



A Green & Blue Infrastructure Strategy for Wiltshire

Wiltshire's Natural Environment Plan 2022-2030

*Supporting the resilience of Wiltshire's communities,
businesses and wildlife in a changing world*

The Strategy

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Preface

Welcome to the first Green & Blue Infrastructure Strategy for Wiltshire.

The strategy has been shaped through engagement with a wide range of internal stakeholders and external partners, starting with an initial workshop in February 2020 attended by some 50 representatives of 29 organisations. A webinar attended by many of the same stakeholders was held in May 2021 to identify priorities for the emerging strategy to focus on.

A joint public consultation on the draft Wiltshire Green & Blue Infrastructure Strategy and the Wiltshire Climate Strategy ran for 6 weeks from 1st September to the 17th October 2021. This included consultation events at local libraries and an online survey. A total of 213 responses were received from both private individuals and stakeholder organisations, the majority of which have been overwhelmingly positive and supportive of the green infrastructure approach.

The feedback was invaluable in helping shape the final strategy adopted by the Council on 15 February 2022.

Key messages



Our rich and varied environment underpins Wiltshire's natural capital; it makes Wiltshire an attractive place to live, work and visit, enhances our quality of life and well-being, and underpins the economy.



Wiltshire's natural environment is undergoing substantial changes driven by factors including climate change, biodiversity loss, population growth and development.



Wiltshire's multi-functional network of green and blue infrastructure assets supports a range of ecosystem services, providing multiple economic, social and environmental benefits for people, places and nature.



The Strategy sets out a long-term vision, strategic goals and principles for delivering green and blue infrastructure across Wiltshire by a range of partners and stakeholders, working together at a variety of scales.



Highlighting "what" is needed and "how" this will be achieved, it provides a high-level framework for developing delivery strategies and detailed implementation plans that reflect community needs and national priorities.



Together with the new Local Nature Recovery Strategy for Wiltshire, the Strategy has a significant role to play in delivering nature-based solutions to support the Council's Climate Strategy and new Local Plan.

The Vision for Wiltshire's Green & Blue Infrastructure

Wiltshire's multi-functional network of high quality, biodiverse and accessible green and blue infrastructure is widely valued by our communities, businesses and visitors.

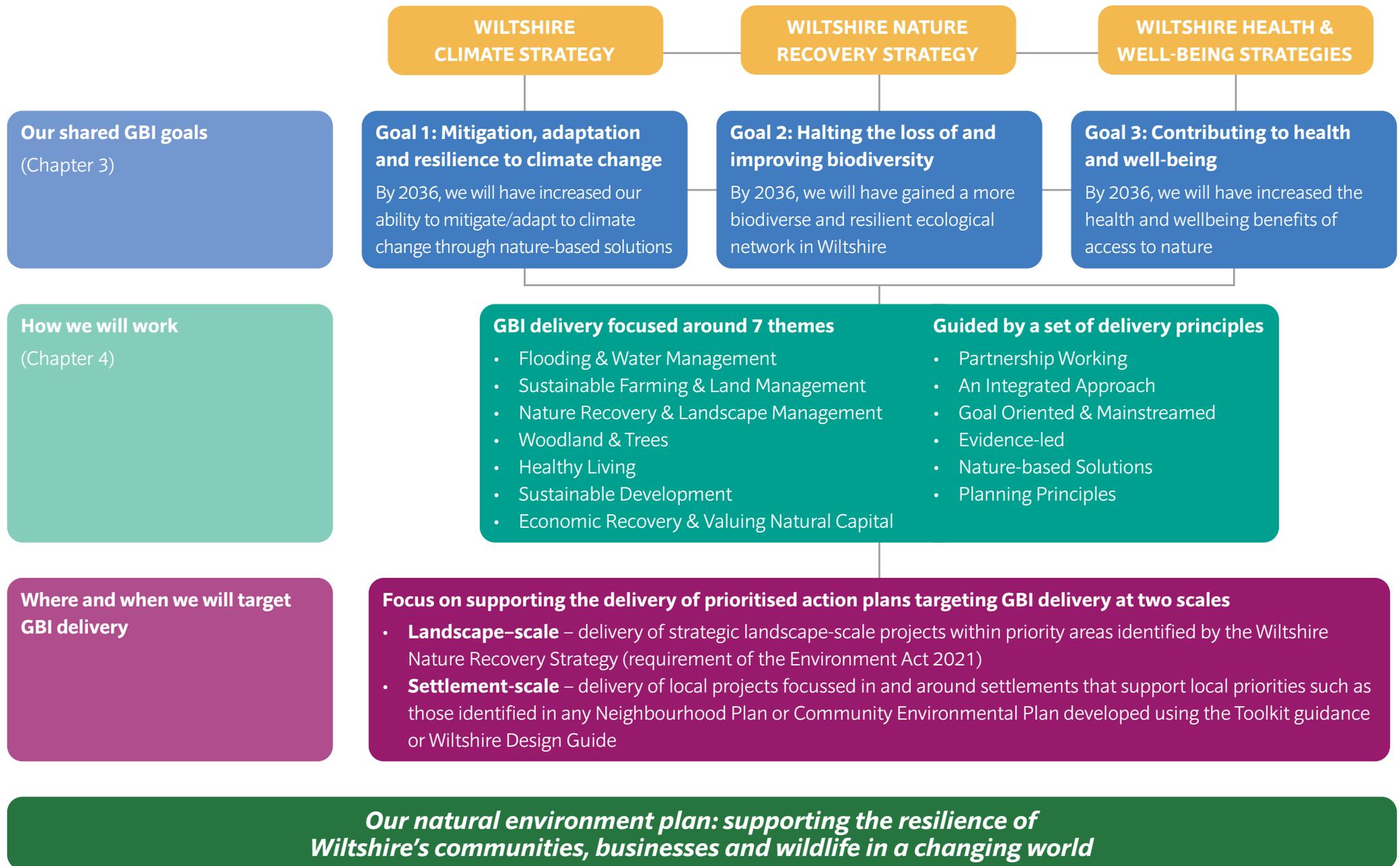
Managed sustainably through strong leadership and partnerships, the green and blue infrastructure network provides a range of well-being benefits for people, places and nature across Wiltshire.

As a result of working with natural processes to support delivery of multi-functional ecosystem services, Wiltshire is better able to adapt to a changing climate and biodiversity loss has been reversed.

Networks of green and blue spaces and corridors in the countryside and our towns support access to nature and healthy lifestyles, and provide high quality landscapes and beautiful places for people to live, work and visit.



