manage budgets effectively** – plan and prioritise budgets over the long and short term.
- **Make informed decisions** – hold information about our assets to inform decisions including investment through maintenance or renewal to deliver our priorities and achieve longer term value for money.
- **Sustainability and resilience** – deliver greater and more sustainable long term benefits to keep assets at the point of optimum maintenance (balanced between cost and quality)
- **Achieve our goals and deliver multiple benefits** – optimise benefits and outcomes for people, places, and nature through well managed assets.
- **Respond to and manage risks** – deliver effective and proactive maintenance, inspection, and management plans to fulfil statutory responsibilities, respond to and manage risks and minimise costs over the long term.
- **Secure funding and investment** – increase opportunities to secure further investment.
- **Apply a holistic and integrated approach** – Integrating green space design and maintenance considerations at the start of planning and design requirements, guidance and policy for new development ensures the multiple benefits of green infrastructure are optimised to create places with high quality, nature rich, connected and resilient green infrastructure as set out in the councils Green Infrastructure Supplementary Planning Document 2021.

6.4 Introducing our Green Spaces Asset Management Policy

Our green spaces asset management policy is our statement of the vision, mission, and principles by which we intend to manage our green space assets, aligned with the overarching priorities of the Greener Places Green Infrastructure Strategy.

6.4.1 Our vision and mission

> Our overarching vision for the 'Greener Places - South Gloucestershire GI Strategy' is for **'greener places where people and nature thrive'.**

> This vision aligns with the South Gloucestershire Council – Sustainable Community Strategy 2016 – 2036 Place priority to **'Conserve and enhance our green spaces, networks and countryside for the benefit of people, wildlife and the wider environment.'**

To deliver this vision, **our mission** for effective management of council owned and or maintained public open spaces is:

Our green space asset management mission:

'To lead by example, working towards creating and maintaining high quality green spaces at the heart of places where people, communities and nature thrive.'

6.4.2 Our principles

The council is responsible for a wide range of green space assets with diverse management needs. This includes formal parks, local nature reserves, local community open spaces and formal play areas. Across the urban and rural landscape of South Gloucestershire, the needs of our communities also vary, and our service delivery needs to reflect this.

Successful management of green spaces requires a consistent and integrated approach across all the green spaces the council is responsible for, aligned with clear priorities and principles. To deliver our mission and vision for green spaces, our work on the ground also needs to clearly link with and contribute to the '**green thread**' which connects local, regional, national, and global priorities as summarised in 1.5.1.

Reflecting the priorities and values of our Council Plan, the principles which underpin our work to manage the green spaces the council is responsible for are:

Safety

- Compliance with relevant health and safety legislation and good practise when carrying out our green space asset management activities.
- Maintenance of green space assets to manage and mitigate risk to users, our workforce, the general public and the natural environment.

Protecting and restoring nature

- Management of our green space assets to protect and optimise biodiversity and nature recovery, balanced with other objectives including safety and accessibility. This includes delivering better quality and better-connected habitat to extend and improve our nature recovery network to make more space for nature as required by the DEFRA 25 year Environment Plan 2018
- Management of our green spaces to support nature recovery, biosecurity, health and safety and other objectives through action on litter, pollution, environmental crime, and invasive species.
- As required by The Natural Environment and Rural Communities Act 2006 (NERC). We will 'show due regard for biodiversity' in all our operations.

Adaptation and resilience to the changing climate

- Maintaining, protecting and improving green space assets so they are adapted and resilient in future climates, reducing the impact of extreme weather events where we can, by planning for future demands and risks.
- Managing our green spaces to optimise the key role they play for climate change resilience of local communities particularly for drainage, cooling, shading and air quality.
- Managing our green spaces to protect existing 'locked in carbon' in soils, wetland, trees, and vegetation and consider new opportunities for carbon sequestration balanced with other priorities including nature recovery and amenity.
- Managing our green spaces to minimise our carbon footprint and environmental impact through use of environmentally sustainable and local sourced materials and plants where possible, and by reducing operations emissions towards net zero carbon emissions by 2030.

- Consider locations for renewable energy generation in our assets where appropriate, using existing built infrastructure rather than green space where possible and alongside other considerations particularly biodiversity and amenity.

User focus

- Managing our green spaces, so they are appropriate for their use and fit-for-purpose. Where we can, implementing improvements to support future demands, reduce inequalities and optimise multiple benefits for users.
- Embedding equalities needs and considerations across all aspects of our asset management work, operations and decision making.
- Managing our resources and the work of third parties to minimise disruption to green space users as a result of maintenance or improvement works.

Working together

- Working with all our stakeholders including residents, voluntary groups, and our partners to deliver a shared vision, mission, priorities, goals, and action for green space asset management.
- Working to support and empower volunteers and voluntary groups who help manage and care for green spaces.

Caring for our heritage

- Maintaining and caring for the built and natural environment heritage of our green spaces as required by current legislation.
- Exploring opportunities to conserve, improve and celebrate our green space heritage.

Connection and integration with the wider green infrastructure network

- Optimising how our green spaces connect with how they connect to and are integrated as part of the wider green infrastructure network to provide multiple benefits for people and nature.
- Optimising how our green spaces connect with the wider public rights of way network for walking, wheeling, cycling, and riding routes to support and improve our network for sustainable and active travel.
- Managing our green spaces, the public rights of way network and road highway verges network to improve our nature recovery networks to be '**bigger, better, more and connected**'.

Efficiency and delivering value for money

- Applying a 'whole life' cost approach (where applicable) to our asset maintenance, inspection and improvement decision making. This approach includes setting out risk management strategies to achieve optimum point of maintenance and value for money over the long term.
- Using data to ensure resources are focussed where and when they are most needed.

Managing performance

- Preparing and implementing asset management action plans aligned with wider strategic council priorities to set our performance indicators.
- Monitoring our performance by using meaningful and accurate measures and benchmarking aligned with nationally recognised standards and best practice.
- Maintaining ISO accreditation for international Asset Management Standard ISO 55000, ISO 14090 adaptation to climate change, ISOs 55000 asset management, 9001 quality and 14001 Environment.

6.4.3 Our goals

To deliver our vision and mission for green space asset management, aligned with our principles and green infrastructure outcomes, our goals for the management of our green spaces are:

> **Delivering for nature**
> 'to manage public open spaces to make more space for nature, improving the quality and connectivity of habitat through our management plans and operations'

> **Delivering action in response to the changing climate**
> 'to embed action for climate change adaption, resilience, and carbon sequestration in site management and to decarbonise our operations'

> **Delivering for sustainable water management**
> 'to manage our green and blue spaces to optimise their contribution to natural solutions for drainage and storage of rain water to reduce flood and drought risk, alongside water quality, wildlife habitat and public amenity benefits'

Delivering for people
'to manage public open spaces which are welcoming, well managed and provide amenity to improve the health and wellbeing of everyone in our communities and help to reduce the inequality gap'

Delivery value for money
'to deliver value for money and high return on investment through efficient green space management and operations which deliver multiple benefits for people, nature and places'

Delivering for heritage
'to manage our green spaces to conserve, enhance, and celebrate local landscape character, heritage, and culture'

Delivering for places
'to green the public realm including greener highstreets and new and existing residential areas with trees, space for recreation, planting for pollinators, habitat restoration and creation'

Delivering for sustainable food production
'to optimise opportunities for sustainable food production in our green spaces, including community orchards, community allotments, and commons grazing, and the role of our community farm to showcase good practice and deliver training'

Delivering investment in our green spaces and contributing to a green and resilient economy
'to deliver investment in our green space assets and optimise their contribution to green and sustainable economic growth'

Delivering together
'to work together with residents, our volunteers, our partners, and communities to manage, improve, value, and enjoy our green spaces'

6.5 Managing our green spaces

6.5.1 Requirements of maintaining and sustaining our green spaces

The council's core responsibilities for the management of public open spaces are to maintain safety of users and our staff, fulfil statutory legal requirements, and optimise the resilience and contribution of our assets by balancing quality, priority and cost considerations to achieve our goals.

To deliver these responsibilities, and to manage work and budgets effectively, we aim to be proactive rather than reactive in the management of public open spaces where possible. Within the **council's StreetCare service, the Place Maintenance team** and **Grounds team** work together to co-ordinate the maintenance, management and inspection of our public open spaces, including parks, commons, play areas, allotments and cemeteries.

Our **Place Inspectors** are the first port of call for many issues. Place Inspectors are responsible for routine maintenance inspections of public open spaces and other assets in our communities. Our inspectors identify and resolve issues needing immediate attention as well as identifying risks, issues and opportunities to feed into longer term management plans.

There are also inspectors and officers from a wide range of StreetCare service areas who are responsible for specific functions, features or assets which are part of council owned or maintained spaces including **play area inspectors, dog wardens, commons officers, tree officers and enforcement officers**.

Most of the following tasks and services are delivered by our StreetCare service, working with other service areas and partners where appropriate to ensure the maintenance and upkeep of public open spaces to required standards:

Green space maintenance areas of work include:

- **Grounds maintenance**
  - grass mowing
  - shrubs, trees
  - highway verges
  - paths, leaf clearing
  - Invasive weeds
- **Waste, cleansing and enforcement** – emptying bins, dog waste, fly tipping, pollution, hazardous waste (including chemicals, drugs paraphernalia etc), cleaning graffiti, pest control

- **Community safety** – enforcement of environmental crime, encroachments, encampments and antisocial behaviour including motorcycles, arson, graffiti
- **Accessibility** – inspecting and maintaining public rights of way, entry points, gates, dropped kerbs, blue badge parking, bicycle stands
- **Grey infrastructure** – facilities and the built environment within public open spaces all require inspection and maintenance to required standards including:
    - play areas, skate parks, fitness equipment and ballcourts
    - paths, steps, roadways, walls, bridges, jetties, stiles, fences and gates
    - heritage, archaeological and listed features
    - pavilions
    - Toilets and drains
    - benches, picnic tables, barbeques areas
    - signage
    - lighting
    - art installations
    - bowling greens – mostly leased to bowls clubs
    - car parks – relining car parks, disabled parking provision
- **Designated sites** – for designated sites we own or manage there are specific statutory management requirements for biodiversity, geology and other criteria for management - Commons, LNRs, SSSIs
- **Ecology surveys** – as set out in site management plans, for statutory purposes, prior to or following specific works
- **Ponds, wetland areas and watercourses** – inspections and management
- **Drainage** – inspections, maintenance, reactive incidents
- **Site security** – locking and unlocking schedules for specific sites and facilities
- **Trees** – inspections, maintenance, reactive incidents and works
- **Dedicated benches and dedicated trees** – inspections and maintenance

- **StreetCare Maintenance** – repairs on site where appropriate, installation of benches and bins, resetting fence posts
- **Adoptions** – inspection of public open spaces in new developments through the planning process which are either to be adopted (taken on) by the council or passed to a private management company
- **Technical Support**
  - hire of public open spaces including sports pitch bookings, events and filming
  - service searches to identify utilities within an area of works
  - emergency notifications to key site user groups
  - notification and/or consultation for all public open spaces works, improvements, changes etc
- **Other administration functions**
  - data recording and mapping information about our assets
  - Customer service - Streetcare helpdesk including out of hours – one stop shop – corporate help desk – website and social media queries
  - Website
  - Communication and social media
  - Consultation and/or notification for works, changes to site management, events
  - Dealing with complaints
  - Responding to Freedom of Information requests
  - Legal cases - officer time and legal fees – accident and insurance claims and issues, way leaves (annual fees paid by utility companies for a right of access across council land)
  - Licensing - for vendors and community events
  - Risk Management and Insurance
  - Property Services - manage security contracts, land ownership records and rights of access, site utility bills

Our partners

It is also important to highlight that given the important and integrated role of public open spaces within our communities, that the above list is not comprehensive, and there are many other council and partner services and organisations involved in the maintenance and management of these special places.

The council works closely with local voluntary sector and site 'friends' groups, residents, community groups and partner organisations including Town and Parish Councils, Avon and Somerset Police and environment organisations who work with the Council to manage green spaces across our area.

6.5.2 Costs of maintaining and sustaining our green spaces

The management of council owned and/or maintained green infrastructure and public open spaces is complex and involves a range of operational, improvement and administration functions.

Understanding priority and condition

We review and manage our green spaces by assessing the **priority and condition** of our assets to focus resources to where investment is needed most and to plan our budgets:

- **Priority** – assets which are assessed to have high priority can be due to health and safety and other statutory requirements or high levels of use, such as our play areas and formal parks.

- **Condition** – condition is assessed in relation to asset type/group. For example, excellent condition for grass managed as a wildflower meadow is different from grass managed for public amenity and recreation in a park.

- **Priorities for action** – by assessing priority and condition of assets alongside costs we can identify trends for improving or deteriorating condition alongside level of criticality to help prioritise our work and resources where it is needed most as well as forecast and plan for future needs.

  Priority + Condition = Priorities for action and resources

For green space assets which have high priority such as our play areas and formal parks, inspections are frequent, and we have data which is regularly updated regarding condition of assets (daily in the case of play areas).

The costs of maintaining and sustaining our green spaces

For all green space assets we aim to keep condition to satisfactory levels, and to focus resources to ensure satisfactory and above condition of high priority asset functions and assets.

The direct spending of the council on maintenance of green spaces is for revenue costs only, which are primarily for staff and operational costs. Funding sources include local authority capital opportunities, funding through new development offsite contributions, external grants secured by the council, community groups and other partners.

The council also has to respond to reactive pressures such as changes in demand and weather events in the management of our green spaces which means that pressure on services and budgets varies. Responding to the Covid-19 pandemic required additional resources due to the increased demand, use and pressures on our green spaces.

Based on analysis of expenditure over the last five years between 2017-2022, **our annual revenue expenditure for the management of green spaces is £4.4 million/year**. The council also receives income from a range of sources including grounds maintenance contracts with town and parish councils and purchase of burial plots at council owned cemeteries. This income also varies and based on income over the last five years, **our annual income is £1.1 million/year** (2021).

Taking into account the balance between income and expenditure in the management of council owned and/or managed green spaces, **the overall annual net cost to the council each year at 2021/2022 is £3.3 million which is around £12/resident/year** (based on a population of 285,100 in 2019, projected to rise to 354,000 by 2043 (Office for National Statistics 2018 data published 2020)

The cost to the Council of managing our green spaces is around **£12** per resident per year

The contribution of volunteers

The contribution of community Friends and volunteer groups plays a vital and much valued role in the care of our public open spaces. In 2019/20 over 40 community groups were active on our green spaces across South Gloucestershire.

Annual volunteering figures recorded by groups demonstrate an **annual average of £125,000 value of volunteer hours per year** (based on hourly National Lottery volunteering values). 2020/21 volunteering figures were not representative due to the Covid 19 pandemic.

In addition, there are volunteers who help maintain the public rights of way network, collect litter, and are involved in nature interest groups such as Avon Bat Group who contribute many hours of skilled expertise to care for nature and green spaces across our area.

Volunteers contribute over **£125,000** value of volunteer hours per year in the care of green spaces and nature across South Gloucestershire

There are many council service areas involved in maintaining our green spaces. In addition to core green space management and maintenance costs, the following are significant areas of service which contribute to the management, quality and improvement of our public open spaces:

- Litter and cleansing
- Tree maintenance and works
- Ash dieback management
- Public rights of way maintenance
- Structures on public open spaces
- Drainage and water courses

6.5.3 Improving our green spaces

Management of our public open spaces is undertaken with revenue funding only (general running costs budget) and no capital budget. In addition to maintaining our green space assets to required standards, we work with local communities and our partners to secure external funding to improve green spaces. These improvements are key to enhance the role of green spaces in our communities and to deliver important benefits, creating greener healthier communities where people want to live, work and visit.

Enhancements include improved accessibility, interpretation and engagement, management for nature, conserving heritage, and play and sport facilities. Habitat improvements to enhance green spaces for nature include pond creation and restoration, new pollinator habitat and tree planting.

To secure capital funding to improve and enhance our public open space assets we work with our communities and other partners to actively seek opportunities to secure external funding through a range of sources such as:

- **External grants** – **Over the last five years over £2.7 million of external funding has been secured by the council and our partners** to deliver a wide range of green space improvement and engagement projects. This includes the £1.6 million grant awarded by the National Lottery Heritage Fund in 2015 to the council with the support of the Friends of Page Park to restore and improve Page Park in Staple Hill. The amount of external funding secured varies depending on the funding streams available and the capacity of officers to prepare bids.

Between 2016-2021 over **£2.7 million** of external funding has been secured by the council and our partners to improve our green spaces

- **Section 106 (S106) Agreements** – These are legally enforceable planning obligations attached to land that is the subject of a planning permission negotiated between a developer and the local planning authority (LPA) under section 106 of the Town and Country Planning Act 1990. **Over £8 million S106 funding has been secured and awarded for off-site public open space improvements between 2015/16 and 2020/21** including improvements to sports facilities, play area installation and refurbishment, accessibility and natural habitat improvements. Further information is available at Section 106 funding for outdoor sports and facilities for children and young people

Over **£8 million** S106 funding has been secured and awarded for off-site public open space improvements between 2015/16 and 2020/21

- **Community Infrastructure Levy (CIL)** - CIL is a planning charge to developers by the Local Planning Authority, introduced by the Planning Act 2008 to help fund community infrastructure to support new development. More information including examples of CIL funded improvements can be found in the S106/CIL Supplementary Planning Document at CIL-S106-SPD-March-2021-Graphics-version.pdf (southglos.gov.uk)

Our landscape design service

The council's in-house team of award-winning landscape architects and designers provide landscape design services for new infrastructure projects, development, and community facilities, as well as public open space improvements. The Landscape Design Team has extensive experience of project design, consultation, management and delivery, including the preparation of planning applications. They have expertise in landscape design to improve biodiversity and optimise climate change adaptation and resilience, as well as restoring historic garden heritage planting schemes to their former glory. The team is also available commercially for externally commissioned work including Town and Parish Councils, trusts and charitable organisations. For more information visit Doing More Together page

Key considerations

For all externally funded improvements, the need to ensure effective management plans and clear maintenance agreements, liabilities and budgets are considered at the start of project planning is a priority to optimise design, multiple benefits and sustainability of ongoing maintenance.