Strategy overview

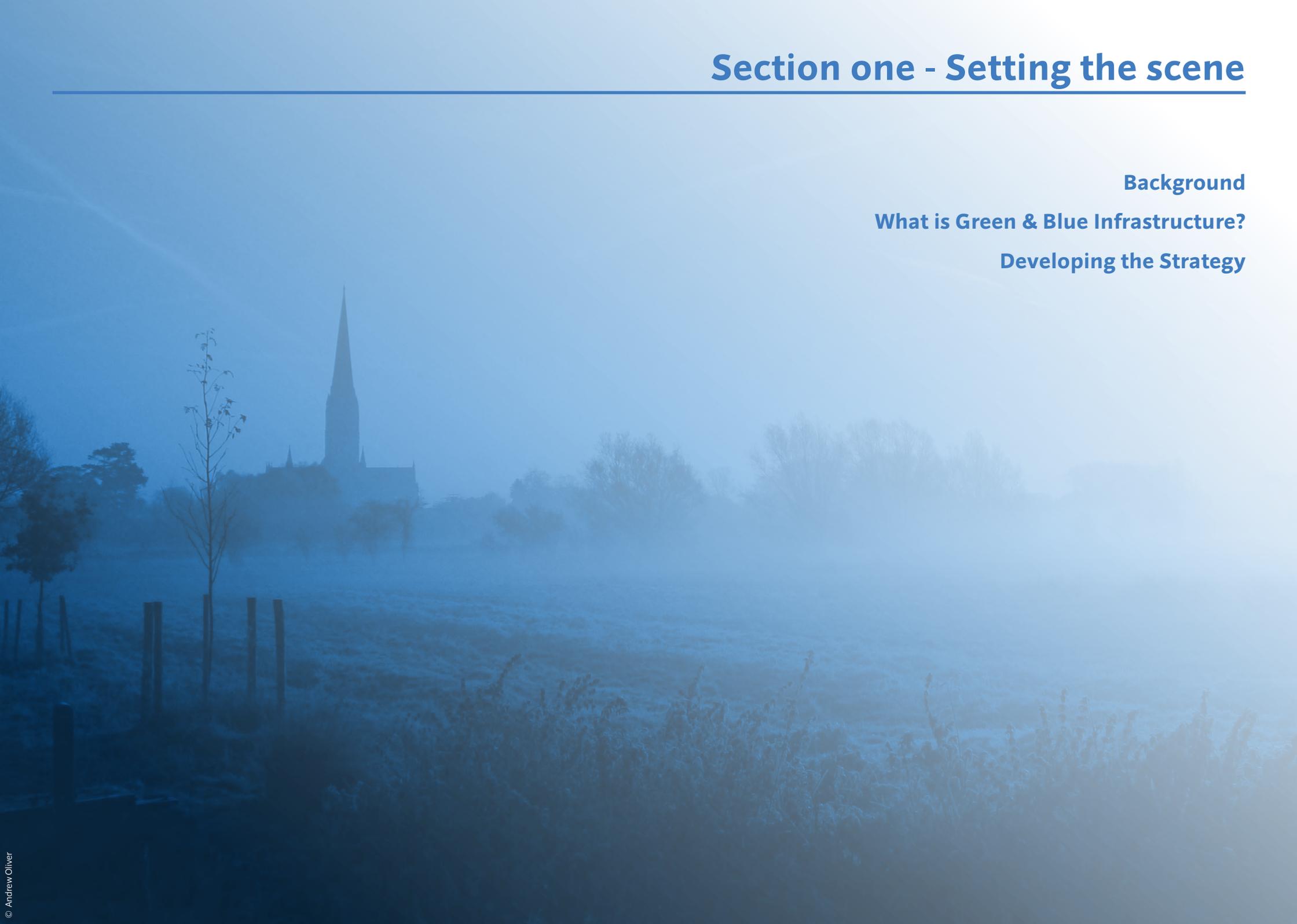


Section one - Setting the scene

Background

What is Green & Blue Infrastructure?

Developing the Strategy



Section one - Setting the scene

1.1 Background

Strengthening networks of multi-functional green and blue infrastructure has an important role to play in halting biodiversity loss and nature recovery, building resilience to climate change (see **Box 1.1**) and promoting healthy, resilient and safe communities.

BOX 1.1 Responding to the Climate Emergency

As a result of global warming, Wiltshire is set to experience warmer, wetter winters and hotter, drier summers. Extreme weather events will become more frequent.

Wiltshire Council has a key responsibility for addressing climate change through adaptation and mitigation measures, both within its services and as part of its community leadership role. In response to the global climate emergency, Wiltshire Council acknowledged the climate emergency and committed to seek to make the county of Wiltshire carbon neutral by 2030.

Wiltshire Council established a Global Warming and Climate Emergency Task Group (renamed the Climate Emergency Task Group) and the council has produced a draft Climate Strategy which is looking at all issues around climate change and in particular how Wiltshire can become carbon-neutral, shaping the next five years of the council's action on climate change.

In collaboration with local nature, health and enterprise partnerships and neighbouring authorities, Wiltshire Council has developed a bold vision and strategic approach to maintaining and enhancing networks of green and blue infrastructure at a catchment and landscape-scale.

In addition to providing a framework for co-ordination of environmental land and water management in Wiltshire, the Strategy will also inform and support implementation of the Local Plan.

BOX 1.2 Access to Green Space in a Pandemic

The COVID-19 coronavirus pandemic has revealed the critical role of access to local green space for people's health. The Government's priority was to save lives and the best way to protect yourself and others from illness was to stay at home. However, exercise was still important for people's physical and mental wellbeing, so the Government said people could leave their homes for exercise once a day.

www.mind.org.uk - coronavirus and your wellbeing

Bringing nature into your everyday life can benefit both your mental and physical wellbeing. It can improve your mood, reduce feelings of stress or anger, and make you feel more relaxed.

Power of parks in a pandemic

When half of the world was living under lockdown, the ability to go outside and get some fresh air had never been so important.

As those who could afford to do so converged on green spaces, seeking exercise and solace amid the coronavirus pandemic, parks became stages for collective joy, anxiety, and social-distancing infringement crackdowns.



In the context of the global climate emergency, biodiversity loss and the COVID-19 coronavirus pandemic (see **Box 1.2**), investment in the provision of high quality, biodiverse and accessible green and blue infrastructure has never been more vital.

1.2 What is Green & Blue Infrastructure?

Green infrastructure is defined by the National Planning Policy Framework (2021) as 'A network of multi-functional green and blue spaces and other natural features, urban and rural, which is capable of delivering a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities and prosperity'.

As outlined in **Box 1.3**, green infrastructure embraces a range of public and private natural assets. This Strategy refers to these assets collectively as Green and Blue Infrastructure (GBI).

BOX 1.3 What can GBI include and why is it important?

Planning Practice Guidance on the Natural Environment advises:

Green infrastructure can embrace a range of spaces and assets that provide environmental and wider benefits. It can, for example, include parks, playing fields, other areas of open space, woodland, allotments, private gardens, sustainable drainage features, green roofs and walls, street trees and '**blue infrastructure**' such as streams, ponds, canals and other water bodies. (Paragraph 004)

Green infrastructure is a natural capital asset that provides multiple benefits, at a range of scales. For communities, these benefits can include enhanced wellbeing, outdoor recreation and access, enhanced biodiversity and landscapes, food and energy production, urban cooling, and the management of flood risk. These benefits are also known as ecosystem services. (Paragraph 005)

Natural resources - air, land, water, wildlife, plants and soil - provide our most basic needs, including food, energy and security, and keep us healthy. Where natural resources are under pressure from unsustainable uses and activities, this presents a risk to long-term social, economic and environmental well-being.

Well-designed and sustainably managed GBI assets have the potential to provide a range of **ecosystem services** (as highlighted in **Box 1.4** and illustrated on **Diagram 1.1**), which in turn provide multiple benefits for people, places and nature.

BOX 1.4 Ecosystem Services

- **Supporting services** (such as soil formation, nutrients cycling or plant growth) are essential for supporting all other services.
- **Regulating services:** ecosystem services that regulate the environment – such as pollination, pest/disease control, carbon storage, water purification and flood attenuation.
- **Provisioning services:** ecosystem services that provide goods – such as drinking water, food, fuel, energy and construction materials.
- **Cultural services:** ecosystem services that provide aesthetic, spiritual, religious, recreational or scientific enrichment – such as access to green spaces and historic places for recreation and tourism.

DIAGRAM 1.1 GBI & Ecosystem Services



'From the basics such as food, water and clean air, the wonders of our landscapes and wildlife, we are all fundamentally connected to nature.'

(Dr Gary Mantle MBE, Director of Wiltshire Wildlife Trust)

Embedding GBI into well-designed built development can help reinforce and enhance the local built, natural and historic character of Wiltshire's landscapes and townscapes, contributing to a sense of place and natural beauty.

In addition to helping reverse the decline in biodiversity by enhancing ecological connectivity, facilitating biodiversity net gain and nature recovery networks, GBI can help communities and wildlife become more resilient to a changing climate through nature-based solutions such as:

- Replicating natural functions of catchments, and restoring flood storage and drainage functions to manage flood risk
- Increasing tree cover to help capture carbon and aid thermal cooling in urban areas
- Preventing soil erosion and increasing biodiversity
- Providing renewable energy opportunities

GBI can contribute to healthy living and well-being by providing opportunities for recreation, relaxation and growing local food, while also supporting sustainable growth and economic development.

'The environment can be pivotal to people's health and wellbeing including litter, air quality, parks and open spaces.'

Wiltshire Health & Wellbeing Strategy 2019-2022

Whilst individual GBI assets can serve one or more functions, connectivity between different GBI assets helps to maximise the ecosystem services and well-being benefits that they can generate. Well-connected GBI assets create GBI networks that are adaptive and resilient to urbanisation and climate change.

Physical connections make the most impact. Linear landscape features such as river corridors and hedgerows provide ecological corridors for the dispersal of wildlife. Connecting green spaces and places via a network of sustainable walking and cycling routes along green corridors encourages and enables access to nature in a more sustainable and healthy manner.

'The need for greenspace and green infrastructure to be valued, well connected and managed for the benefit of all has never been more important'

(Salisbury Area Greenspace Partnership)

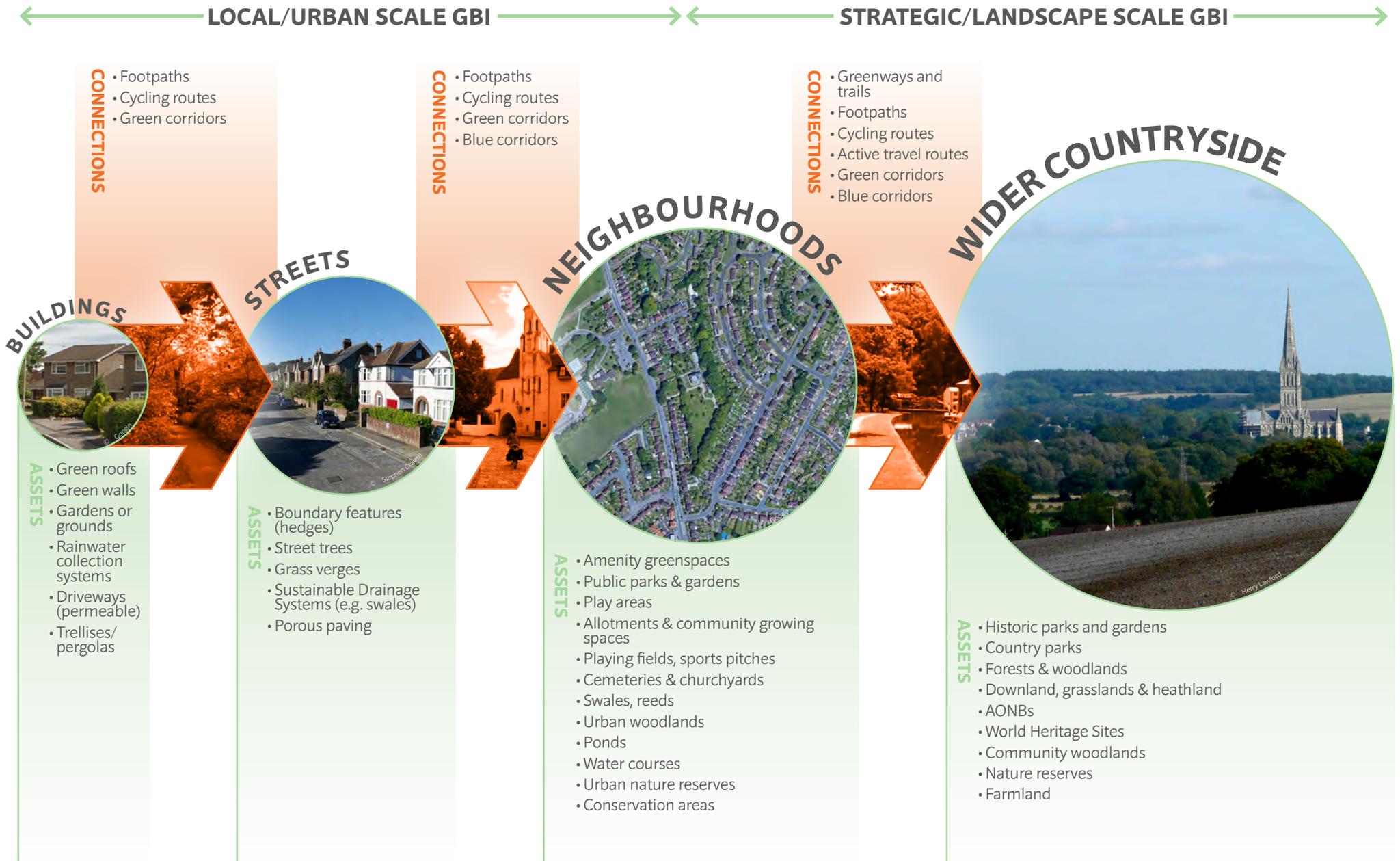
Adopting an integrated and joined up "GBI approach" to managing natural assets can significantly reduce costs for public bodies, businesses and individuals, whilst providing quality of life benefits for residents, workers and visitors.

As illustrated in **Diagram 1.2**, GBI networks can connect people and wildlife with GBI assets at various scales. GBI Assets range from 'blue infrastructure' (such as rivers, canals and lakes) to urban GBI (such as parks, green roofs and street trees). They can be specific sites at the local level or broader landscape-scale features at the strategic level such as river floodplains and woodlands.

Where connected together by rights of way, bridleways, cycleways and green and blue corridors, GBI assets around individual buildings, streets, neighbourhoods and in the wider countryside combine to create multi-functional GBI networks interspersed within and between urban and rural places.

DIAGRAM 1.2 GBI Networks

Adapted from GI Design & Placemaking (Scottish Government, 2011)



1.3 Developing the Strategy

The GBI Strategy was developed by CBA on behalf of Wiltshire Council.

The Strategy applies to the whole of the Wiltshire Authority Area as illustrated on **Map 1.1**. It should be noted that the New Forest National Park Authority is the local planning authority for that part of the Wiltshire Authority Area within the National Park.

The GBI Strategy as a whole is a material planning consideration as it supports GBI policy in the Wiltshire Local Plan. Settlement GBI Frameworks will be prepared to provide more detailed planning guidance on local priorities and opportunities for GBI provision in and around key settlements.

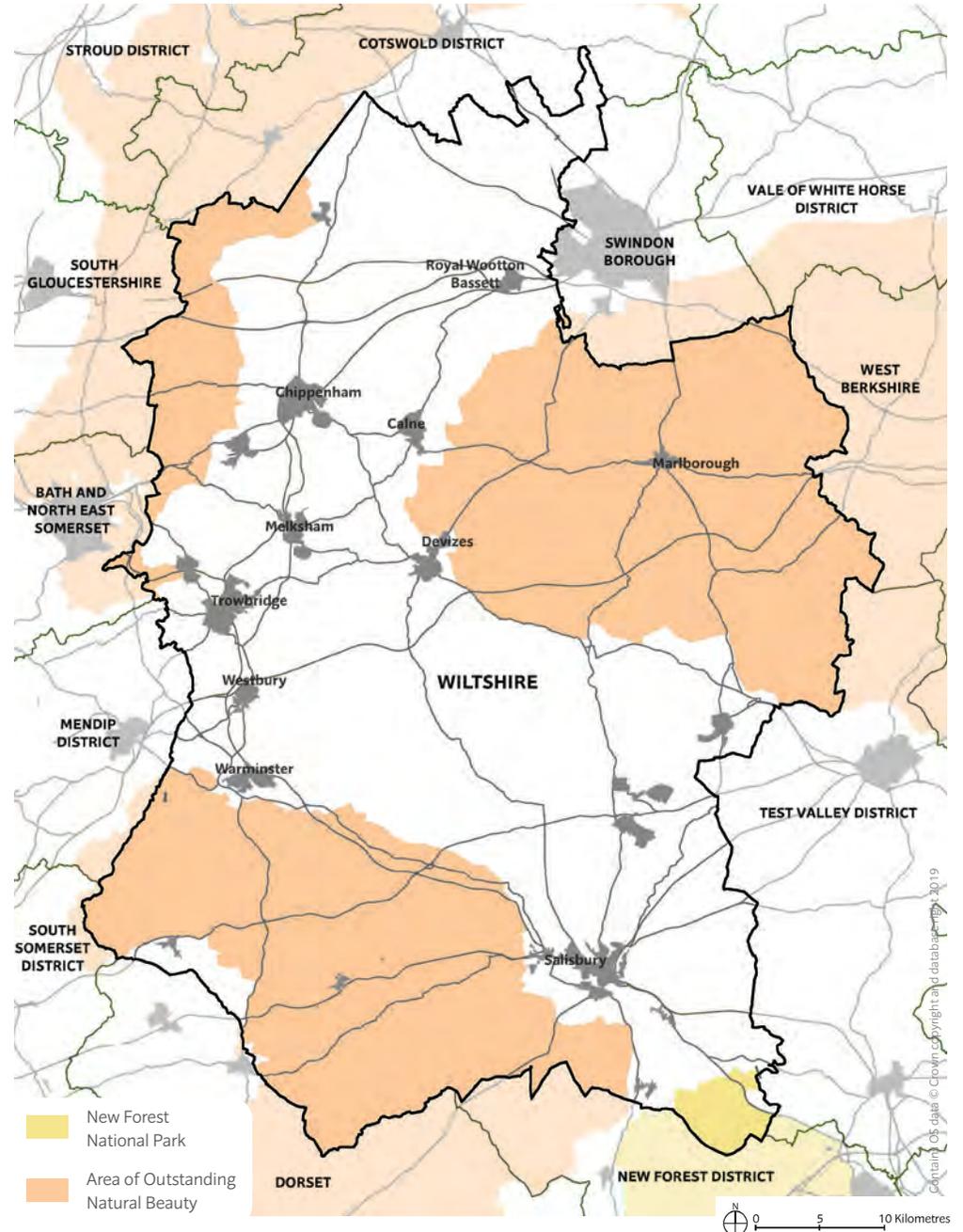
The Strategy is primarily aimed at planning authorities, developers, partnerships, farmers and land managers working across Wiltshire with a key role to play in the planning and delivery of strategic GBI initiatives and projects. It will also help deliver an integrated approach with town and parish councils, communities and other local stakeholders.