It is also essential that maintenance plans and arrangements are in place prior to handover and completion of projects to ensure clarity regarding maintenance responsibilities and requirements.

Strengthening integrated working across the council and with our partners at all stages of project development and implementation supports shared understanding, collaboration and a joined-up approach to maintenance.

New opportunities

The council actively seeks new opportunities for investment in our green space assets to enhance and improve them for people and nature through external funding opportunities.

As introduced in **Section 5 – our strategic green infrastructure priorities and programmes**, the council is preparing a portfolio of programmes which include investment in council owned and/or managed green spaces. This portfolio enables the council to have a 'pipeline' of projects at different stages of investment readiness to enable a response to new opportunities which arise through a range of funding sources.

The anticipated statutory requirements for biodiversity net gain in the forthcoming Environment Bill 2021, presents new opportunities where investment in neighbouring green spaces maybe appropriate. This would apply where the mitigation hierarchy has been followed and biodiversity net gain cannot be implemented on a development site and needs to be delivered at another site.

Recognition of the increasing contribution and value of our green spaces to deliver our priorities is rising. Within this context, the costs to maintain and improve our green spaces needs to be considered alongside the value and contribution they provide. This presents an opportunity to inform our decision making and deliver value for money to achieve our priorities and vision for 'greener places where people and nature thrive'.

6.6 Working together

Working together with our partners and local communities is essential to identify and deliver shared priorities for managing and improving green spaces, to optimise the many benefits of these spaces for people, communities and nature.

The council works with a range of partners in the management of green space assets we own or manage including other land holding partners who own or manage public open spaces as well as statutory bodies, organisations and businesses. Working effectively together is key to optimising the quality, resilience and benefits of both council and non-council owned green spaces which are part of and connect to the wider green network across South Gloucestershire.

6.6.1 The Community Spaces Network

In South Gloucestershire, our Community Spaces Network consists of a range of voluntary groups who work with the council and our partners to care for local green spaces, contributing many hours of vital work each year. This includes 'Friends of' groups, public rights of way volunteers, local nature groups, wildlife special interest groups and 'In Bloom' groups. Find out more about this network at The Hive - home of the South Gloucestershire Community Spaces Network

Volunteers carry out a wide range of projects including:

- contributing to management plans for green spaces
- practical tasks such as conservation workdays, woodland management, path maintenance, litter picks (Big Spring Clean), and tree planting
- improving biodiversity, such as installing and monitoring bird and bat

- boxes, pond and wetland habitat restoration, creating new wildlife habitat and ecological surveying
- planting and care of bedding plants, shrubs and planters in the wider public realm
- fundraising for restoration, improvements and community events
- organising community events, talks and guided walks
- working with the council and other partners including the South Gloucestershire Disability Action Group to identify and raise funds for physical, cultural, social, economic and other accessibility and inclusion improvements for green spaces
- communicating and helping to raise awareness of open spaces through email networks, social media, websites, information leaflets and other educational material
- acting as eyes and ears to report anti-social behaviour and unlawful activities
- helping with consultations to engage local people in contributing to decisions about their local green spaces

People from all walks of life find volunteering to care for green spaces and nature in their communities fun and rewarding. In return, volunteering offers many benefits including the chance to meet new people, learn new skills and boost health and wellbeing.

Imagine if all 27.9 million working adults (employees) in the UK (ONS data Oct 2020) picked up one piece of litter/day. That would total at least **27.9 million bits of litter picked up each day** with significant improvements for nature and people across the country!

To find out more about helping look after your local environment or to find a local community group visit Friends and conservation groups or sign up for our Community Spaces Network newsletter

6.6.2 Community voiced key issues and opportunities

Through our engagement work to prepare the Greener Places Strategy, members of the South Gloucestershire Community Spaces Network have told us about key issues which are important to them:

Information and support with setting up and managing a community group

- Community group governance, administration, insurance and policies
- Health and Safety, data protection, and safeguarding requirements and policies
- Funding and income generation
- Attracting, engaging and retaining new volunteers, particularly to support succession planning to support succession planning for when longstanding volunteers move away or retire
- The role of working groups for time limited projects and tasks

Working on site, including practical considerations and requirements

- Contributing to and working with site management and improvement plans
- Training and support for practical site management conservation work
- Responding to changes in legislation or government recommendations for volunteers or the public regarding safety such as changes to Covid-19
- Responding to anti-social behaviour – litter, dog fouling, vandalism etc
- Hire of open spaces – considerations for hirers and other green space users
- Community events planning and management including licensing
- Help and advice with wildlife management
- Ways of supporting changes to management e.g. reducing mowing, use of pesticides etc

Thinking bigger, including outreach, projects and partnerships

- Networking and collaborative platforms to share experience, skills and knowledge with other groups
- Ensuring all contributions are valued and finding ways to enable volunteers to stay connected, and to focus on the work they want and like to do
- Identifying how the council can improve how we work and communicate with community groups
- Clarity about what work can be done by volunteers, and what work needs funding
- Undertake required maintenance of council owned buildings, structures and heritage features to keep in good order
- Training and skills for community groups including management for:
    - **Climate change adaption and resilience** – making the most of the design and management of green spaces to support flood and drought resilience, shade, carbon capture.
    - **Restoring nature** – protecting, restoring and improving management for nature - including pollinator habitat.
    - **Tree planting** opportunities and how volunteers can help to care for
    - **Food trees** – community orchards and allotments play a key role in greening our communities, supporting nature connection, reducing inequalities and providing local food.
    - **Access and engagement** – to improve access, interpretation, community events, recreation, education, health and wellbeing, sport, inclusion
    - **Communications and promotion** – need to raise awareness and knowledge of public to increase understanding, engagement and to widen membership of groups and site users.
    - **Welcoming spaces** – improving access and facilities, paths, play areas, toilets, signage, communications, dogs on site considerations.
    - **Heritage** – conservation and interpretation

6.6.3 Working with other landowners

Most land across South Gloucestershire is in private ownership where the council has limited or no direct influence. Climate change and nature know no boundaries, so working with other landowners is essential to support and enable the adaption and changes needed across our area.

We work with other landowners including town and parish councils, businesses, land owned by public bodies (e.g. NHS, Universities, etc.), large countryside estates, farmers and residents to progress our priorities and objectives.

Town and parish councils, businesses and other landowner partners

- As set out in our climate and nature emergency action plans, the council's role is to '**lead, enable and inspire**' the changes needed to achieve our goals for a net zero carbon and nature rich South Gloucestershire. This process starts with improving how we manage the land that the council is responsible for, to where appropriate 'lead by example' and to highlight, promote and celebrate the work of partners where their work 'leads the way'.

- The council has prepared Local Nature Action Plans (LNAPS) to provide a practical framework, resources and guidance for town and parish councils and other partners to plan and deliver changes to restore nature on the land they are responsible for, and to 'pay it forward', so they too can support the partners and residents they work with

- Potential ideas to build on and further support this work, include the possible introduction of a local LNAP standards award scheme to recognise work achieved.

Residents' gardens and other private and shared outdoor spaces

- Through improving the management of council owned green space for nature, alongside associated on site and online interpretation and communications information, the council aims to raise awareness of these changes and also empower and inspire residents to take steps themselves. This includes getting involved in care of these public spaces as volunteers or in private gardens, balconies or other outdoor space they may have access too.

- Raising awareness of resources available such as Big Garden Bird Watch, Buglife, Plantlife, Froglife and the Wildlife Trusts to improve management for nature. Ideas include hedgehog highways, pollinator routes and insect-friendly planting/management, wild corners – how to make an impact by doing very little!

6.6.4 Hire of public open spaces

Our public open spaces play an important role in providing a venue for a wide range of local businesses and community events with diverse social, health, economic and cultural benefits.

Applications to hire use of parks and open spaces are received for a wide range of purposes including community events, educational visits, Forest Schools, personal trainers and film locations.

The latest information about hire processes, charges, risk assessment templates, event plans and regulations can be found at Hire of Public Open Spaces. Guidance and regulations available include for outdoor learning and Forest Schools, parkrun, personal training, geocaching and barbecues.

Event organisers and hirers are also legally responsible for checking with our licensing team for any licensing requirements such as a temporary events notice or any other licenses. Further information about this is available at Licensing Act 2003 | South Gloucestershire Council.

Please note - the council always reserves the right to charge for reinstatement of land should an event result in additional costs to the council

Building on existing work and emerging new opportunities, preparing a business plan and identifying new ways to secure increased income and funding for our green spaces is an important area for further action.

6.7 Our green space asset group management plans

6.7.1 Our green space asset groups

Our green space asset groups bring together sites and assets which have similar purposes and management requirements. Understanding the functions, requirements and needs across these groups supports consistent and effective management. This includes informing prioritisation of resources and service planning for the council to deliver value for money and sustainable management of our green space assets over the long term as well as optimise the benefits they provide for people and nature.

Not all public open spaces in South Gloucestershire are owned and managed by the council. There are many public open spaces across our area owned by other parties such as management companies, or council owned and leased to partners such as including town and parish councils, sports clubs and the Avon Wildlife Trust.

Site ownership, status and management is subject to ongoing change and as part of our asset management, we are working towards an online interactive map on our website to make information about public open spaces and who owns and manages them easier to find. Thank you for your patience while we prepare this.

For the purposes of this asset management plan, our focus is on public open spaces owned and or managed by the council. The information below provides an overview for each of our green space asset groups of:

- Definition and purpose
- Condition and priorities
- Opportunities

Key actions across all our green space asset groups and for specific green space asset groups are presented in section **6.8 Our action plan – delivering our goals for green space asset management**.

For each green space asset group, a more detailed asset management plan has been prepared to inform service delivery and improvement. Further asset management information will be made available online as we update council webpages for our green space assets.

Our green space asset groups		
Formal Parks	Small amenity green space	Outdoor sports facilities
Historic Parks and Gardens	Trees and woodlands	Allotments
Community farm	Community orchards	Cemeteries (operating)
Neighbourhood recreation parks	Hedgerows	Closed churchyards and other burial grounds
Local community open spaces	Green corridors	War memorials
Countryside parks	Green roundabouts	Picnic sites
Local Nature Reserves	Blue infrastructure	Car parks
Commons	Play and activity areas	Civic spaces and high streets

> As highlighted in 6.5.1 Requirements of maintaining and sustaining our green spaces, built infrastructure facilities provide a wide range of functions which enhance green spaces in our communities. This includes community centres, pavilions, cafes and toilets which improve accessibility, support a wide range of activities and add significant social, environmental and economic value.

Formal parks

Definition and purpose

Formal parks are larger public open spaces characterised by distinct built, landscape and heritage features including bandstands and formal gardens. They include a high number and wide range of facilities such as play and sport facilities, toilets and cafes. Formal parks play a vital role in providing spaces to support the health and wellbeing of everyone in our urban communities. Formal parks have high levels of recreation activity such as community events which serve a wider area. The council manages the following formal parks:

- Kingswood Park, Kingswood
- Page Park, Staple Hill
- Emersons Green Village Park

Condition and priorities

The condition of our formal parks for health and safety, legal requirements, access and public amenities is deemed satisfactory overall due to ongoing inspection and maintenance regimes:

- Page Park: benefitted from a £2m capital investment restoration and enhancement project between 2016-2021 and has now secured green Flag accreditation. Condition is high.
- Kingswood Park: while grounds maintenance is good, the park infrastructure needs substantial updating. An external funding bid to the National Lottery Heritage Fund is in progress.
- Emerson Green Park: grounds maintenance is good, but the park lacks amenities. The infrastructure is worn in places and in need of updating.

For all our formal parks support to increase, strengthen and widen engagement with Friends groups is a priority. Thriving Friends groups are important to support group succession planning, optimise engagement of local people in our parks, and to secure funding for restoration, improvement and engagement.

Opportunities

Page Park has set the standard for our formal parks, and we would like to secure investment for improvements to achieve and maintain Green Flag standards for all our formal parks. The Green Flag Award is the benchmark national standard for publicly accessible parks and green spaces in the UK.

Historic parks and gardens

Definition and purpose

Parks and gardens of recorded historic and cultural heritage importance including locally significant historic gardens, buildings, statues, monuments and other heritage features, where maintaining and enjoying heritage is the focus.

Registered historic parks and gardens include a wide range of spaces such as rural landscapes, parks around country houses, deer parks, model farms, hospital landscapes, cemeteries, town gardens and public parks. Many are multi-period with features of different styles and play a key role in contributing to our sense of place as well as providing rich opportunities for education and learning.

Historic parks and gardens managed by the council:

- Warmley Heritage Gardens
- Barrs Court Moat
- Hanham Mount Beacon
- Ram Hill Colliery
- The Engine House, Emersons Green
- Bitton Pound Ground

Condition and priorities

General amenity maintenance - most of our historic parks and gardens are managed to a fair standard for general maintenance for amenity areas, including management of trees, shrubs and grass. However, under heritage criteria the condition of these sites is poor, and funding is needed to make improvements including:

- Warmley Heritage Gardens (a major component of Warmley Brassworks) is on Historic England's 'At Risk' register. The Grotto is of national importance and a Grade 2 listed statue of Neptune, also known as the 'Warmley Giant', is claimed to be the largest garden statue in Britain and the oldest concrete statue (erected by William Campion c. 1750).
- Barrs Court Moat has masonry in need of repair and the moat continues to silt up.
- The plaques, brass lettering and brass features on the pulpit at Hanham Mount Beacon need restoring, along with path and building renovation works.

Opportunities

There is a significant opportunity to raise awareness of local historic parks and gardens and the heritage treasures they hold. Improving on site interpretation and the quality and profile of online information, can help to build support to fundraise, care for and conserve these rich and historic spaces and places, now and for future generations.

There are also opportunities for volunteer skills development to support programmes of structures stabilisation repairs, biodiversity and garden enhancements.

Community farm

Definition and purpose

Grimsbury Community Farm, Kingswood is a council owned and managed working community farm, with a variety of farm animals including pigs, goats, sheep and cattle, as well as poultry, ducks and geese. The farm also has a small farm themed play area, a café and public toilets. The Brandon Trust manages the farm café, providing work, training, skills and support for local people with learning disabilities.

A free to access community farm for the public, initially established to serve the priority neighbourhoods of Kingswood and Cadbury Heath, Grimsbury Farm is now a significant regional destination. With an average of 600 visitors a day, (more than 215,000 visitors per year), the farm is growing in popularity and widening in scope.

Over the last few years, the farm has developed a reputation for education, skills and learning about farming, countryside skills, and sustainable, nature friendly land management. The farm is also a centre for rare farm breeds conservation, and a tree nursery.

Responding to site management requirements during the Covid 19 pandemic, as well as national avian flu and other zoonotic disease outbreaks, has highlighted the need to revise our emergency planning to capture lessons learnt and support a proactive response in the future.

Condition and priorities

- Animals - excellent
- Farm buildings - satisfactory
- Public facilities and infrastructure – satisfactory – in need of updating and expanding.

Opportunities

There is free entry for visitors to the farm. However with increasing visitor numbers, associated costs and parking pressures, alongside promotion of green travel options aligned with our zero carbon emissions goals, inviting donations for parking will help to offset the increased maintenance costs, reduce visits by car and generate income to invest in the farm.

With the climate and nature emergency rising in priority, the farm is in a strong position to play a leading role as a centre for education and training, providing a showcase for nature and climate change adaptation to lead, enable and inspire wider change across our area.

Neighbourhood recreation parks

Definition and purpose

Larger open spaces offering a range of informal recreational opportunities that encourage the public to stop and use the facilities for an hour or more.

The larger size of these parks enable the coming together of communities and can be hired for group, community activities or organised events such as parkrun or local annual fairs.

Neighbourhood recreation parks can include some or many of the following facilities and activities:

- Outdoor children's play equipment
- Informal kickabout areas
- Skate/BMX tracks
- Outdoor gym equipment
- Wildlife areas/ponds/trees/hedgerows/meadows
- Nature trails
- Information signs
- Dog walking
- Cycle paths
- Car parking

- Litter bins/benches

Examples of council owned and managed neighbourhood recreation parks include Bromley Heath park and playing fields, Soundwell playing Fields and Severn Beach playing fields.

Condition and priorities

The condition of our neighbourhood recreational parks for health and safety, legal requirements, access, and public amenities is overall deemed satisfactory due to ongoing inspection and maintenance regimes.

Dog fouling and litter remains high on the list of concerns for those who rely on these spaces as a safe place to exercise and socialise.

Opportunities

- Many of our neighbourhood recreation parks benefit from the support of a Friends group, enabling volunteer support and capital investment to be directed to site maintenance and improvement based on direct local community needs and feedback.