Existing Wiltshire-wide strategies, plans and studies that helped shape the GBI Strategy include:

- River Basin District & Catchment Management Plans
- Landscape Strategy
- Landscape Biodiversity Areas
- Health & Wellbeing Strategy
- Countryside Access Improvement Plan
- Open Space Study
- Air Quality Strategy
- Local Transport Plan

In addition to other emerging strategies highlighted on **Diagram 2.2**, site-specific GBI asset management plans for heritage sites, wildlife sites, country parks and urban open spaces will also have an important role to play in supporting delivery of the GBI Strategy.

MAP 1.1 Location & Context



Section two - Shaping the vision

Policy Context

Wiltshire's Landscape Context

Defining Wiltshire's Strategic GBI Network

Defining Strategic GBI Priorities & Opportunities

Defining Local GBI Priorities & Opportunities

Section two - Shaping the vision

2.1 Policy Context

As reflected by emerging legislation and national policy in England (see **Diagram 2.1**), the provision of GBI has become an integral element of the UK's approach to sustainable development (see the **Evidence Base** for details).

DIAGRAM 2.1 GBI Policy Framework



Due to the crosscutting and integrated nature of GBI, this Strategy provides a framework to support delivery of the following key target areas for action in the Government's 25-year Environment Plan:

- Using and managing land sustainably.
- Recovering nature and enhancing the beauty of landscape.
- Connecting people with the environment to improve health and wellbeing.
- Increasing resource efficiency, reducing pollution and waste.
- Mitigating and adapting to climate change

The National Planning Policy Framework (NPPF) requires local plans to adopt a strategic approach to maintaining and enhancing networks of habitats and GBI, taking into account climate change factors such as flood risk, water supply and changes to biodiversity and landscape.

It is intended that the GBI Strategy will support delivery of Wiltshire Council's Business Plan alongside a range of other partnership-based strategies and plans as highlighted in **Diagram 2.2**, such as management plans for the AONBs.

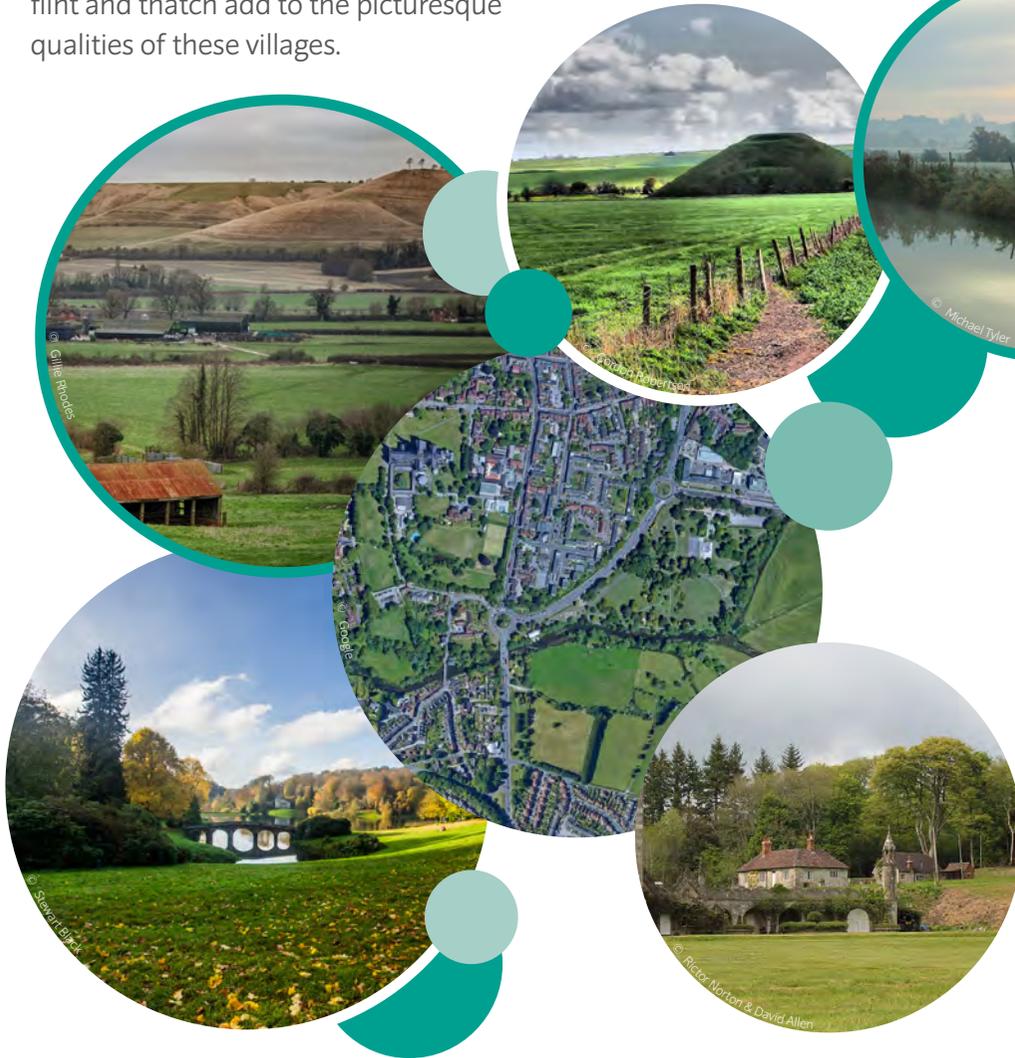
In particular, the GBI Strategy has a key role to play in supporting the Council's climate change mitigation and adaptation strategies by promoting nature-based solutions to combating the effects of a changing climate that deliver multiple benefits for people, places and nature.

Importantly, the Strategy will also inform the Wiltshire Local Plan, enabling priorities and opportunities for GBI provision to support growth identified through the Strategy to be supported by planning policy and guidance.

Escarments form the most dramatic features of the Wiltshire landscape and are the locations of a number of chalk carvings such as the white horses and regimental badges.

Earthworks & ancient trackways give the chalklands a distinct archaeological feel, particularly in the Stonehenge and Avebury World Heritage sites.

Settlements are concentrated in the river valleys or below the 'spring line' beneath the escarpments. The traditional building materials of brick, stone, flint and thatch add to the picturesque qualities of these villages.



The oolitic **limestone** of the Cotswolds forms a gently undulating plateau with deeply incised, heavily wooded valleys. Much of the plateau is under arable cultivation with large fields separated by dry stone walls. The use of 'traditional' local stone has ensured that villages blend well with the landscape.

The **clay vales** are areas of gently undulating topography and varied landscape with permanent pasture on the flood plain and arable cultivation on the better drained soils. Throughout the vales there are numerous villages and many of the major towns of Wiltshire.

The Thames and Bristol Avon Vales are separated by low wooded hills, remnants of the ancient Braydon Forest, which occur on the outcrop of corallian limestone stretching from near Westbury to Highworth. In places this forms an important escarpment, especially around Lyneham. The Thames Vale is broad and relatively flat with more extensive floodplains and meadows than those in the Vale of Pewsey or Bristol Avon Vale. In the Upper Thames Valley, the extraction of gravel deposits has created numerous lakes, which form the core of the Cotswolds Water Park.

On the edge of the chalk downlands, in the south-west of the study area, is a series of wooded ridges and valleys on the **greensand** where there are many large estates, such as Fonthill in the Vale of Wardour, Longleat and Stourhead.