- There is an opportunity to optimise these benefits, by supporting increased participation from local communities within existing Friends groups and encouraging establishment of new groups for our neighbourhood recreation parks.

- Through our work to respond to the climate and nature emergency there are important opportunities in our neighbourhood recreation parks to improve management for nature, climate change adaptation and resilience, balanced with recreation, amenity, and accessibility objectives.

Local community open spaces

Definition and purpose

Small to medium sized open spaces that form most of our public open spaces. Local community open spaces provide informal, very local, recreational spaces primarily for immediate site neighbours. These spaces are typically used for informal play, social spaces, short activities such as dog walking or to enjoy habitat for nature.

These are particularly valuable spaces for local parents/carers with young children, for whom the time needed to take their child to a Neighbourhood Recreational Park may not be feasible day to day. These spaces offer more scope for children to play close to home with minimal supervision, and often can be seen from their home.

Some include children's equipped play areas or unequipped play spaces including Lyde Green, Gover Road, and Streamleaze Park.

Condition and priorities

The condition of our local community open spaces for health and safety, legal requirements, access, and public amenities is overall deemed satisfactory due to ongoing inspection and maintenance regimes.

Dog fouling and litter remains high on the list of concerns for those whose children rely on these spaces as a safe place to play and socialise with their friends informally.

Opportunities

- Some of our local community open spaces are starting to benefit from the support of a Friends group, enabling volunteer support and capital investment to be directed to site maintenance and improvement based on direct local community needs and feedback.
- There is an opportunity to optimise these benefits, by supporting increased participation from local communities within existing Friends groups and encouraging establishment of new Friends groups.
- Improving communications, engagement, and enforcement to raise awareness among dog owners of their responsibilities and rights, to help create a safer, cleaner, and more welcoming environment for everyone is a critical area for action.
- Promoting and encouraging community engagement in the review and delivery of biodiversity projects across these spaces, which will also provide educational opportunities.
- Through our work to respond to the climate and nature emergency there are important opportunities in our neighbourhood recreation parks to improve management for nature, climate change adaptation and resilience, balanced with recreation, amenity, and accessibility objectives.

Countryside parks

Definition and purpose

Countryside parks are areas for people to visit and enjoy recreation in a rural environment, to provide a free to access destination for informal recreation that encourages the public to stop and use the facilities for an hour or more.

Countryside parks provide valuable habitat for nature as well as contributing to carbon sequestration, adaptation, and resilience to the changing climate.

Due to the large size, landscape character and facilities of country parks, they often attract visitors from all areas of the district and further afield. They can also be hired for group community activities or organised events such as orienteering or local fairs.

These sites can include some or many of the following activities:

- Wildlife and woodland areas/ponds/nature walks
- Outstanding views
- Nature trails or defined circular walking routes
- Horse riding routes
- Outdoor fitness trails
- Litter bins
- Information signs
- Dog walking
- Car parking

Countryside parks managed by the council:

- Warmley Forest Park
- Conham River Park

Condition and priorities

The condition of our countryside parks for health and safety, legal requirements, and access is overall deemed satisfactory due to ongoing Inspection and maintenance regimes.

Littering, BBQ burn damage, illegal camping and unofficial raves/parties are a common issue on these spaces, despite clear advertising of byelaws that prohibit such activities.

Ash dieback is severely affecting ash trees across these parks. Works to assess and manage trees by public rights of way and in more heavily used areas is prioritised to optimise safety of park users.

Countryside parks provide vital places for people nature. Work to improve management for access, biodiversity and carbon capture through tree planting and wetland creation and restoration are important opportunities.

Opportunities

- We have established Friends groups and partnerships with other organisations who work with us to monitor the use and management of these sites. We are keen to understand how we can make our countryside parks more welcoming and accessible for everyone, particularly people who live in urban areas with limited access to local green space.
- There is an opportunity to promote and encourage community engagement in the review and delivery of biodiversity projects across our countryside parks and associated education and interpretation information.
- Promoting and encouraging community engagement in the review and delivery of biodiversity projects across these spaces, which will also provide educational opportunities.
- Through our work to respond to the climate and nature emergency there are important opportunities in our neighbourhood recreation parks to improve management for nature, climate change adaptation and resilience, balanced with recreation, amenity, and accessibility objectives.

Local Nature Reserves (LNR)

Definition and purpose

A site designated under National Parks and Access to the Countryside Act 1949 where people and wildlife come together locally.

- Local Nature Reserves (LNRs) are a statutory designation made under Section 21 of the National Parks and Access to the Countryside Act 1949 by principal local authorities.
- Town and parish councils can also declare LNRs but they must have the powers to do so delegated to them by a principal local authority.
- These designated greenspaces are for people and wildlife. They are places with wildlife or geological features that are of special interest locally and offer people opportunities to study or learn about nature or simply to enjoy it.
- LNRS can range from ancient woodlands and flower-rich meadows to former inner-city railways, long abandoned landfill sites and industrial areas now colonised by wildlife.

- They are an impressive natural resource which makes an important contribution to England's biodiversity (ref: Natural England)

Local Nature Reserves in South Gloucestershire include:

- Wick Golden Valley
- Willsbridge Mill
- Avon Valley Woodlands
- Three Brooks
- Huckford Quarry
- Monks Pool (leased to Winterbourne PC)
- Bradley Brook (leased to Winterbourne PC)
- Wapley Bushes (owned by Dodington PC)
- Gorse Covert

Condition and priorities

- The condition of our Local Nature Reserves in terms of health and safety, access and biodiversity is favourable overall due to active management programmes being delivered by the council, contractors and volunteer groups.
- Management is undertaken in line with five year management plans where applicable. However, some sites are managed more informally and reliant on the good will of volunteers.
- Habitat management is carried out to good standards by volunteers, grounds team and external contractors.
- There is currently no defined resource allocated to the management and maintenance of Local Nature Reserves, restricting enhancement programmes.

Opportunities

- New potential sites for LNR declaration to be investigated, include Woodwell Meadows (complete designation), Magpie Bottom, Cock Road Ridge, Filnore Woods, and Thornbury Farm Woodland.
- Review and establish and support volunteer Friends groups for each LNR to ensure community engagement and raise profile in communities
- Management – aspire to manage all sites to Green Flag accreditation standards
- Heighten visitor experience – review interpretation and education packages: eg make use of oral history resources, update existing educational resources standards
- Develop links with University of Bristol and UWE to help monitor biodiversity on sites.

Commons

Definition and purpose

Common land is owned by one or more persons where other people, known as 'commoners' are entitled to use the land or take resources from it. Many contain nationally important habitats. Commons provide a protected green refuge for people and wildlife, often in urban areas, and are a historically important landscape. The general requirement of the local authority and/or landowner is to manage protection and to oversee a scheme of management that maintains the landscape in its traditional form.

At the time of dedication of a common, residents or those living on the common land are granted Commoners Rights such as Estovers (rights to timber and/or pasture) and to put grazing animals onto the common.

In South Gloucestershire there are currently 75 registered commons covering a total of 628 hectares, equivalent to 1.3% of the land area of South Gloucestershire or 775 football pitches (a football pitch about 0.8 hectares).

Some registered commons are made up of several individual parcels of land, which vary in size, but are in close proximity if not physically linked to one another.

Condition and priorities

The condition status below refers to the aggregated grading for commons as an overall asset group.

1. Biodiversity – unfavourable and declining
2. Legal compliance – favourable
3. Access – favourable

Apart from Hawkesbury, Inglestone, Hareley and Assley Commons, historically the care of many of the commons within South Gloucestershire has not been sufficiently resourced to ensure the continued monitoring and improvement of biodiversity.

Lack of resource to properly monitor and manage commons over the last 30 years has led to a high rise in encroachments taking place with a resulting loss of common land. In 2017 we appointed a temporary two year dedicated Commons Officer role using external funding, to undertake a condition survey. This was a great success and has led to the rectification of many encroachments. As a result, the post has been made permanent to support ongoing management and protection of commons in South Gloucestershire.

Encroachments, littering, illegal parking, illegal camping and unofficial raves/ parties present regular challenges for our commons, despite clear advertising of byelaws that prohibit such activities. There is also a need to update the register custodians for all commons in South Gloucestershire.

Opportunities

- In February 2021, the council secured funding from the West of England Combined Authority (WECA), to fund a one year project to scope out the 'Common Connections' programme for the East Bristol fringe area. This programme includes a suite of projects to protect and enhance biodiversity and create vital green links between green spaces in the area, including commons. There is a key opportunity to seek further funding to implement this programme, particularly to inform and support preparation of our Local Plan.
- In March 2021, our HLS Stewardship Officer successfully secured a further 10 years worth of funding (around £340k) to support the ongoing management, protection and enhancement of Hawkesbury, Inglestone, Hareley and Assley Commons.
- Commons are important sites to deliver natural climate solutions, improve biodiversity, tree planting and nature recovery through new funding opportunities including climate emergency, carbon offset and Biodiversity Net Gain (BNG) investment.

Small amenity green space

Definition and purpose

Small areas of amenity green space, usually located within an urban setting, to provide soft landscaping for visual amenity, sustainable drainage and to connect habitat for wildlife. These areas 'green' our communities, add to the sense of place and support well bring for those living in higher density urban settings, including contributing to cooling during hot weather.

Condition and priorities

The condition of the small amenity green space the council manages, is satisfactory overall for health and safety, legal and access requirements due to ongoing Inspection and maintenance regimes.

Dog fouling and litter is a common issue on many of these spaces as they are not as prominent for informal monitoring or reporting by residents in the area.

Opportunities

- We are assessing all our open spaces for potential to improve biodiversity, habitat quality and connectivity for nature. These small spaces are perfect sites for this type of improvement as they are not in conflict with local demand for recreational use.

- Promoting and encouraging community engagement in the review and delivery of biodiversity projects across these spaces, particularly to raise awareness of the importance of restoring nature and the case for changes to amenity green space management in terms of 'what good looks like'.

- Improving communications, engagement and enforcement to raise awareness among dog owners of their responsibilities and rights, to help create a safer, cleaner and more welcoming environment for everyone is an important area for action.

Trees and woodlands

Definition and purpose

Trees and woodland provide vital habitat for a wide range of plants and wildlife. Trees also provide other multiple benefits for the environment and for people including air, water and soil quality, cooling and shading. Trees and woodlands enhance the visual landscape and positively improve our health and wellbeing.

The council is directly responsible for thousands of trees growing along our highway verges, in our parks, open spaces and woodlands. The council also

provides advice on best practice and responsibilities in respect of trees owned by others, such as privately owned trees that may be a danger to the public, protected trees and trees affected by development.

The existing tree cover in South Gloucestershire is approximately 11% of the whole area. Our trees would cover an area about five and a half times the size of the town of Yate and 18 times the size of the town of Thornbury. Trees owned by the council make up approximately 45% of all tree cover with 55% of tree cover in third party ownership.

Condition and priorities

The priorities and plans for the management of trees the council is responsible for are set out in the South Gloucestershire Tree Asset Management Plan. Regional plans for tree and woodland across the West of England are brought together in the The Forest of Avon Plan – A Tree and Woodland Strategy for the West of England, and nationally in the Tree Strategy for England. Requirements and guidance regarding trees on development sites is set out in our **Trees on Development Sites Supplementary Planning Document**.

The council manages the trees and woodlands we are responsible for according to priority. Specifically, this includes safety of the public, the health of our trees and the wider environment. Our schools, the major roads of our highway network, busy urban parks and street trees are some of the locations where tree inspections and works are carried out to the highest of safety standards.

Caring for what we already have - Alongside our ambitions for increasing tree canopy cover, it is also vital that we invest in caring for existing trees and woodlands to optimise the health and resilience and many contributions they provide.

Ash dieback - Approximately 20% of our tree canopy cover in South Gloucestershire is ash, and in line with national projections, we anticipate losing at least 90% of our ash trees over the next eight years due to the ash die back fungus, Hymesnoscyphus fraxineus. This shocking and at scale loss brings significant challenges for the health of our woodlands, our ambitions to increase tree canopy cover, alongside increased risks from diseased trees falling. We are responding to this challenge by:

- A planned approach to the assessment of all ash tree stock to prioritise tree works to higher risk locations including schools and highways to reduce the level of risk.
- Where appropriate to replant trees where ash is removed with a mixture of species or allow natural regeneration to support future woodland resilience to new diseases (alongside our plans to increase tree canopy cover).
- Planting with UK, locally sourced and grown tree stock to reduce future biosecurity risks from new diseases and pests.

Preparing for the future – with rising pressures including the changing climate and new development, we need to plan for the future. This includes optimising the health, resilience and adaptation of our trees and woodlands, and the vital contribution they provide for greener communities.

Opportunities

Doubling tree canopy cover – through our climate and nature emergency plans, we are working with our partners to plant and establish trees across South Gloucestershire by 2030, to double tree canopy cover at maturity. This includes ensuring that we **plant the right trees in the right place** with appropriate care in place and consider future conditions particularly climate change to optimise the resilience and contribution of our trees and woodlands.

Street trees – planting more trees within existing and new communities is an important way of greening our communities for nature and people to provide multiple benefits including flood resilience, air quality, cooling and shading and plays an important role in our tree planting plans.

New investment – with growing recognition of the vital role of trees and woodlands, there are new opportunities for investment. By identifying and preparing our priorities for existing and new trees and woodlands the council and our partners can respond proactively.

Our Tree Asset Management Plan will be updated to reflect the changing context of new and rising challenges, priorities and opportunities for our trees and woodlands.

Community orchards

Definition and purpose

A community orchard is a collection of five or more fruit trees (including nut trees), often planted among grass managed for wildflowers. They are characterised by a collection of fruit trees growing in publicly accessible areas such as public open spaces, parks, schools, churchyards and allotments, which are available to and shared by the wider community.

- The wider Gloucestershire area is a nationally important area for orchards. 75% of Gloucestershire's 'old' orchards have been lost in the last 50 years: **South Gloucestershire Biodiversity Action Plan**
- There are at least 18 community orchards on council owned open spaces.
- Community orchards are widely spread across the area with many managed by volunteers.

- Orchards are important for cultural and historic reasons, as well as providing habitat for a wide variety of wildlife and places to relax for health and wellbeing.
- Community orchards provide the opportunity for people to come together to celebrate local produce and learn about and growing fruit, researching the history of fruit production and local varieties, develop horticultural skills, and hold events.
- Community orchards on council owned land include Thornbury Community Orchard, Three Brooks, and Magpie Bottom.

Condition and priorities

The condition of our community orchards for health and safety and access is favourable due to inspection and maintenance regimes and the work of volunteer groups. There is currently no defined resource allocated to the management and maintenance of community orchards. Sites are managed informally and reliant on the good will of volunteers.

Opportunities

- To create new orchard locations across South Gloucestershire and aspire to have one well managed climate change-resilient community orchard within a 15 minute walk of every urban community across the authority
- Prepare and implement a community orchard tree replacement programme.
- Fruit tree maintenance training for volunteers and the public
- Support community orchard events
- Champion community orchards and raise awareness across the council and town and parish councils
- Improve signage and interpretation for key orchards.

Hedgerows

Definition and purpose

Hedgerows are rows of trees and shrubs that form historic and contemporary land management assets. Hedgerows are a valued part of our landscape character and serve a wide range of purposes. This includes land division, livestock boundary, wildlife habitat and corridor, soil protection, water retention, wind protection, screening, visual amenity and shading.

Most of our hedgerows date back from after the Enclosures Act, however many go back even further, sometimes thousands of years. Hedgerows often contain and protect old trees, ponds, ditches and watercourses and dry-stone walls. Retaining these features can help retain character in new developments. There are many different types of hedgerows depending on species planted, age, location, size, function and the level and form of maintenance.

There are almost 1000 hedgerows, covering around 80km on public open spaces managed by the council. Hedgerows are found across all our rural and urban areas, and nearly all are privately maintained by landowners.

In South Gloucestershire there are many ancient, species rich hedges in the countryside in private ownership, some of which are also adjacent to the Public Rights of Way Network. Several thousand were surveyed as part of the Field Boundaries project and play a vital role in the heritage, landscape and biodiversity of our area. Where possible, new developments retain old hedgerows as found in Emersons Green and parts of Little Stoke.

Condition and priorities

The majority of hedges are privately maintained, and the council has a role to play with its duties under the Highways Act to make sure there is no encroachment on highway land or other issues that may affect highway use.

Through our work to respond to the climate and nature emergency, we are reviewing and changing the management of our own hedgerows where we can, for nature, climate change adaptation and resilience, balanced with highway visibility, visual amenity, and accessibility objectives. A more comprehensive review is needed to prepare more detailed plans, policies and operational changes.

Ash dieback is impacting the condition of many of our hedgerows and surveying and works regarding affected trees adjacent to the highway network is an important priority.

Opportunities

The council is currently reviewing management of our highway verge network and grassed areas and following this work, a review of management of the hedgerows we are responsible is necessary.

Community engagement has a key role to play, to raise awareness of approaches to managing hedges for different purposes, and the benefits of changing how we manage hedgerows to contribute to restoring nature, balanced with safety and other considerations. This will include consideration of the recommendations for management to optimise the role of hedgerows for nature by Hedgelink and sector leading best practice.

Training for volunteers in skills for creation and management of hedgerows is a further key opportunity.

Green corridors

Definition and purpose

Green corridors are areas of green space that run parallel or adjacent to a travel network providing green routes, for people and nature. Sometimes they are narrow strips no wider than a footpath, and other times much wider. They all however, enable movement between places within a natural environment. This includes highway verges (roads and public rights of way), railway embankments, hedges and trees, and the banks of water courses.

Green corridors provide important habitats for wildlife and play an important role in our nature recovery network by connecting larger areas of habitat. The connectivity that green corridors provide, supports the movement of wildlife and the resilience of nature to new pressures.

Green corridors can include active travel routes for walking, wheeling, riding and cycling and informal recreation as well as road highway verges across our highway network.

Public Rights of Way (PROW): A public right of way is a path that anyone has the legal right to use on foot, and sometimes using other modes of transport (footpaths, bridleways, Restricted byways, Byways Open to All Traffic. Legally identified as highways and recorded on the Definitive Map.

The council is responsible for 1257km of public rights of way across South Gloucestershire and there is an evolving cycling network: Local Walking and Cycling Infrastructure Plan 2020. The council manages 2.9 million m² of highway verges (an area equivalent to 425 football pitches).

Condition and priorities

Highway verge management – until recently the main approach to management of our green corridors, was for regular close mowing. This resulted in a lack of habitat for wildlife and poor diversity of native flowering plant species, resulting in reducing populations of insects, birds, invertebrates and mammals. Work is underway to change how our verges are managed to improve and connect habitat for nature, and climate change adaptation and resilience.

Public Rights of Way – priorities for improvement to our Public Rights of Way (PROW) Network are set out in the Local Walking and Cycling Infrastructure Plan 2020, and our Highways Asset Management Framework. With increased use of the PROW network for daily exercise during the Covid 19 pandemic, the importance of maintaining and expanding this vital green travel network has been highlighted, alongside priorities to support zero carbon, active and healthier forms of travel.

Opportunities

- In 2020 our StreetCare team set up a Verge Management Group to investigate the opportunities to increase the biodiversity of highway verges, and other green space we manage by modifying maintenance methods. Work has begun to commence a programme of phased improvements across our highway network.

- Using the Verge Management Group's success, we intend to review and implement similar improvement projects across other asset types including hedgerows and public open spaces.

- Through climate emergency and Covid 19 green recovery initiatives at local and national level, there are new funding opportunities to improve and expand the PROW network.

Green roundabouts

Definition and purpose

Green roundabouts in our highway network include grassed areas, trees, shrubs or floral displays. In addition to playing an important role for traffic management, our green roundabouts improve visual amenity, provide habitat for nature, natural drainage and carbon sequestration.

Green roundabouts range in size, with larger assets including hard infrastructure such as maintenance parking bays, signs, underground services, lighting and traffic signals installed within them. Sculptures are also installed in some of our green roundabouts.

Condition and priorities

The condition of our green roundabouts for health and safety, legal requirements and access is overall satisfactory. Inspection and care of green roundabouts is covered through the highway maintenance programme and budget. They will however be included within reviews of verges and other green spaces to identify biodiversity improvement opportunities.

The planting on many of our green roundabouts is need of updating and there is a significant opportunity to improve them for visual amenity, nature, tree canopy cover and climate change adaptation.

Opportunities

- Applying the success and learning from changing management of out highway verges, this is informing similar change management and improvement projects for our green roundabouts and other green spaces.

- Many of our green roundabouts receive commercial sponsorship. There is an opportunity to work with existing and new sponsors to expand our vision and ambition for these high-profile sites and locations to deliver gains for nature and inspire public awareness and support for nature friendly management.

- There is an opportunity to build on our sponsorship offer for roundabouts and memorial trees through preparing a marketing plan for wider sponsorship of improvements to wider green spaces, features and facilities.

Blue infrastructure

Definition and purpose

Blue infrastructure includes all areas of wetland, rivers, streams, tributaries, standing waters (lakes, ponds, ditches and marshes), coastal waters and estuaries. The function, quality and health of our blue infrastructure provides many vital roles including flood drainage, water storage, benefits for nature and amenity.

Where blue infrastructure is on Council land or our responsibility, we manage these assets with our partners according to statutory requirements and seek to enhance condition and function where we can. Management of blue infrastructure assets is covered in more detail in individual site management plans.

Condition and priorities

The condition of blue infrastructure which the council is responsible for regarding health and safety, legal requirements, access, and public amenity is overall satisfactory due to ongoing inspection and maintenance regimes.

Locally and globally our river catchments, lakes, ponds, coastal areas, and wetlands are under growing pressures from pollution, development, agriculture, unsustainable fishing, and climate change. These pressures are causing fragmentation and reduction of vital wetland and marine habitat, reduced water quality and poorer flood and drought resilience.

Locally, only 11% of the Bristol Avon catchment is classified as having 'good ecological status', however this is typical of other catchments in the UK, demonstrating the significant scale of the challenge to meet the Water Framework Directive targets

Increased incidence of extreme weather events including flooding and rising sea levels and drought risk are some of the effects of the changing climate. Our South Gloucestershire Local Flood Risk Management Strategy action plan sets out the steps we are taking locally to respond to and manage flood risk in our area.

With our partners in the Bristol Avon Catchment Partnership (BACP) we work to deliver the Bristol Avon: Catchment flood management plan and the River Frome Reconnected Catchment Plan

Opportunities

With increasing risks of flooding and drought due to the changing climate, optimising the role and contribution of our blue infrastructure for adaptation and resilience of wider infrastructure and our communities is a key opportunity. In particular we want to optimise the role of natural solutions including the restoration and creation of wetlands and ponds which provide benefits for nature and amenity as well as adaptation and resilience to the changing climate as highlighted in our **Sustainable Urban Drainage Systems Supplementary Planning Document**.

Play and activity areas

Definition and purpose

Outdoor play and activity areas are designed for play and social interaction. These areas include equipped play areas, skate parks, informal outdoor fitness equipment, youth shelters, BMX tracks and ball courts.

The main purpose of our play and activity areas is to provide equal opportunity for children and young people to participate in outdoor play and leisure as required by the United Nations Convention on the Rights of the Child (UNCRC).

Our equipped play and activity areas also provide important facilities and social spaces for people of all ages to enjoy being active outdoors within our communities.

Our facilities include:

- Over 70 council owned outdoor play areas including LAPs (Local Areas of Play), LEAPs (Local Equipped Area for Play) and NEAPs (Neighbourhood Area for Play)
- 6 Sure Start children's play areas
- 6 Skate parks / BMX tracks

- 7 Multi-Use Games Areas
- An assortment of youth shelters, single basketball hoops, parkour features and hard surface ground graphics

Condition and priorities

The condition of our play facilities for health and safety, legal requirements and access is favourable due to ongoing rigorous inspection and maintenance regimes.

Recent capital investment has enabled us to focus on more expensive whole site renovations, whilst our existing revenue budgets enable us to undertake repairs and maintenance on individual play equipment items.

Play equipment that is assessed as being in poor condition is removed on Health and Safety grounds and replaced if or when capital funding is available. Items assessed as average condition are included in a forward planning process so that we have time to identify and secure funding for replacement or refurbishment.

Responding to rapidly changing facility management requirements during the Covid 19 pandemic, has identified the need to revise our emergency planning to capture lessons learnt, and support a proactive response in the future.

Opportunities

- **Accessibility** – we improve play area accessibility and promote equal access to play wherever possible, including whenever sites are refurbished and equipment, gates and surfacing are replaced.
- **Online information** – to review and update play area information on our public web pages to assist people in locating facilities near to them or that meet specific needs.
- **Succession planning** – optimising apprenticeship opportunities for new staff to learn alongside experienced inspectors to pass on skills and knowledge and ensure service continuity.
- **Commercialisation development** – there is potential to expand our commercial play inspections service.

Outdoor sports facilities

Definition and purpose

Grass and all-weather outdoor sports facilities for use, hire or lease to the public as individuals or as part of an organised group, for the playing of sports.

The council leases out the following outdoor sports facilities:

- **1.** Lees Hill Playing Fields
- **2.** Bromley Heath Playing Fields
- **3.** Badminton Road Playing Fields
- **4.** King George V Playing Fields
- **5.** Soundwell Playing Fields
- **6.** Kingswood Bowling Green & Pavilion
- **7.** Southey Playing Fields
- **8.** Fisher Road Playing Fields
- **9.** Tennis Court Playing Fields
- **10.** Greenbank Road Playing Fields
- **11.** Vicarage Road Playing Fields
- **12.** Deanery Road Rugby Playing Fields
- **13.** Longwell Green Playing Fields
- **14.** Blackhorse Playing Fields
- **15.** Walker Playing Fields
- **16.** Aitchinson Playing Fields

Page Park Playing fields are the only playing fields that the council has retained management and maintenance responsibility for, as this sits within our busiest formal park. Page Park Playing fields provides hire of facilities for cricket, football, tennis and table tennis.

Condition and priorities

By condition of lease our outdoor sports facilities are maintained in good condition and benefit from external funding opportunities to improve the playing surfaces as and when required. As a local authority we remain responsible for the management and maintenance of trees on these sites.

Opportunities

- We have successfully leased out all but one of our playing fields to community groups, Parish or sports clubs. This has enabled better investment in these important local facilities whilst maintaining community use in keeping with their purpose.
- We are investigating the feasibility of improving the condition of the main pavilion at Page Park, to improve facilities for users, income opportunities and hire capacity for all sports.

Allotments

Definition and purpose

Allotments are dedicated areas for the growing of crops including fruit, vegetables, and flowers. Managed to the requirements of the Allotments Act 1950, allotments are available for hire to local residents, providing benefits for sustainability, health and reducing inequalities.

Allotments play an important role in enabling access to local growing space and green space, particularly for people who do not have access to private or shared outdoor space.

Promoting the health benefits of working an allotment and growing your own food, plays an important and increasing role in the work of the council to encourage healthier lifestyles, and support local food production as part of our response to the climate and nature emergency and Covid 19 recovery.

Research by Professor Jane Memmott (Bristol University), highlights that allotments are key urban habitats for pollinating insects: Urban Pollinators Project

The council owns and manages 350 plots across 8 allotment sites:

- **Lees Hill Site** – Lees Hill, Kingswood, BS15 4TW
- **Lime Road Site** – Lime Road, Hanham, BS15 3AR
- **New Cheltenham Road Site** – New Cheltenham Road, Kingswood, BS15 4RR
- **Orchard Road Site** – Orchard Road, Kingswood, BS15 9TN
- **Pound Road Site** – Pound Road, Kingswood, BS15 4QU
- **Syston Way Site** – Syston Way, Kingswood, BS15 1TL
- **Waters Road Site** – Waters Road, Kingswood, BS15 8EB
- **Woodyleaze Site** – Woodyleaze Drive, Kingswood, BS15 3BU

Volunteer site representatives play an important role in helping to manage our allotments including working with the council to support communication with plot holders.

There are also allotment sites managed by Town and Parish Councils and allotment associations. Find out more at Allotments | South Gloucestershire Council (southglos.gov.uk)

Condition and priorities

Our allotment sites are kept in good condition. The council is responsible for the management and maintenance of the communal spaces and features including communal paths, site trees (not including fruit trees on plots), boundary hedges, fences and security gates. We undertake routine safety inspections of trees and boundaries in accordance with risk assessment requirements.

Plot holders are required to manage their plots and use the wider facilities of the allotment site as set out in hire agreement terms and conditions.

Bonfires are not permitted on our allotment sites, and this requires action in terms of awareness raising and enforcement, as there are occasions where bonfires have been reported in recent years. We actively encourage and support composting of green waste.

In response to the climate and nature emergency, awareness is rising of the role of organic food growing for our health and nature. Across our allotment sites, plot holders apply a wide range of approaches and methods for food growing, and there is a need and opportunity to share and promote nature friendly practice.

Opportunities

- Review our allotment allocation procedure, to consider how this can contribute to reducing inequalities, particularly as demand is increasing and availability of plots is limited.
- Review and update our allotment regulations including a review the suitability of the legacy approach to local community food production and what inequalities it creates or perpetuates as identified through our Equalities Impact Assessment.
- Raise awareness of the requirements of allotment regulations among plot holders and review enforcement processes.
- Support nature across our allotment sites, we have identified communal areas that can be improved for biodiversity, which we are taking steps to implement.
- Prepare information, workshops and training for plot holders and site representatives including food growing which works with nature, composting methods and use of green manures to cover vacant areas of plots (rather than plastic).

Cemeteries (operating)

Definition and purpose

Our cemetery grounds are managed and maintained to meet the general burial needs of our local communities and faith groups. Other burial grounds include churchyards and private burial grounds.

Our operating Cemeteries in South Gloucestershire are:

1. Mangotsfield Cemetery est. 1850
2. Filton Cemetery est 1947
3. Mayshill Cemetery (Yate) est 1973
4. Kingswood Remembrance Park est 2010

Condition and priorities

We maintain our cemeteries to a high standard, as they are a local community facility to care for our deceased and to provide a quality service for all those who wish to come and pay their respects.

Mangotsfield Cemetery has recently benefitted from the investment of several columbaria to continue offering cremated remains placements for local families where space for ground burials is no longer available.

Opportunities

- To review and update our masonry records for all our cemeteries and introduce a comprehensive safety inspection process.
- To review and update our management processes regarding the legislative requirements of providing a compliant and best practice burial service.
- To review the burial needs for all groups within our communities and explore the demand for 'out-of-hours' working, and the costs of meeting such demands.
- investigate more sustainable management practices of cemeteries for biodiversity and climate change adaptation and resilience

Closed churchyards and other burial grounds

Definition and purpose

A closed churchyard is a Church of England burial ground that no longer has capacity for further planned burials, and as such is termed 'closed'. The closure of a churchyard ends the formal right of burial for parishioners, apart from individual vaults or graves, which have been reserved.

Under Section 215 of the Local Government Act 1972, the Parochial Church Council requires the parish council, (or district council, if the parish refuses), to take on the responsibility and expense of maintaining the grounds of the churchyard in a good and safe condition. This is a mandatory requirement and does not extend to maintaining the memorials.

South Gloucestershire Council is currently responsible for 10 closed church yards and one closed burial ground assigned to a derelict Methodist chapel.

Condition and priorities

Most of our closed churchyards are in rural locations and are not regularly visited by the public other than to access the associated church.

The general condition of our closed churchyards is average and in keeping with standards for closed churchyards across the country. Primarily we manage the soft landscaping to a specification that encourages biodiversity where possible. Any ground adjacent to formal paths, war memorials, or war grave areas are maintained to a higher standard.

We undertake routine safety inspections of trees, masonry and structures, in accordance with risk assessment requirements.

Opportunities

- In some of our more rural closed churchyards we have been working with the local communities and parochial church and parish councils to improve biodiversity and manage and monitor the general landscape condition of these sites.
- There is an opportunity to review and update our masonry records, for all our closed churchyards and introduce a comprehensive robust safety inspection process.
- We have the opportunity to improve our asset information and create a quick reference guide for any future general asset inquiries.

War memorials

Definition and purpose

Permanent memorials in the public realm, primarily commemorating the fallen of the First and Second World War. Other war memorials are in remembrance of those who have fallen in earlier or later conflicts, for example the Crimean, Boer, Korean or Falklands Wars.

War memorials form an important part of our cultural heritage and remind us of the impact for our ancestors and local communities of global conflicts that have shaped the world we live in today.

Condition and priorities

Most war memorials across our district are sited in churchyards or on parish land.

The council is directly responsible for the care and maintenance of nine war memorials, located on highway land, public open space, or by the then local authority choosing to take responsibility for a war memorial under the War Memorials Act 1923 and the subsequent amendments within the Local Government Acts of 1948 and 1972:

- Hanham War Memorial (outside the Community Centre)
- Mangotsfield War Memorial (St James Place)
- Downend War Memorial (at the junction of Westerleigh Road with the A342)
- Chipping Sodbury Town Cross (at the junction of Hatter's Lane with the B4060)
- Hawkesbury Upton War Memorial (Park Street)
- Marshfield War Memorial (High Street)
- Staple Hill War Memorial (Page Park)
- Stoke Gifford War Memorial (North Road)
- Westerleigh War Memorial (Westerleigh Village Green)

There is currently no budget, either revenue or capital, assigned to the management, inspection and maintenance of war memorials.

Any work undertaken is on a reactive basis and funded from grant applications applied for or at the time of need.

Opportunities

- To review and update our condition records, for all our war memorials and introduce a comprehensive safety inspection process and maintenance programme.
- To realign our budgets to optimise revenue budget allocation to cover inspection and any routine maintenance of war memorials.

Picnic sites

Definition and purpose

A dedicated site that is free to access and use, suitable for outdoor picnics, eating and socialising. Many of our picnic sites are in scenic locations where users can enjoy views and time in nature, attracting visitors from across the district and further afield.

Picnic sites can include some or many of the following facilities:

- Benches and tables
- BBQ stations
- Litter bins
- Car parking
- Toilets
- Information panels
- Scenic views
- Short walk routes

Our picnic sites are located at:

- Swineford picnic site
- Toghill picnic site
- Riverside picnic site (Bitton) – **only accessible on foot or by bicycle from the Bristol Bath Railway Path** and **River Avon Trail**
- Conham River Park

Condition and priorities

The condition of our picnic sites for health and safety, legal requirements and access is overall satisfactory.

There is no dedicated budget for this asset group and any work to improve the asset must be fundraised for at time of need.

Access to the Bitton Riverside picnic site is limited to those who can arrive on foot or on bicycle. There is no vehicle access to this site.