In the south-east of Wiltshire, on the sands and gravels, the heavily wooded landscape is more typical of the **New Forest** extending into Hampshire.

2.3 Defining Wiltshire's Strategic GBI Network

Three main elements form the backbone of Wiltshire's Strategic GBI Network as illustrated on **Map 2.1**:

- Strategic GBI Sites
- Strategic GBI Corridors
- Sub-Regional Strategic GBI

The Network includes a range of habitats such as woodland, chalk grassland and grazing marsh, which support a variety of wildlife species. It also incorporates accessible open space, nationally valued landscapes, watercourses and rights of way. The components of the Strategic GBI Network are presented on a series of maps (see **Box 2.1**).

These GBI assets combine at a landscape-scale to create an integrated network of green and blue spaces, corridors and linkages, connecting people, places and nature across Wiltshire and in neighbouring areas.

Comprising a mosaic of land uses, natural features and habitats, the multi-functional Strategic GBI Network has the potential to deliver a wide range of economic, environmental and social well-being benefits (see the **Evidence Base** for details).

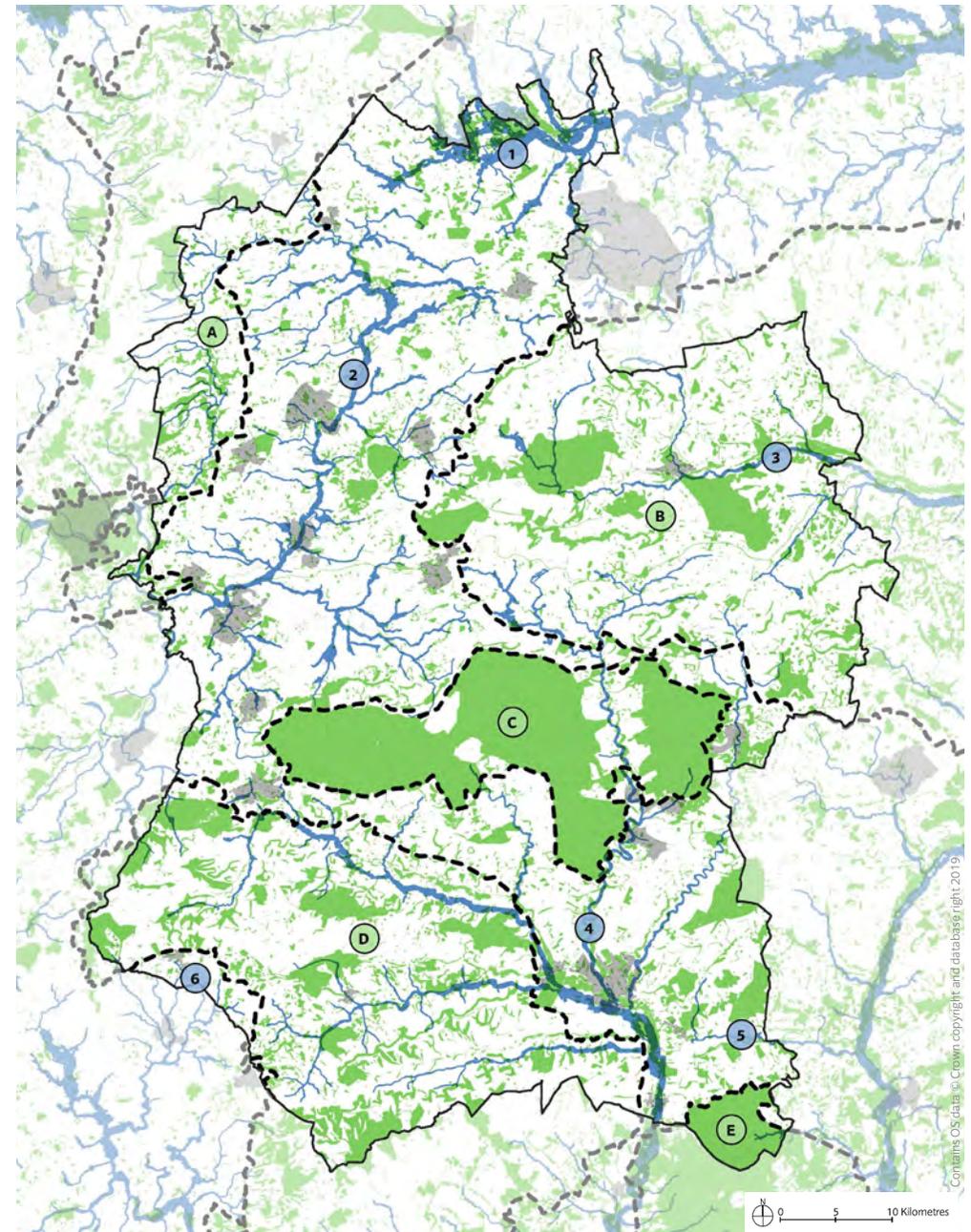
Established strategic partnerships provide a mechanism for bringing together all sectors to focus on valuing and delivering benefits from Wiltshire's Strategic GBI Network.

Strategic GBI Sites

The Strategic GBI Sites comprise the following natural assets:

- Biodiversity Sites
- Priority Habitats
- Woodland
- Historic Environment Designations

MAP 2.1 Wiltshire's Strategic GBI Network



Contains OS data © Crown copyright and database right 2019

0 5 10 Kilometres

Strategic GBI Corridors

Focussed on river systems and navigable waterways, the following Strategic GBI Corridors connect with many of Wiltshire's Strategic GBI Sites and main settlements:

- 1 Thames Corridor
- 2 Bristol Avon Corridor
- 3 Kennet Corridor
- 4 Hampshire Avon Corridor
- 5 Test & Itchen Corridor
- 6 Stour Corridor
- 7 Wiltshire Canals - Kennet & Avon, Wilts & Berks, Cotswold (not mapped)

Sub-Regional Strategic GBI

The Sub-Regional Strategic GBI comprises the following nationally and internationally protected areas:

- A Cotswolds AONB
- B North Wessex Downs AONB
- C Salisbury Plain SPA
- D Cranborne Chase & West Wiltshire Downs AONB
- E New Forest National Park

The overarching, cross-cutting nature of GBI encompasses the access and well-being agenda as well as other relevant aspects of the three AONBs, the Salisbury Plain SPA/SAC and the New Forest National Park. These include biodiversity, landscape character, economic growth and flood risk management.

Being predominantly undeveloped countryside areas of high environmental value, these precious landscapes provide extensive and well-connected networks of Strategic GBI Sites and Corridors at the sub-regional level that offer multiple benefits for nature, people and businesses. In this context, these protected areas are a significant element of the nation's and Wiltshire's high level GBI network (see **Evidence Base** for further details).

Wiltshire's Strategic GBI Network provides a focus for prioritising strategic action and investment in GBI by partners working across Wiltshire and beyond.

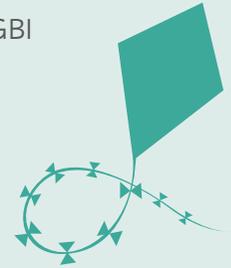
BOX 2.1 Components of the Strategic GBI Network

Wiltshire's Strategic GBI Network includes the following GBI assets (see the **Evidence Base** for details):

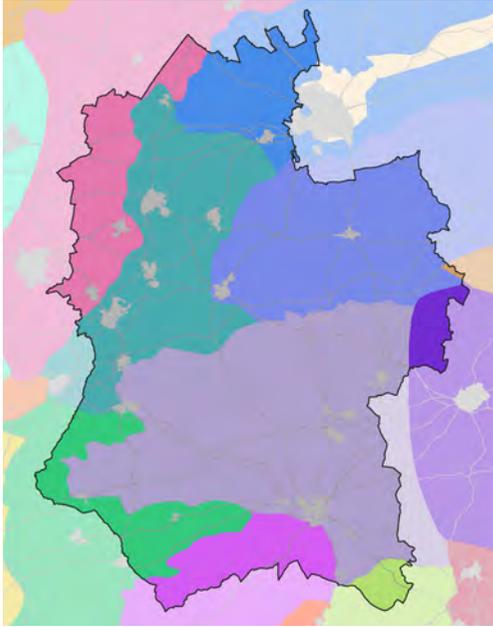
- **Map 2.2** - National Character Areas
- **Map 2.3** - Landscape Character Types & Areas
- **Map 2.4** - Nationally Valued Landscapes
- **Map 2.5** - Historic Environment Designations
- **Map 2.6** - Biodiversity Sites
- **Map 2.7** - Priority Habitats
- **Map 2.8** - Landscape Biodiversity Areas
- **Map 2.9** - Woodland
- **Map 2.10** - Agricultural Land
- **Map 2.11** - River Basin Districts & Catchments
- **Map 2.12** - Watercourses & Waterbodies
- **Map 2.13** - Strategic GBI Sites: Accessibility
- **Map 2.14** - Strategic GBI Sites: Connectivity