Littering, illegal camping and unofficial raves/parties are a common issue on some of these spaces, despite clear advertising of byelaws that prohibit such activities. Some of these sites also suffer from other illegal activities due to their locations and we work closely with the Police and Anti-Social Behaviour Team to manage and monitor all these areas.

Opportunities

- We are working with partner organisations to promote these sites for family use and investitagting opportunities to establish new Friends groups.
- We have an opportunity to review and enhance accessibility on these sites, including increased provision of picnic benches which are accessible for wheelchair users.
- These are key sites for our work regarding communications to raise awareness and enforcement regarding littering as well as positive messaging to encourage action and care of the environment for people and nature.

Car parks

Definition and purpose

Our car parks provide all-weather non-commercial vehicle parking, to support public access to primary facilities in the public realm. The council is responsible for the management and maintenance of 29 car park sites across the district: Council car parks | South Gloucestershire Council

Condition and priorities

The general condition of our car parks in terms of safety for use is average. We are currently members of the British Parking Association, who inspect and rate our car parks every two years.

The physical condition of the car parks is average to poor. The surfacing and road markings are deteriorating and require urgent attention to support accurate and fair parking enforcement. Lack of sufficient revenue budget has resulted in the ongoing deterioration of car parks over time.

As well as the hard surfaces, boundary treatments, access barriers, lighting and signs, the council is also responsible for drainage, soft landscaping and tree maintenance associated with all these sites.

Opportunities

- We have begun a programme of introducing Electric Vehicle (EV) charging points in our primary highest use car parks.
- To review the condition and cost of managing and maintaining these assets to realign the budget accordingly.
- To review which team within the council is based place to have strategic management responsibility for this asset to ensure compliance and best service.

Civic spaces and high streets

Definition and purpose

Civic spaces – Civic spaces are in the heart of our communities and are designed to be easily and readily accessible for wide range of purposes. They provide an important setting for civic buildings, monuments, public art, community meetings, events and activities including markets. Predominantly hard landscaped, planting such as trees, shrub beds, seasonal displays and grassed areas play an important role in softening these spaces to make them more attractive for all users.

High streets – The high streets in our towns and urban areas are home to a wide range of retail businesses, transport hubs and facilities, central to the vibrancy of our communities. Most centres also provide wide areas for pedestrians. Street trees, rain gardens, seating areas, raised or sunken planted beds and seasonal floral displays provide important greening of our high streets. These features create a more attractive destination, improving the experience of visitors and shoppers and increasing the time spent in a location. Greening our high streets can also boost the local economy and provide a strong return on investment.

A green economic recovery – The Covid-19 pandemic has led to a drive for catering, hospitality and retail businesses to optimise use of available outdoor space in the interests of the health of customers and staff. 'Greening' our high streets and civic spaces has an important role to play in making them more attractive for businesses and customers in master plans for our town centres and plans for a green recovery from the pandemic.

Greening our civic spaces and high streets supports:

- a greener more attractive environment
- improves the air quality and in turn health and wellbeing of all users and passers by
- a more welcoming space where users can have the opportunity to relax
- enhanced social spaces for people to meet and come together
- attracts customers and encourages them to stay
- can increase participation in community events
- supports adaptation and resilience to the changing climate by providing shading, shelter, cooling and natural drainage.
- air quality benefits by absorbing particulates.
- Provides habitat for nature
- Carbon sequestration

To manage the green infrastructure we are responsible for in our civic spaces and high streets, the council works with a range of partners including town and parish councils, chambers of commerce, traders associations and 'In Bloom' groups.

Condition and priorities

The condition of the green infrastructure in our civic spaces and high streets for health and safety, legal requirements and access is overall satisfactory. In line with priorities to respond to the climate and nature emergency and support the recovery of our high streets from the Covid-19 pandemic, greening our high streets and civic spaces to make them more attractive for all users is a key opportunity.

Street trees – street trees play an important role in greening our urban areas. The council maintains the street trees it is responsible for to a high standard for safety, due to the high levels of public use of these locations. It is important to highlight that street trees are now planted in specially designed tree pits which significantly reduces the impact of roots for pavements and nearby built infrastructure (which can be seen near our older street trees).

Resilient sustainable planting – for beds and planters, more sustainable, lower water planting is prioritised with planting of perennial native species which support pollinators where appropriate. These built spaces are harsh environments for trees and plants, so careful choice of species, location and maintenance plans is required.

Clear maintenance requirements, costs and ongoing responsibility are essential for all new planting to ensure sustainability, resilience and value for money.

Opportunities

- To progress work with our partners to increase opportunities for greening our civic spaces and high streets, to support Covid-19 recovery regeneration plans and town centre master plans.

- To optimise the role of greening the public realm as central to achieving council aspirations for 15 minute neighbourhoods, to increase residents use of services, facilities and retail close to where they live.

- To optimise funding opportunities from a range of sources to green our civic spaces and high streets and how that investment is used to deliver benefits for the environment, people and our economy.

7

Our Action Plan and looking to the future

7 Our Action Plan and looking to the future

7.1 Our Action Plan

This strategy brings together our priorities, ambitions and commitments for green infrastructure across our area to achieve a shared vision for '**greener places where people and nature thrive**'.

Working together, good communication and a co-ordinated approach are at the heart of how we will deliver our vision across the council, with our partners and residents.

The actions we will take are set out in our Action Plan. We will review, report on progress and update our Action Plan each year. We will refresh this strategy in line with Council Plan priorities and changes in legislation.

7.2 Looking to the future

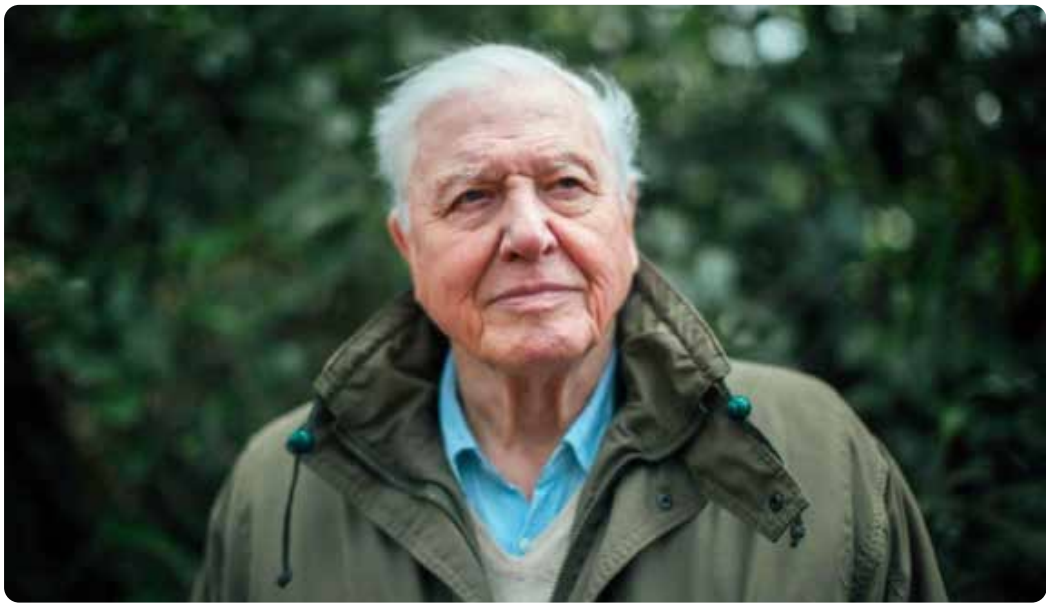
We are living in a fast-changing world. The pace and scale of these changes requires us to be resourceful, proactive and creative.

Responding to the climate and nature emergency, reducing health inequalities and the drive for a green and sustainable economy have all placed a spotlight on the role and importance of green infrastructure.

This strategy presents why and how well designed and managed green infrastructure can help transform our response to these challenges. It sets out our plans to create thriving, inclusive, nature rich and resilient communities over the next decade and beyond.

This includes transforming how we think and what we do in our work and everyday lives to value nature and the environment.

There is great work underway across our area, and significant opportunities to share knowledge, raise awareness and learn from what is already working. We all have a part to play to support the changes we need to make and preparing this strategy and our Action Plan is a key step on our journey. The council will work with our partners and residents to lead, enable and inspire action to achieve our shared goals and vision for '**greener places where people and nature thrive**'.



'We must not give up hope. We have all the tools we need, the thoughts and ideas of billions of remarkable minds and the immeasurable energies of nature to help us in our work.'

A Life on Our Planet – My Witness Statement and a Vision for the Future
Sir David Attenborough

8 Glossary

8 Glossary

This glossary has been informed by definitions from the: The National Planning Policy Framework (NPPF) Glossary and West of England Joint GI Strategy 2020. Please refer to the NPPF Glossary for latest planning policy definitions of terms.

Air quality management areas (AQMA)
Areas designated that are assessed as not likely to achieve national air quality objectives by the relevant deadlines.

Ancient or veteran tree
A tree which, because of its age, size and condition, is of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees.

Ancient woodland
An area that has been wooded continuously since at least 1600 AD.

Archaeological interest
There can be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity.

Biodiversity Net Gain
A requirement for development projects, in which measures are taken to avoid, minimise or compensate biodiversity loss impacts of the project.

Catchment area
A catchment area is a hydrological unit. All the precipitation that falls into a catchment area eventually ends up in the same river going to the sea. Catchment areas are separated from each other by watersheds. A watershed is a natural division line along the highest points in an area.

Climate change adaptation and resilience
Climate change adaptation involves adjusting, reorganising, and evolving natural or human systems in response to the actual or anticipated impacts of climate change. Adaptation improves the sustainability of a system, leaving it better prepared and more 'resilient' to future impacts.

Climate change mitigation
Action to reduce the impact of human activity on the climate system, primarily through reducing greenhouse gas emissions and locking in carbon.

Community forest
An area identified through the England Community Forest Programme to revitalise countryside and green space in and around major urban areas.

Conservation (for heritage policy)
Maintenance and management which protects, sustains and, where appropriate, enhances a heritage asset.

Ecosystem services
Described as the 'multiple benefits gained by people from the natural environment.'

Green infrastructure (GI)
Green infrastructure is the term used to describe the natural environmental features of an area and the natural connections (or network) between these features. Green infrastructure also includes 'blue infrastructure', which are areas of wetland, water bodies and water courses.

Local Nature Partnership (LNP)
A body, designated by the Secretary of State for Environment, Food and Rural Affairs, established for the purpose of protecting and improving the natural environment in an area and the benefits derived from it. Locally, our Local Nature Partnership (LNP) is the West of England Nature Partnership (WENP).

Local planning authority (LPA)
The public authority whose duty it is to carry out specific planning functions for a particular area.

Local plan
A plan for the future development of a local area, drawn up by the local planning authority in consultation with the community. In law this is described as the development plan documents adopted under the Planning and Compulsory Purchase Act 2004.

National trails
Long distance routes for walking, cycling and horse riding.

Natural capital
Natural capital includes the ecosystem services, resources and elements of nature that directly or indirectly produce value to people.

Natural Flood Management
Managing flood and coastal erosion risk by protecting, restoring and optimising the natural 'regulating' features of catchments, rivers, floodplains and coasts.

Nature Recovery Network (NRN)
An expanding, increasingly connected, network of wildlife-rich habitats supporting species recovery, alongside wider benefits such as carbon capture, water quality improvements, natural flood risk management and recreation. It includes the existing network of protected sites and other wildlife rich habitats as well as and landscape or catchment scale recovery areas where there is coordinated action for species and habitats.

Open space
All open space of public value, including areas of water (such as rivers, canals, lakes and reservoirs).

Priority habitats and species
Species and Habitats of Principal Importance included in the England Biodiversity List published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006.

Ramsar sites
Wetlands of international importance, designated under the 1971 Ramsar Convention.

Special Areas of Conservation (SAC)
Areas defined by regulation 3 of the Conservation of Habitats and Species Regulations 2017 which have been given special protection as important conservation sites.

Special Protection Areas (SPA)
Areas classified under regulation 15 of the Conservation of Habitats and Species Regulations 2017 which have been identified as being of international importance for the breeding, feeding, wintering or the migration of rare and vulnerable species of birds.

Site of Special Scientific Interest (SSSI)
Sites designated by Natural England under the Wildlife and Countryside Act 1981.

Spatial development strategy (SDS)
A plan containing strategic policies prepared by a Mayor or a combined authority (locally, the West of England Combined Authority) under the Local Democracy, Economic Development and Construction Act 2009 (as amended).

Supplementary planning documents (SPD)
Documents which add further detail to planning policies.

Sustainable travel
A means of travel with low overall impact on the environment, including walking, wheeling, cycling, riding, low emission vehicles, and public transport.

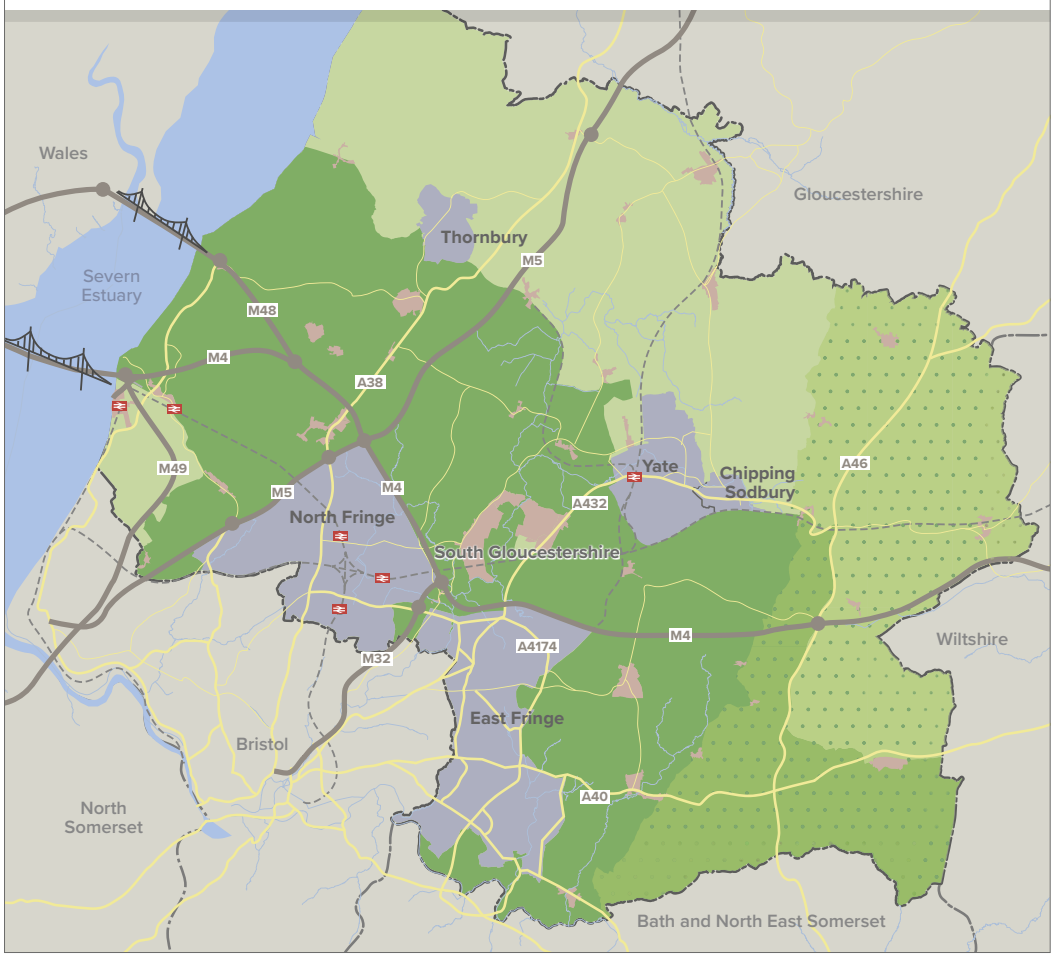
Wildlife corridor
Green areas connecting natural habitat which enable the movement of wildlife.