The Network also includes the following urban GBI assets in and around Wiltshire's main settlements (these will be set out in the Settlement GBI Frameworks):

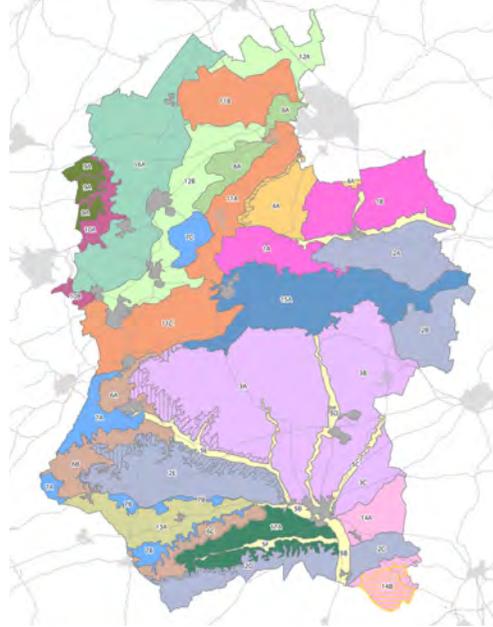
- Parks & Recreation Grounds
- Outdoor Sport
- Natural Greenspaces
- Accessible Natural Greenspaces
- Amenity Greenspaces
- Allotments
- Churchyards & Cemeteries
- Education & School Grounds
- Rivers and Waterbodies



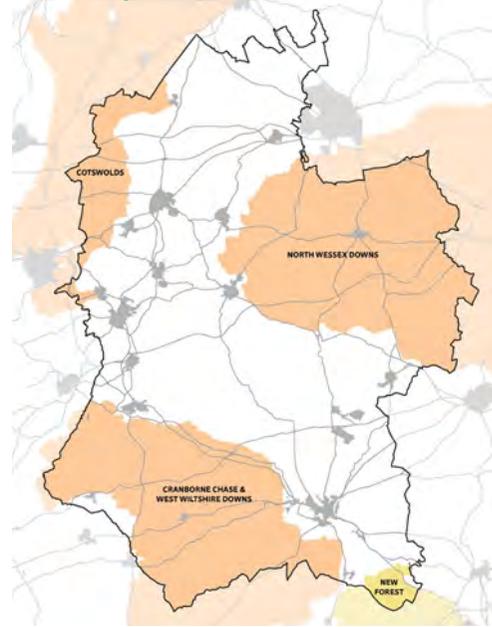
MAP 2.2 National Character Areas



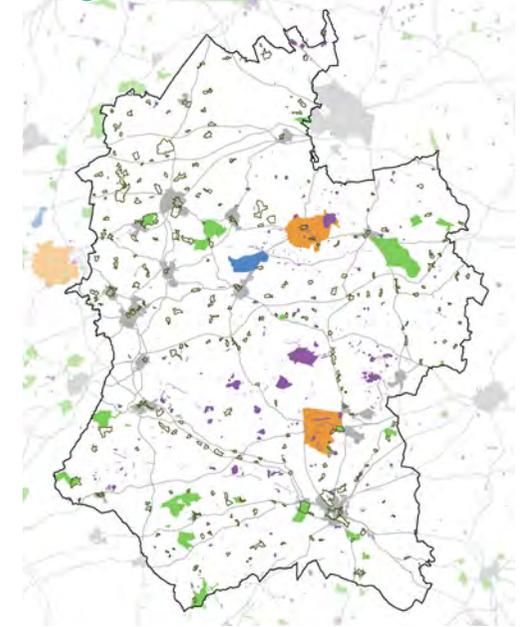
MAP 2.3 Landscape Character Types & Areas



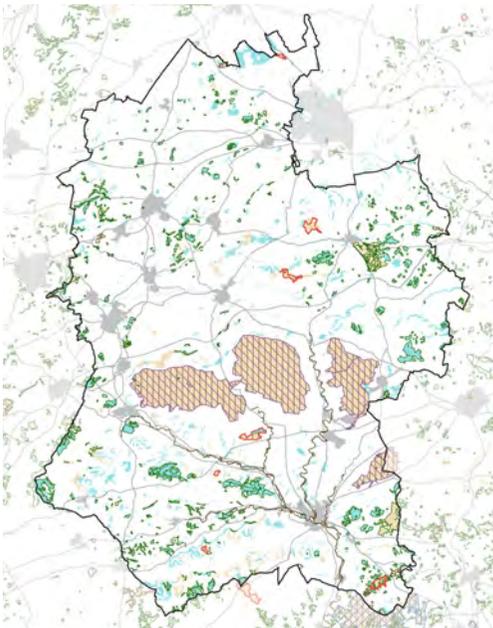
MAP 2.4 Nationally Valued Landscapes



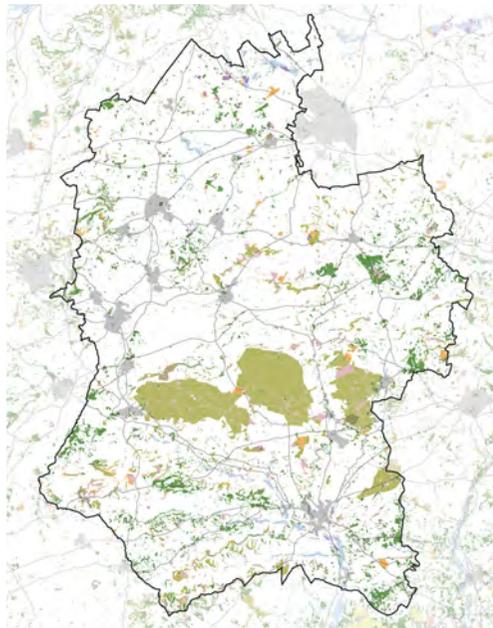
MAP 2.5 Historic Environment Designations



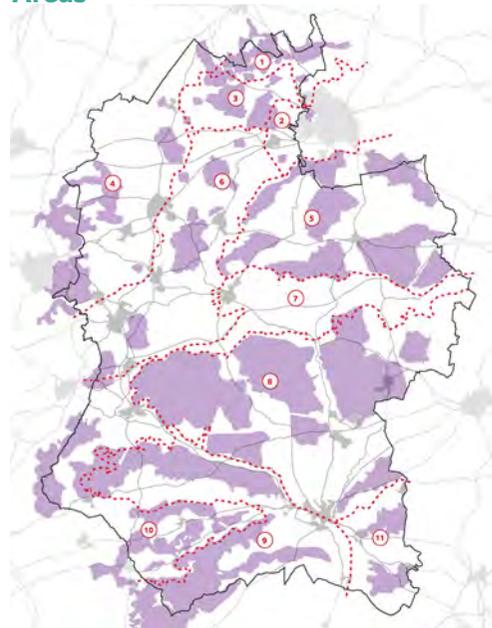
MAP 2.6 Biodiversity Sites



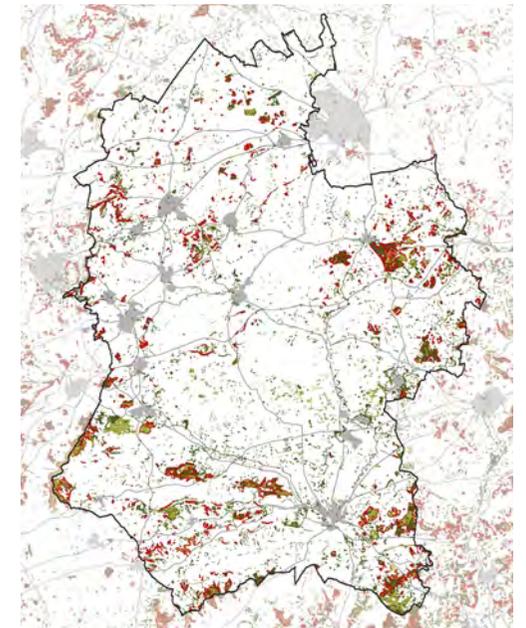
MAP 2.7 Priority Habitats



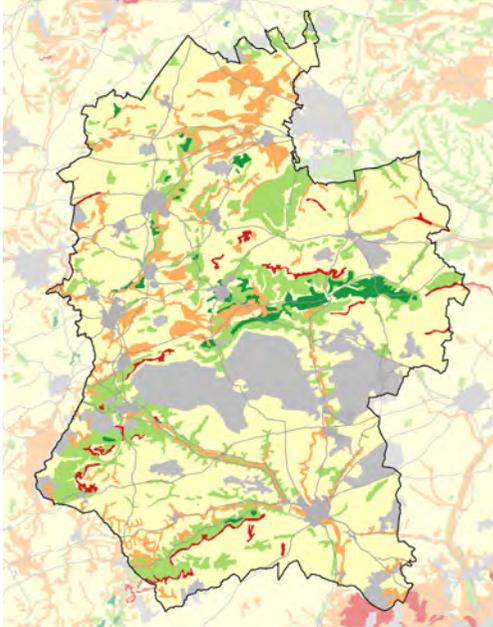
MAP 2.8 Landscape Biodiversity Areas



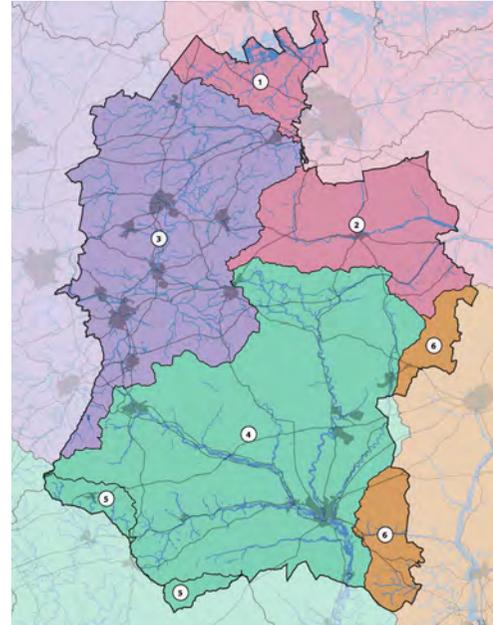
MAP 2.9 Woodland Areas



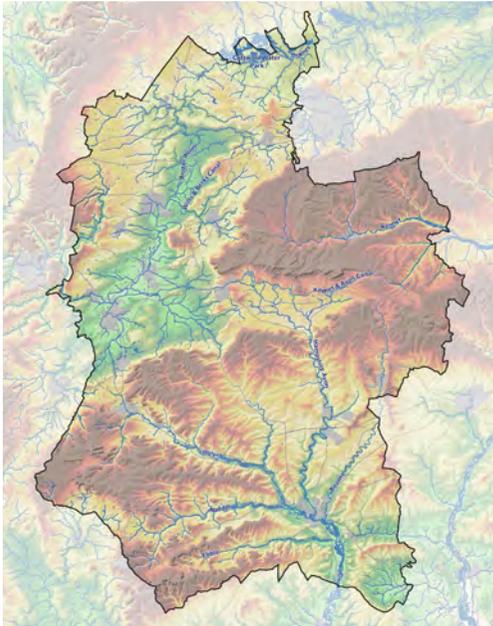
MAP 2.10 Agricultural Land



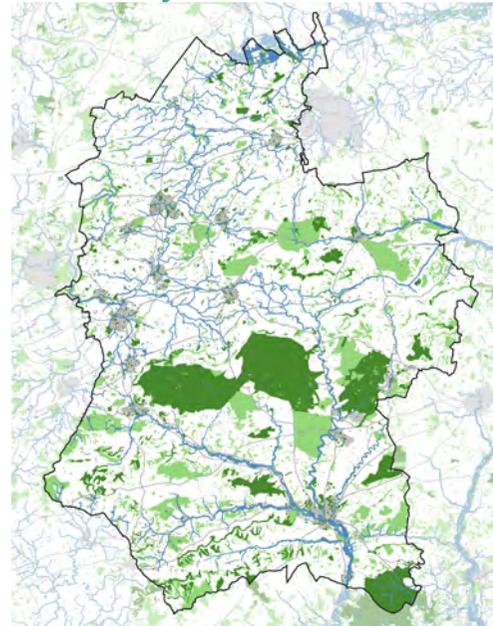
MAP 2.11 River Basin Districts & Catchments



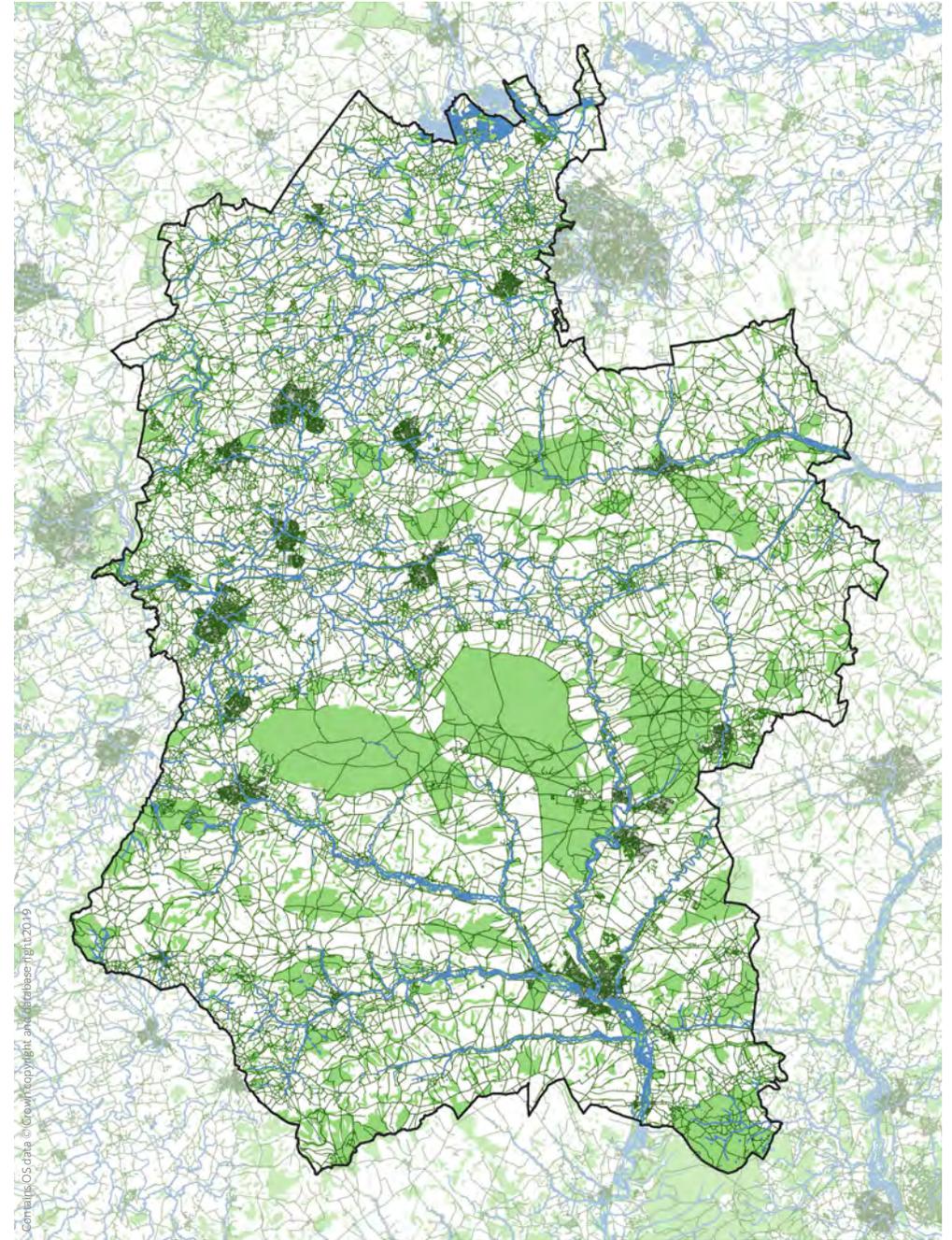
MAP 2.12 Watercourses & Waterbodies



MAP 2.13 Strategic GBI Sites - Accessibility



MAP 2.14 Strategic GBI Sites - Connectivity



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2.4 Defining Strategic GBI Priorities & Opportunities