9 Maps

9 Maps

South Gloucestershire maps

South Gloucestershire – our area

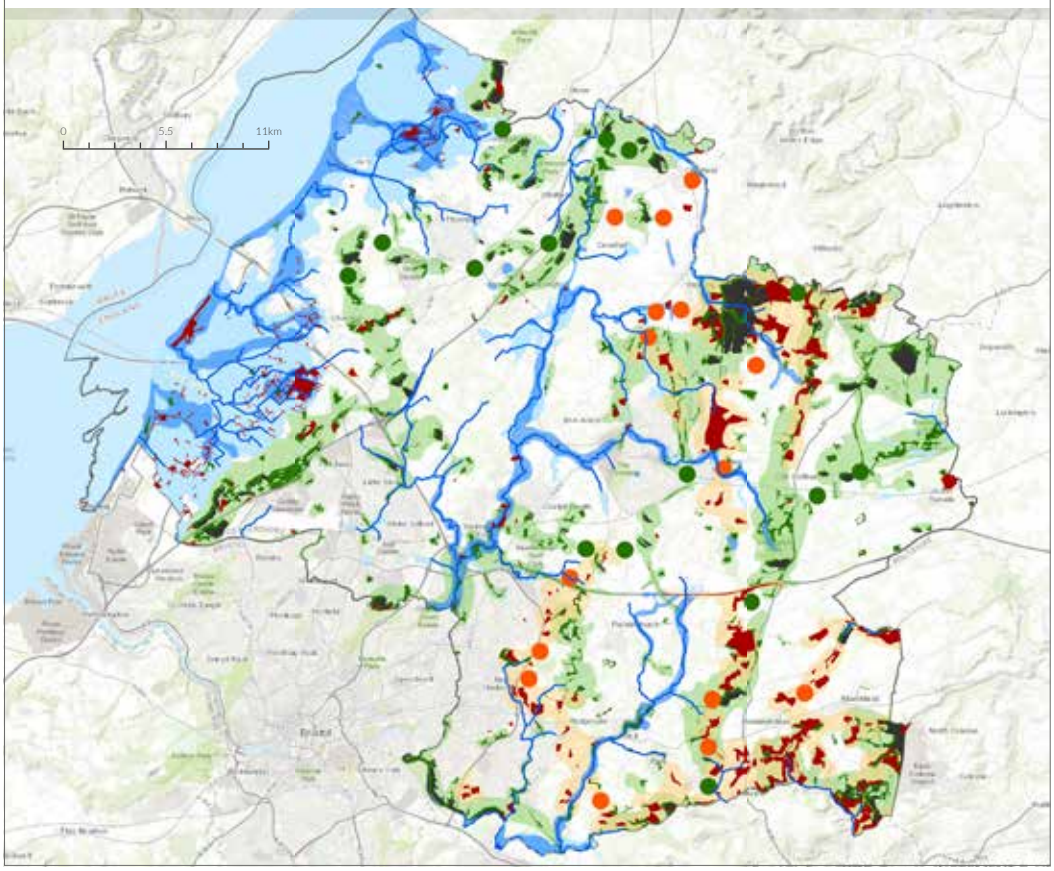


Key

- South Gloucestershire Boundary
- Green Belt
- Cotswolds Area of Outstanding Natural Beauty
- Urban areas and market towns
- Rural settlements
- Motorway
- A roads
- Railway

nature people places

South Gloucestershire Nature Recovery Network



Map © WENP except: River Barriers © BACP. Flood zone 2, Floodplain connectivity, Water quality and chemical status (WFD) © Environment Agency. Ancient woodland © Natural England. All woodland and grassland data, and the water strategic network contain data © Crown copyright and database rights 2018 Ordnance Survey 100024198. Rivers and streams contains OS data © Crown copyright and database right 2021. River barriers, Flood zone 2, Floodplain connectivity, Water quality and chemical status (WFD) contain public sector information licensed under the Open Government Licence v3.0.

Key

Grassland

- Existing grassland
- Grassland connectivity opportunities
- Grassland strategic network

Woodland

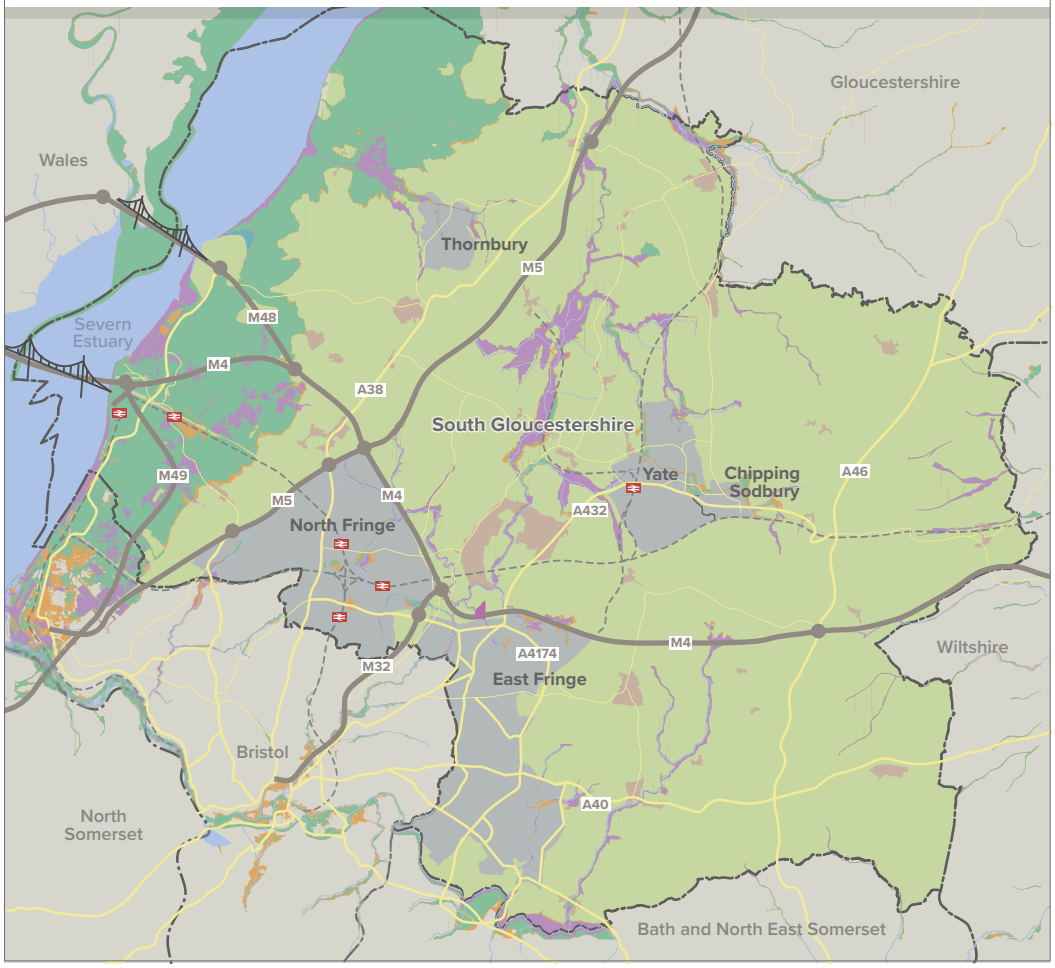
- Existing woodland
- Woodland connectivity opportunities
- Woodland strategic network

Water

- Wetland strategic network
- Rivers and streams
- Indicative wetland opportunities

South Gloucestershire NRN for woodland, grassland and wetland habitat including gaps in the network (indicated by dots) which are priorities to improve connectivity and join up the network. www.wenp.org.uk/nature-recovery-network

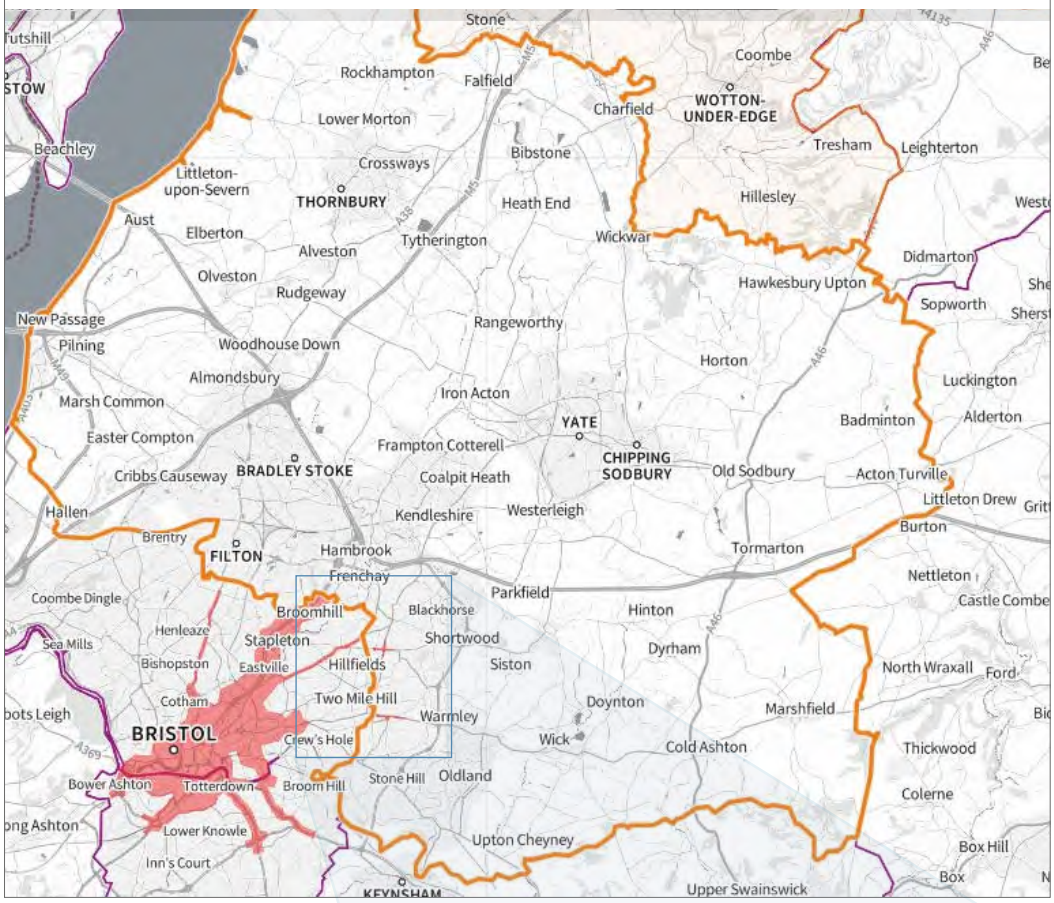
Flood risk areas



Key

- South Gloucestershire Boundary
- Flood Zone 3b (highest risk)
- Flood Zone 3
- Flood Zone 2
- Urban areas and market towns
- Rural settlements
- Motorway
- A roads
- Railway

Air Quality Management Areas



Since December 1997 each local authority in the UK has been carrying out a review and assessment of air quality in their area. This involves measuring air pollution and trying to predict how it will change in the next few years. The aim of the review is to make sure that the national air quality objectives will be achieved throughout the UK by the relevant deadlines. These objectives have been put in place to protect people's health and the environment.

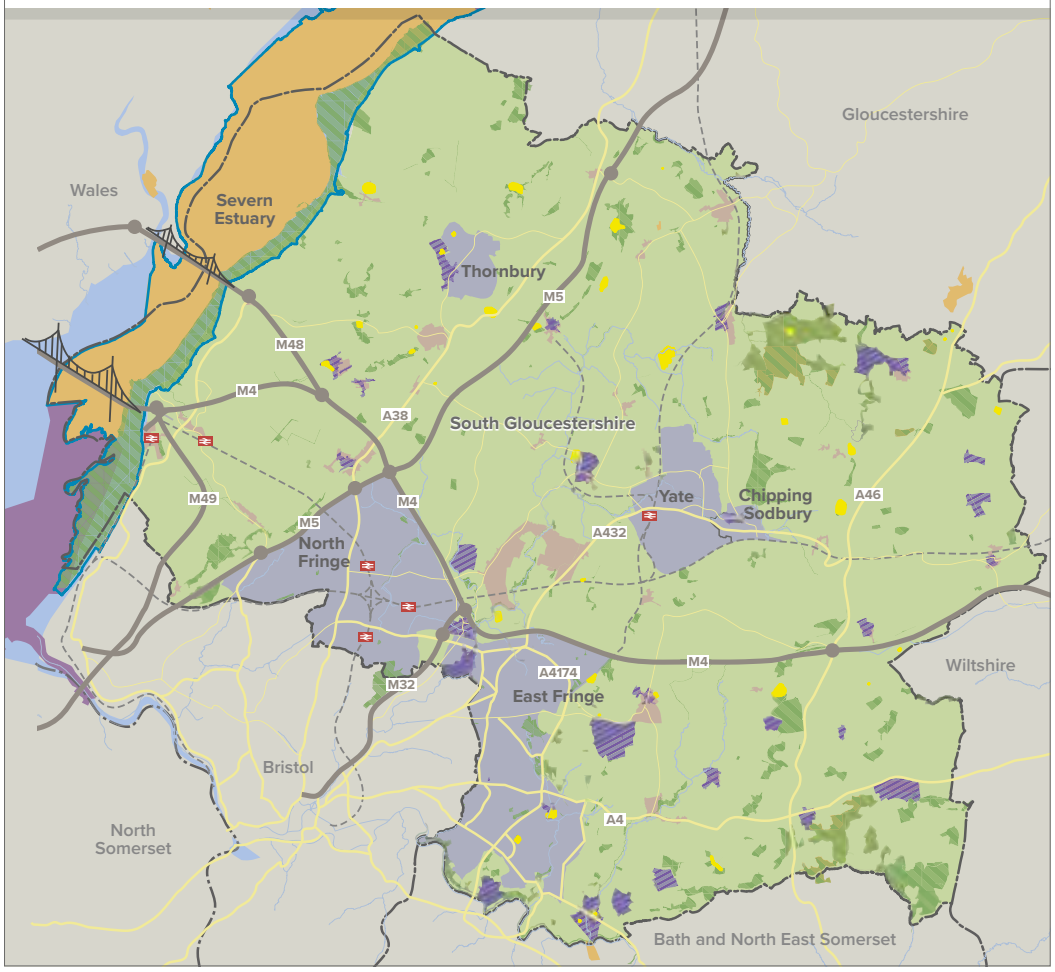
If a local authority finds any places where the objectives are not likely to be achieved, it must declare an Air Quality Management Area there. This area could be just one or two streets, or it could be much bigger.

Then the local authority will put together a plan to improve the air quality – a Local Air Quality Action Plan.

Defra UK Air: January 2020
uk-air.defra.gov.uk/aqma

Currently (2021) there are 2 Air Quality Management Areas in South Gloucestershire: Staple Hill and Kingswood – Warmley.

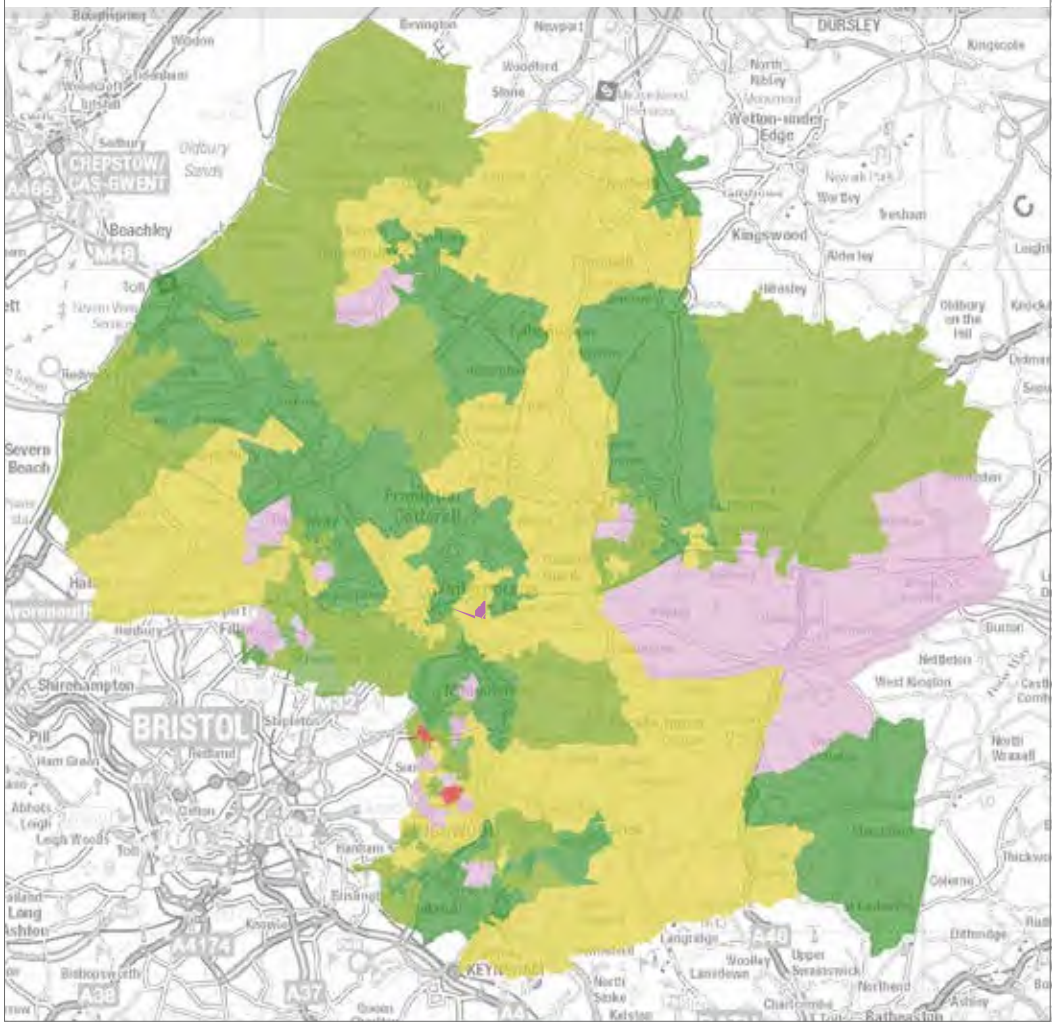
Key heritage and ecology designations



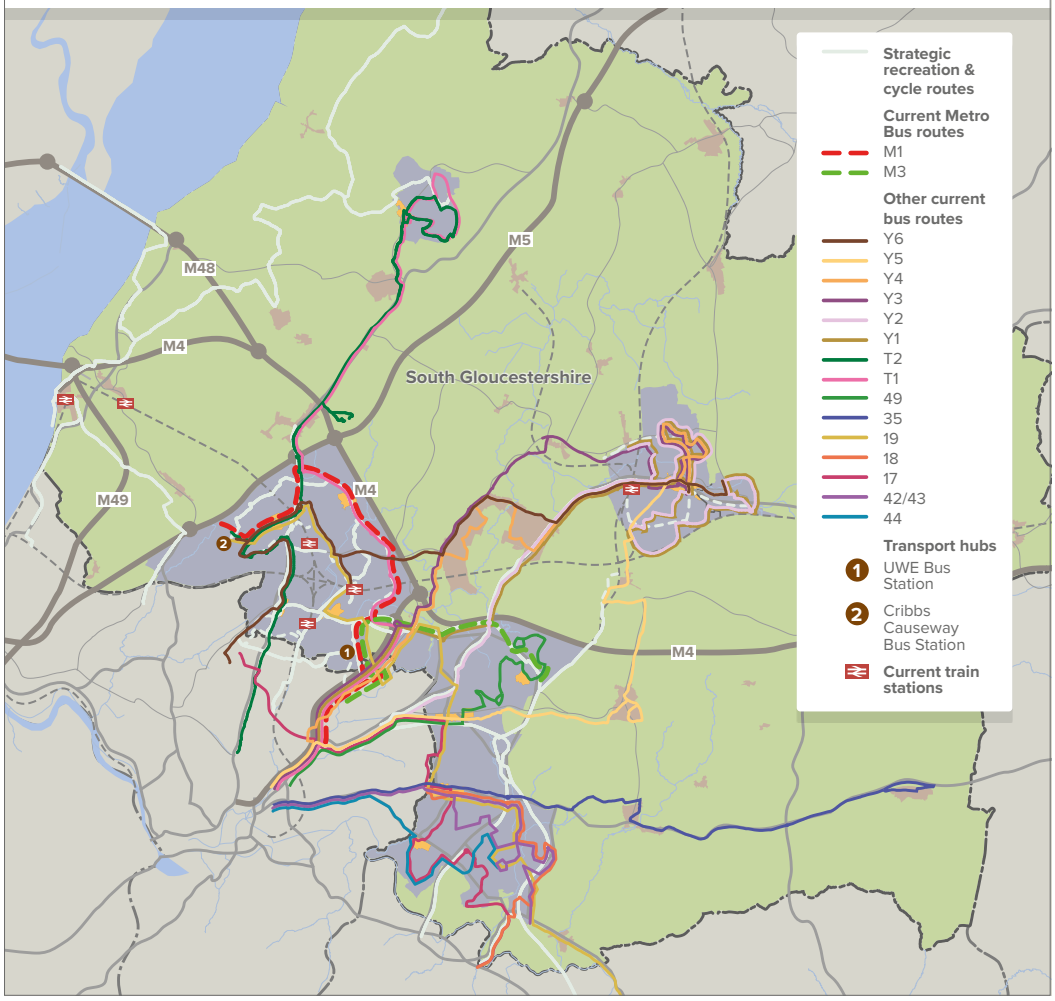
Key

- South Gloucestershire Boundary
- Special Protection Area (SPA) / Ramsar site
- Special Areas of Conservation (SAC)
- Sites of Special Scientific Interest (SSSI)
- Sites of Nature Conservation (SNCI)
- Conservation areas
- Scheduled Ancient Monuments (SAM)
- Urban areas and market towns
- Rural settlements
- Motorway
- A roads
- Railway

Levels of deprivation


DURSLEY
CHEPSTOW / CAS-GWENT
Beachley
Severn Beach
BRISTOL
Shirehampton
Pill
Kingswood
Yate
Thornbury
Wotton-under-Edge
Oldbury on the Hill
Patchway
Filton
Stoke Gifford
Winterbourne
Frampton Cotterell
Chipping Sodbury
Westerleigh
Coalpit Heath
Hanham
Kingswood
Staple Hill
Mangotsfield
Downend
Bitton
Oldland Common
Bridgeyate
Emersons Green
Longwell Green
Abbots Leigh
Portishead
Pilning
Easter Compton
Almondsbury
Olveston
Tytherington
Wickwar
Charfield
Wickwar
Hawkesbury Upton
Badminton
Old Sodbury
Tormarton
Acton Turville
Iron Acton
Rangeworthy
Wickwar
Cromhall
Tortworth
Falfield
Alveston
Thornbury
Buckover
Latteridge
Tytherington
Wickwar
Chipping Sodbury

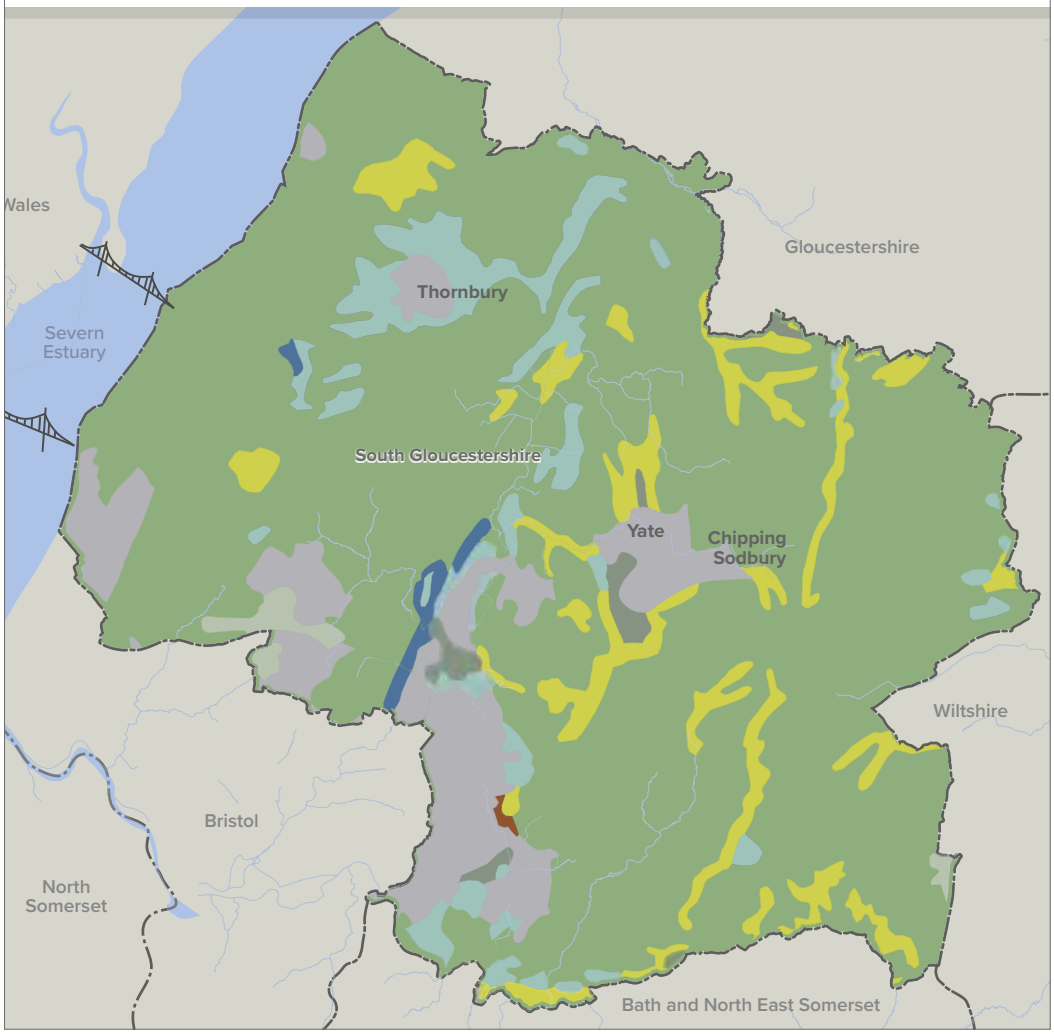
Accessing services and facilities – main rail, bus and walking/cycling routes and networks



Key

- South Gloucestershire Boundary
- Town centres
- Urban areas and market towns
- Rural settlements
- Motorway
- A roads
- Railway

Soil/agricultural land classification



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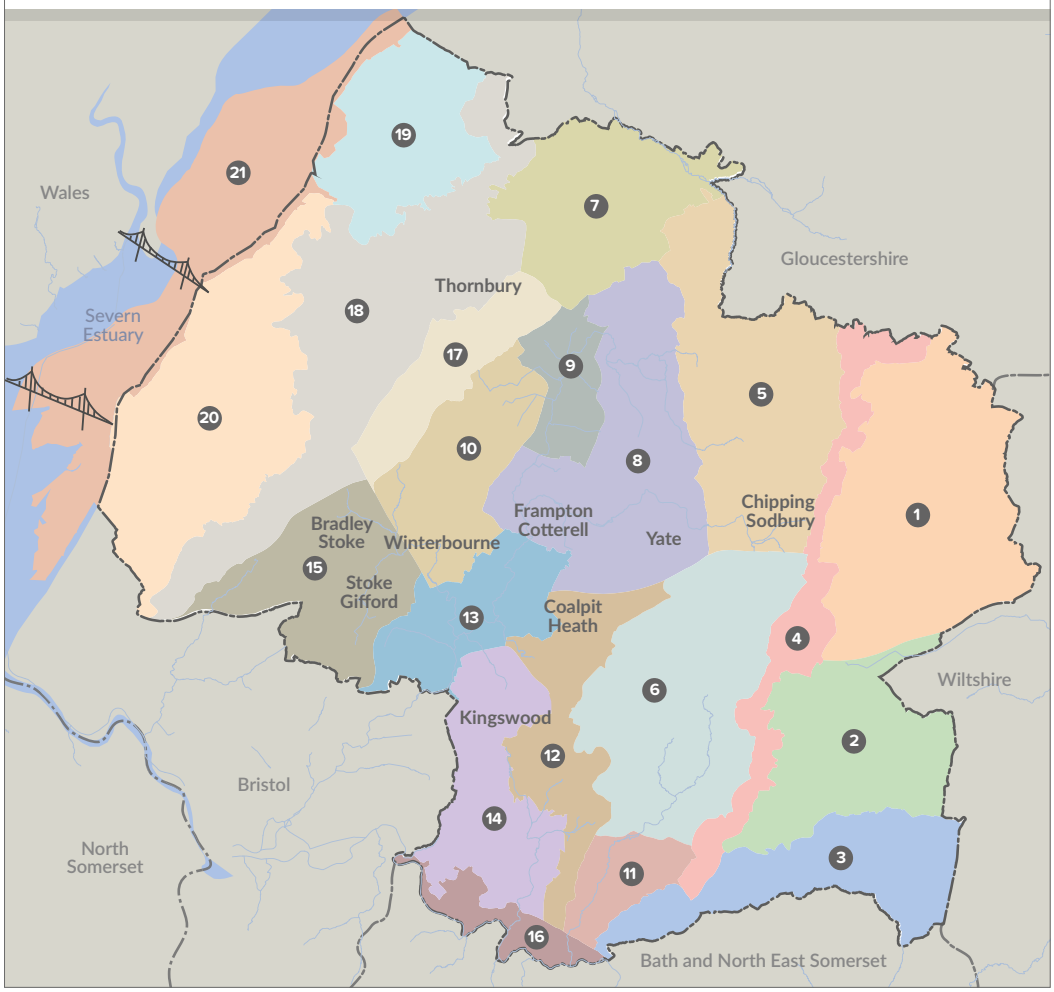
Key

Agricultural land classification:

- Grade 1
- Grade 2
- Grade 3
- Grade 4
- Grade 5
- Grade 6
- Grade 7
- South Gloucestershire Boundary

Landscape character assessment (2014)



Source Information based on British Geological Mapping
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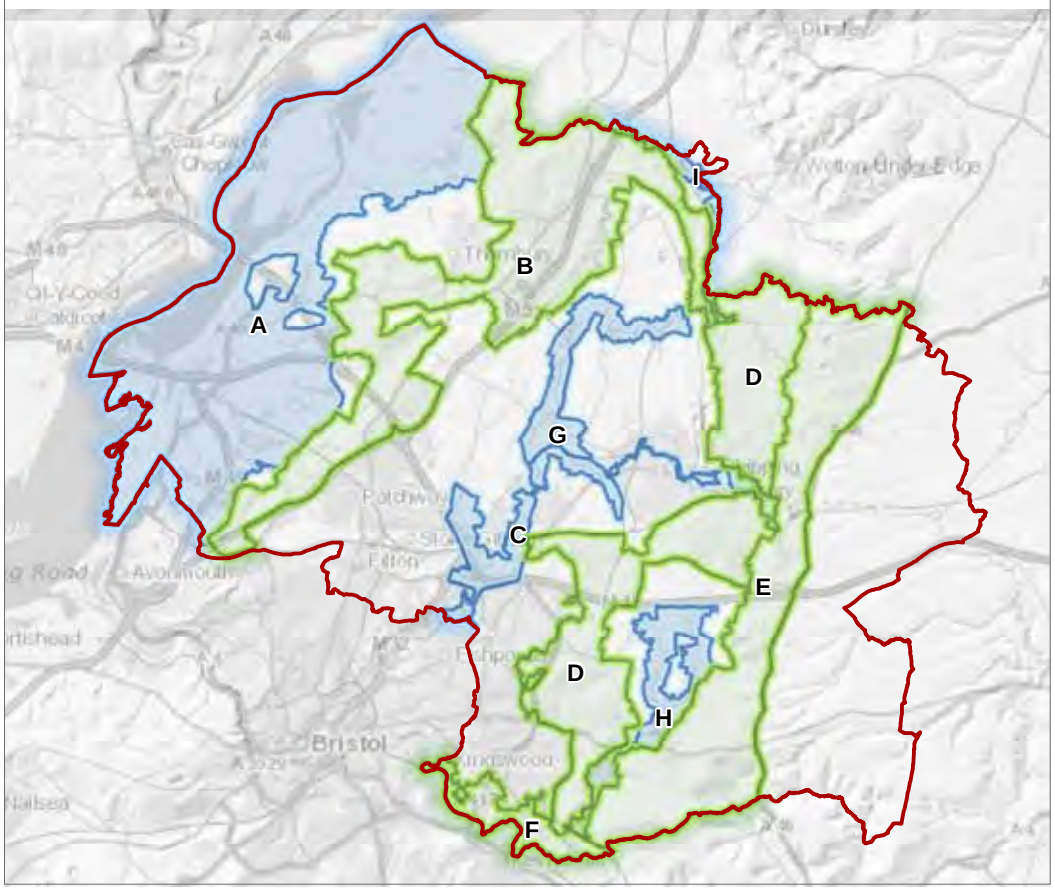
Key

- South Gloucestershire Boundary
- Badminton Plateau 1
- Marshfield Plateau 2
- Ashwicke Ridges 3
- Cotswold Scarp 4
- Wickwar Ridge & Vale 5
- Pucklechurch Ridge & Boyd Valley 6
- Falfield Vale 7
- Yate Vale 8
- Tytherington Plain 9
- Earthcott Vale 10
- Golden Valley 11
- Westerleigh Vale & Oldland Ridge 12
- Frome Valley 13
- Kingswood 14
- Patchway & Filton 15
- Avon Valley 16
- Rudgeway & Tytherington Ridge 17
- Severn Ridges 18
- Oldbury Levels 19
- Pilning Levels 20
- Severn Shoreline & Estuary 21

Strategic Green and Blue Infrastructure corridors



Key

South Gloucestershire Boundary

Blue Infrastructure Corridor

Green Infrastructure Corridor

A: Shepperdine-Oldbury on Severn- Severn Beach (Severn Estuary and Levels)

B: Charfield-Alveston-Hallen (Western Scarp/Severn Ridges)

C: Winterbourne-Kendleshire- Hambrook (River Frome Corridor)

D: Wickwar-Westerleigh-Bitton (Westerleigh Vale/ Oldland Ridge/East Fringe)

E: Hawkesbury-Old Sodbury-Upton Cheyney (Cotswold Scarp)

F: Hanham Green-Hanham Abbots- Bitton (Avon Valley)

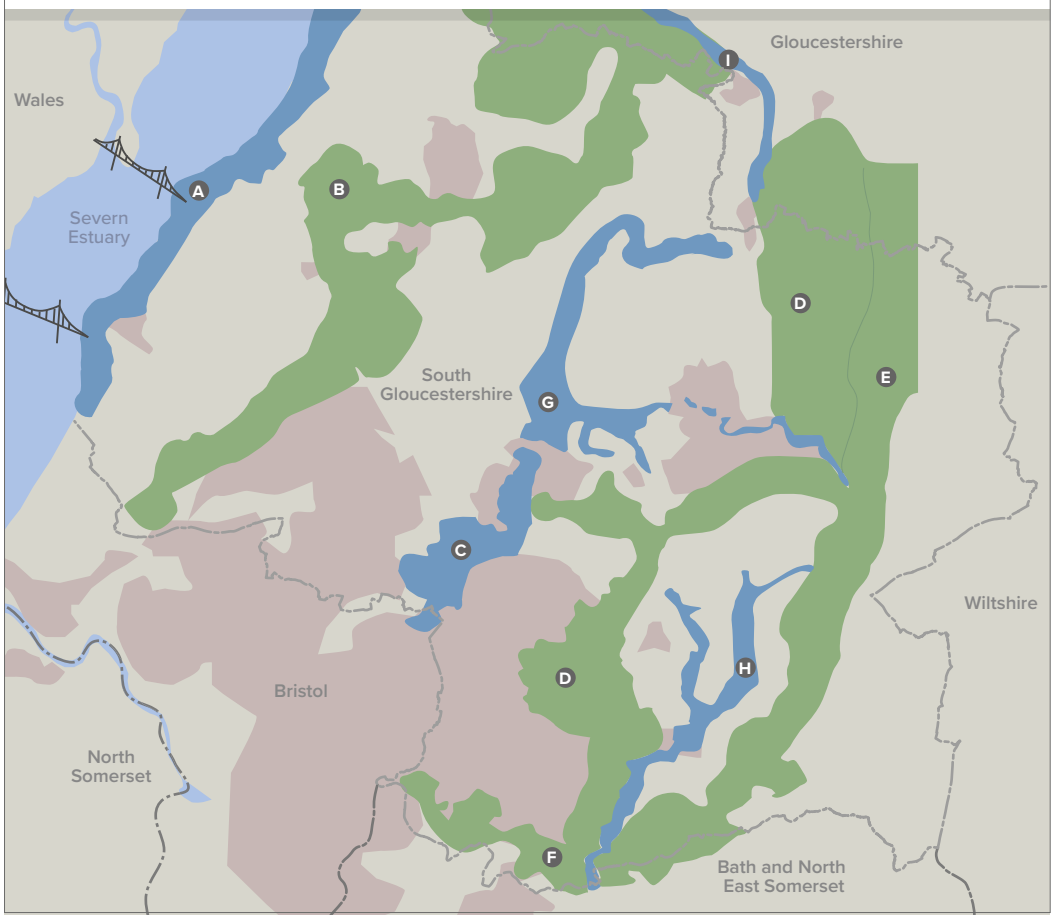
G: Wickwar-Iron Acton-Yate (Ladden Valley)

H: Hinton-Doynton-Bitton (Boyd Valley)

I: Huntingford-Charfield-Wickwar (Little Avon River Corridor)

Names in brackets cross reference to descriptions within the Greener Places: Green Infrastructure Strategy 2021, which highlight the key geomorphological features that the corridors are associated with.

Potential green infrastructure corridors within South Gloucestershire



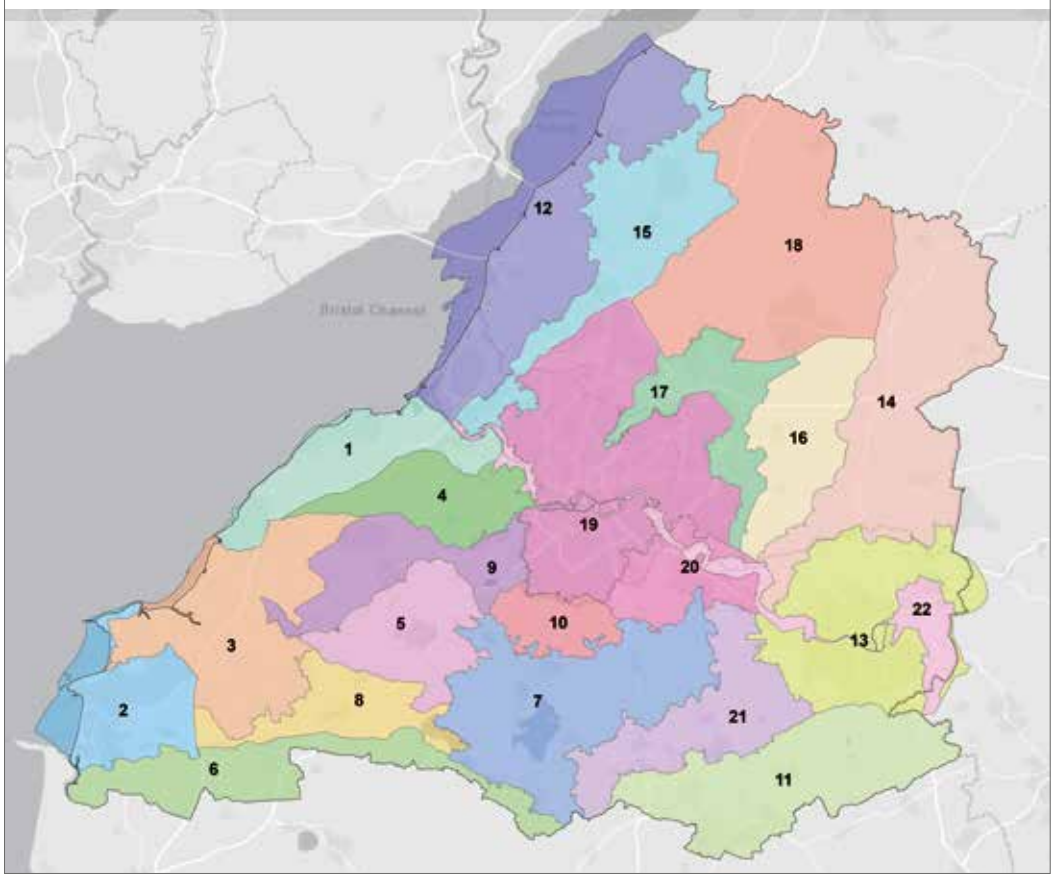
Key

Nature Recovery Network: 9 Strategic Primary GI Corridors

- A Severn Estuary and Levels
- B Western scarp/Severn Ridges
- C River Frome corridor; Frome Re-connected Project
- D Westerleigh Vale and Oldland Ridge/East Fringe
- E Cotswold Scarp
- F Avon Valley
- G Ladden valley
- H Boyd Valley
- I Little Avon River
- Urban areas
- South Gloucestershire Boundary

West of England maps

West of England Green Infrastructure Areas



Source: South Gloucestershire Local Plan Core Strategy 2006-2027 Policy CS2: Green Infrastructure

Key - Areas in South Gloucestershire highlighted

1 Clevedon Portishead and Gordano

2 Weston-super-Mare and Environs

3 North Somerset shoreline and Moors

4 Wooded uplands, Abbots Leigh, Tickenham, Failand

5 North Somerset Open Plateau and wooded slopes

6 Mendip Slopes and outliers

7 Chew Valley

8 Yeo Valley and Spring line villages

9 Nailsea, Backwell, Long Ashton and Environs

10 Dundry Hill

11 Cam, Wellow and Somer Valley around Norton Radstock

12 Severn Estuary Shoreline and levels

13 Bath and Environs – Bathscape

14 Cotswold Scarp and Dip Slope

15 Ridges, Shirehampton to Tytherington

16 Pucklechurch Ridge, Boyd and Golden Valleys

17 Frome Valley – Westerleigh Vale – Oldland Ridge

18 The South Gloucestershire Vales

19 Greater Bristol

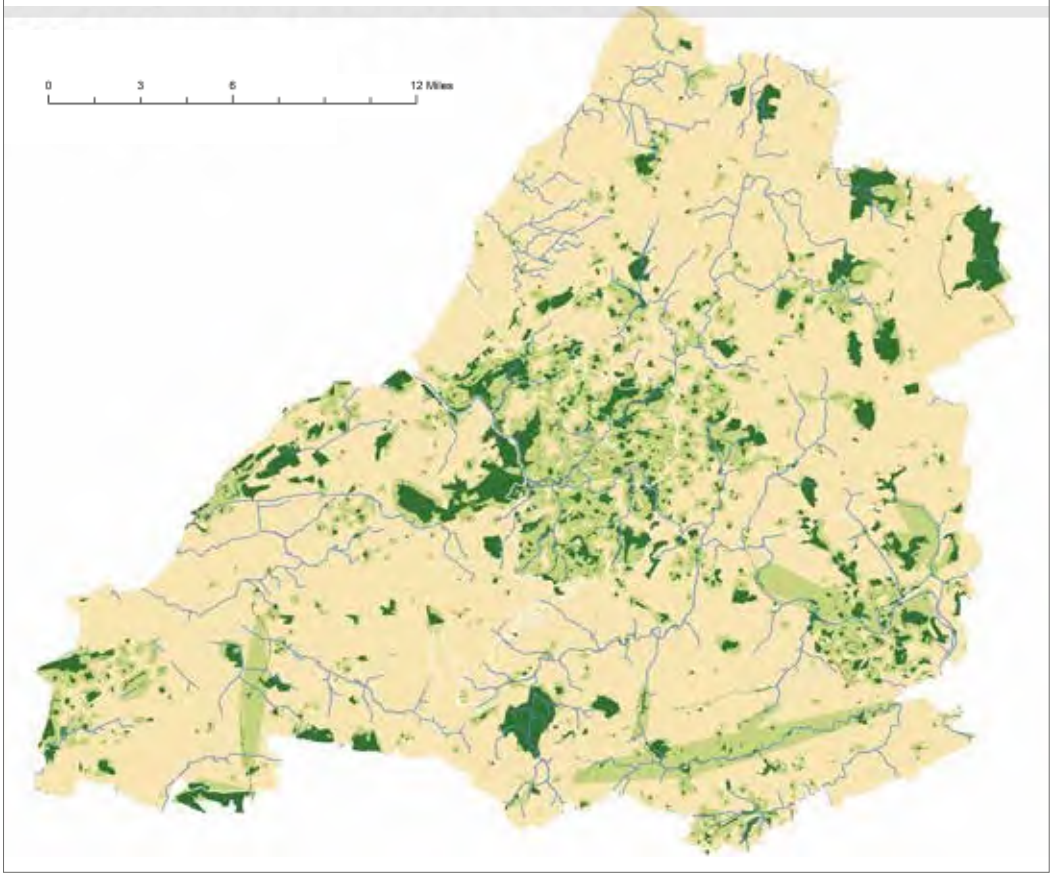
20 Keynsham and Environs

21 Undulating plateau Newton St Loe to Hinton Blewett

22 River Avon Valley

nature people places

Accessibility to open space in the West of England

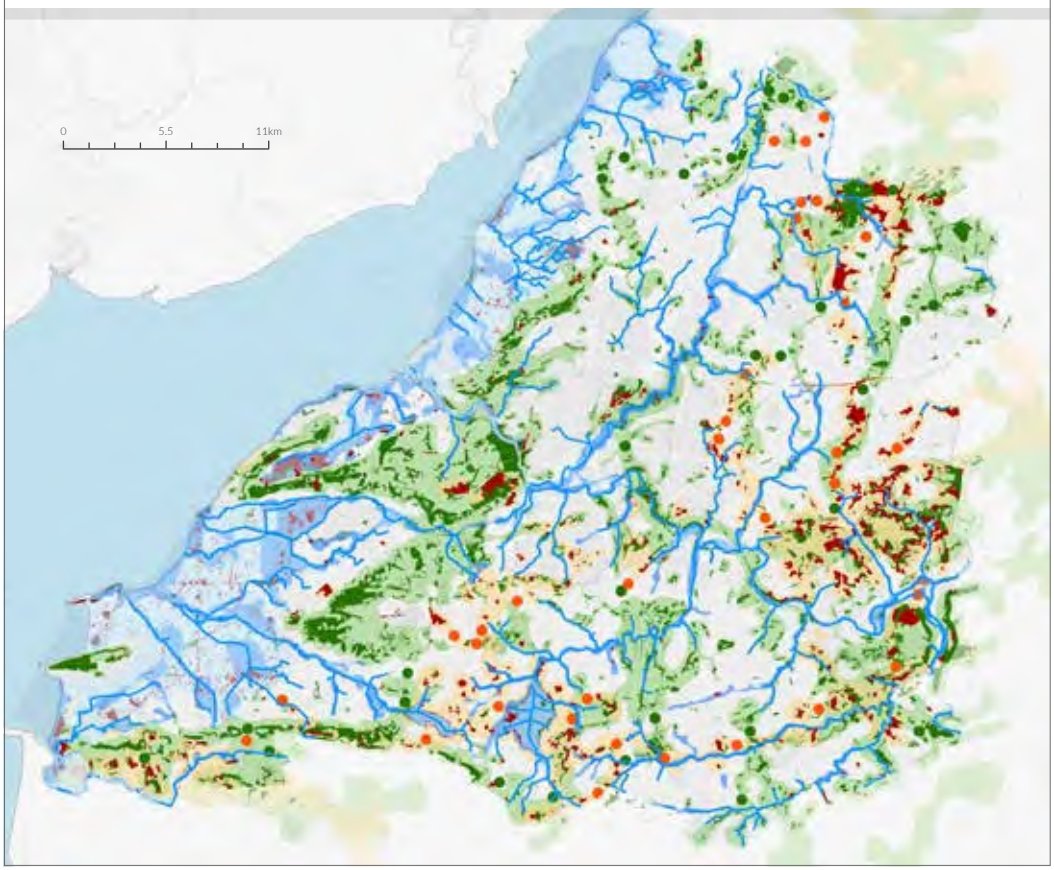


© WENP 2018. Data sources used with permission include: Avon Wildlife Trust, Woodland trust, national Trust, Natural England, OS Green Space

Key

- Open green space
- Acessible to open green space (within 300m walk)
- Deficient in access to open green space
- Rivers

West of England Nature Recovery Network



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Key

Grassland

- Existing grassland
- Grassland connectivity opportunities
- Grassland strategic network

Woodland

- Existing woodland
- Woodland connectivity opportunities
- Woodland strategic network

Water

- Wetland strategic network
- Rivers and streams
- Indicative wetland opportunities

10 References

10 References

Live links to relevant legislation, policy, strategies and evidence are included throughout the Greener Places Strategy. The list below includes the majority of references used in the strategy which will be updated for the final adopted strategy document.

International

Global Assessment Report on Biodiversity and Ecosystem Services (IPBES)

Paris Agreement

UN 2030 Agenda for Sustainable Development

UN Sustainable Development Goals

UN Convention on the Rights of the Child (UNCRC) - UNICEF UK

National UK legislation

Agriculture Act 2020

Allotments Act 1950 (legislation.gov.uk)

Children's Act (Every Child Matters) 2004

Crime and Disorder Act 1998

Criminal Damage Act 1971

DEFRA 25 year Environment Plan 2018

Disability Discrimination Act 1995 and 2005 (Superseded)

Dogs (Fouling of Land) Act 1996

Environmental Act 2021 (add link once Bill passed)

Environmental Protection Act 1990

Equality Act 2010

Health and Safety at Work Act 1974

Wildlife and Countryside Act 1981

Management of Health & Safety at Work Regulations 1992

National play strategy

National Planning Policy Framework NPPF

Natural Environment and Rural Communities Act 2006 (NERC)

Natural England Green Infrastructure standards

Occupiers Liability Act 1957

Occupiers Liability Act 1984

Road Traffic Act (various)

Ramsar Convention 1971

RoSPA – Play Safety

Town and Country Planning Act 1990

UK Biodiversity Action Plan BAP

West of England

Bristol Avon Catchment Partnership

Bristol regional environmental records centre

Cotswolds Conservation Board

Healthier Together Sustainability & Transformation Partnership - Bristol, North Somerset and South Gloucestershire (BNSSG)

Joint GI Strategy 2020

Joint Local Transport Plan 4

Joint Public Rights of Way Plan 2012-2016

Local Industrial Strategy

Local Walking and Cycling Infrastructure Plan

Spatial Development Strategy – being prepared

University of Bristol Urban Pollinators Project

West of England Nature Partnership (WENP) Nature Recovery Network mapping and methodology 2019

West of England Recovery Plan

South Gloucestershire

Adult Mental Health and Emotional Wellbeing Strategy 2017 - 2021

Ageing Better Plan 2019 -2023

Ash Dieback Action Plan (in development)

Biodiversity Action Plan 2016 - 2026

Biodiversity and Planning SPD 2021- update link once prepared, consulted and adopted

Children, Young People and Families Partnership Plan

Climate Change Strategy 2018 - 2023 and annual Action Plan

Core Strategy (2006 – 2027

Council Plan 2020 - 2024

Early Help Strategy 2019-2024

Equalities Strategy

GI Supplementary Planning Document (SPD) 2021 update link once adopted

Highways Asset Management Framework

Joint Health & Wellbeing Strategy (JHWS) 2017 – 2021

Joint Strategic Needs Assessment

Landscape Character Assessment (2014)

Local Accessibility Strategy 2017 - 2019

Local Flood Risk Management Strategy (LFRMS) (2015-2020)

Local Food Plan 2018-2021

Physical Activity Strategy 2015 - 2020

Play Strategy

Playing Pitch and Sports Facilities Strategy

Policies, Sites and Places Plan 2017

Property Asset Management Plan

Sustainable Community Strategy 2016 - 2036

Sustainable Drainage Systems SPD 2021

Tree Asset Management Plan 2018

Trees on Development Sites SPD 2021

Research and evidence

'A dose of nature' University of Exeter 2019

Healthy Woods Healthy Lives - Woodland Trust 2013

HM Treasury Dasgupta Review 2021

Intergovernmental Panel on Climate Change

Public Health England - Improving access to greenspace - a new review for 2020

Public Health England (PHE) 2014 Local action on health inequalities: Improving access to green spaces

Space for People: Woodland Access - Woodland Trust

State of the UK's Woods and Trees 2021 (woodlandtrust.org.uk)

Town and Country Planning Association TCPA green infrastructure research database - for latest green infrastructure research, evidence, and policy visit

The World's Forgotten Fishes, WWF (worldwildlife.org) 2021

UK State of Nature Report 2019 - National Biodiversity Network NBN

South Gloucestershire Council

Delivering climate action

#2811 • 10/21

www.southglos.gov.uk/**greenerplaces**