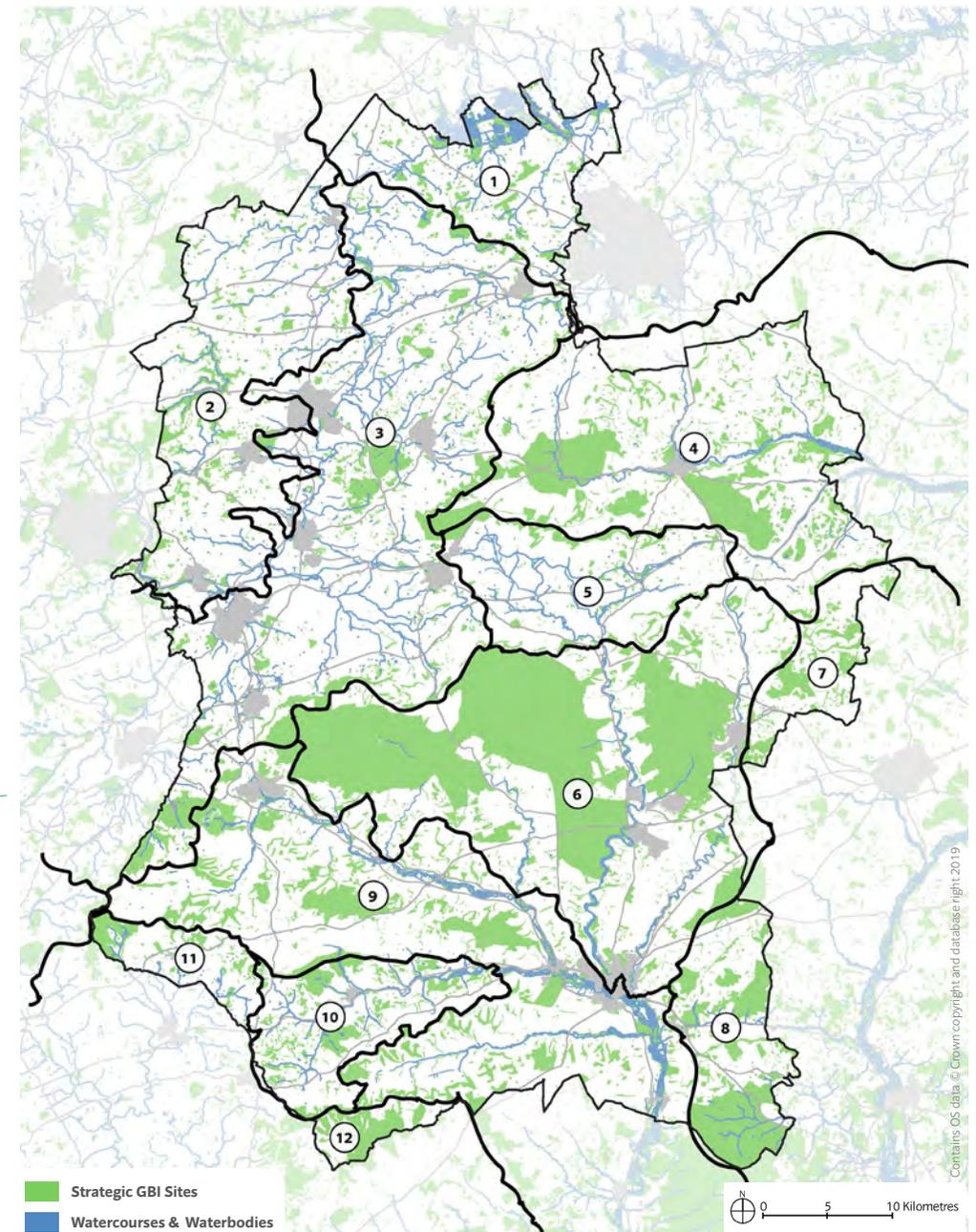
As Wiltshire is a large area with a diverse range of GBI assets, Strategic GBI Areas have been defined to provide an integrated spatial framework for identifying strategic priorities and opportunities to strengthen Wiltshire's GBI Network at the landscape-scale (see **Box 2.2** and **Map 2.15**).

BOX 2.2 Strategic GBI Areas in Wiltshire

1. Thames Vale
2. Bristol Avon & Cotswolds Limestone
3. Bristol Avon Vale
4. Kennet & Marlborough Downs
5. Hampshire Avon & Vale of Pewsey
6. Hampshire Avon & Salisbury Plain
7. Test and Itchen & Chute Forest
8. Test and Itchen & the New Forest
9. Hampshire Avon & Cranborne Chase and West Wiltshire Downs
10. Hampshire Avon & the Vale of Wardour
11. Dorset Stour Vale & Hills
12. Dorset Stour & Cranborne Chase Downs



MAP 2.15 Wiltshire's Strategic GBI Opportunity Areas



The Strategic GBI Areas largely reflect River Catchments defined by the Environment Agency, Landscape Biodiversity Areas as defined by the Wiltshire & Swindon Local Nature Partnership and Landscape Character Types/Areas defined by Wiltshire Council (see **Evidence Base** for further details).

These Strategic GBI Areas are a key part of how the Strategy will be delivered. Informed by the review of existing priorities and opportunities, Wiltshire Council will work with partners to identify and keep track of future priorities and opportunities for improving the management of Wiltshire's GBI Network across each of the Strategic GBI Areas in line with this Strategy's goals.



For example, Wiltshire Council will work with partners to develop Nature Recovery Networks based on the Wiltshire & Swindon Landscape Biodiversity Areas Framework, which identify priorities for restoring, maintaining and enhancing the connectivity of priority habitats at the landscape-scale to help in the recovery of priority species.

The role of the Strategy is to help support these initiatives by developing a shared vision and goals which can draw out ways to integrate our efforts, and prioritise action in pursuit of a multi-functional and better connected GBI network for Wiltshire that helps address our biggest challenges.



2.5 Defining Local GBI Priorities & Opportunities

In addition to looking at landscape-scale opportunities within Wiltshire's Strategic GBI Areas, we also need to focus in on towns where a significant level of change is expected. The protection and enhancement of Wiltshire's GBI Network will be crucial in helping to ensure that the growth set out in the Wiltshire Local Plan can be delivered in a sustainable manner.

In particular, the development proposed in the Local Plan will necessitate a focus on improving GBI provision within the Principal Settlements and Market Towns, particularly along river and canal corridors. Development also offers potential opportunities to create new and enhanced linkages between the towns and the countryside for people and wildlife.

Set within the context of the Wiltshire-wide Strategic GBI Network, Settlement GBI Frameworks will be developed to highlight key needs and opportunities for improving Local GBI Networks in and around the Principal Settlements and Market Towns identified for growth in the new Local Plan over the period to 2036 (see **Box 2.3** and **Map 2.16**).

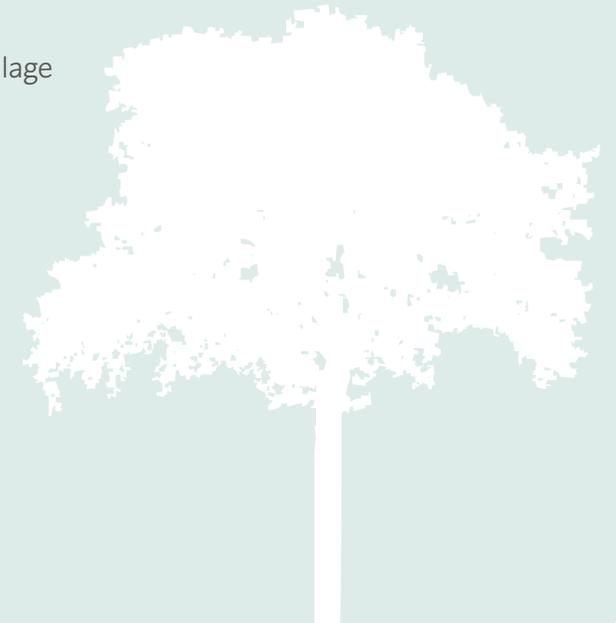
BOX 2.3 List of Potential Settlement GBI Frameworks

Principal Settlements:

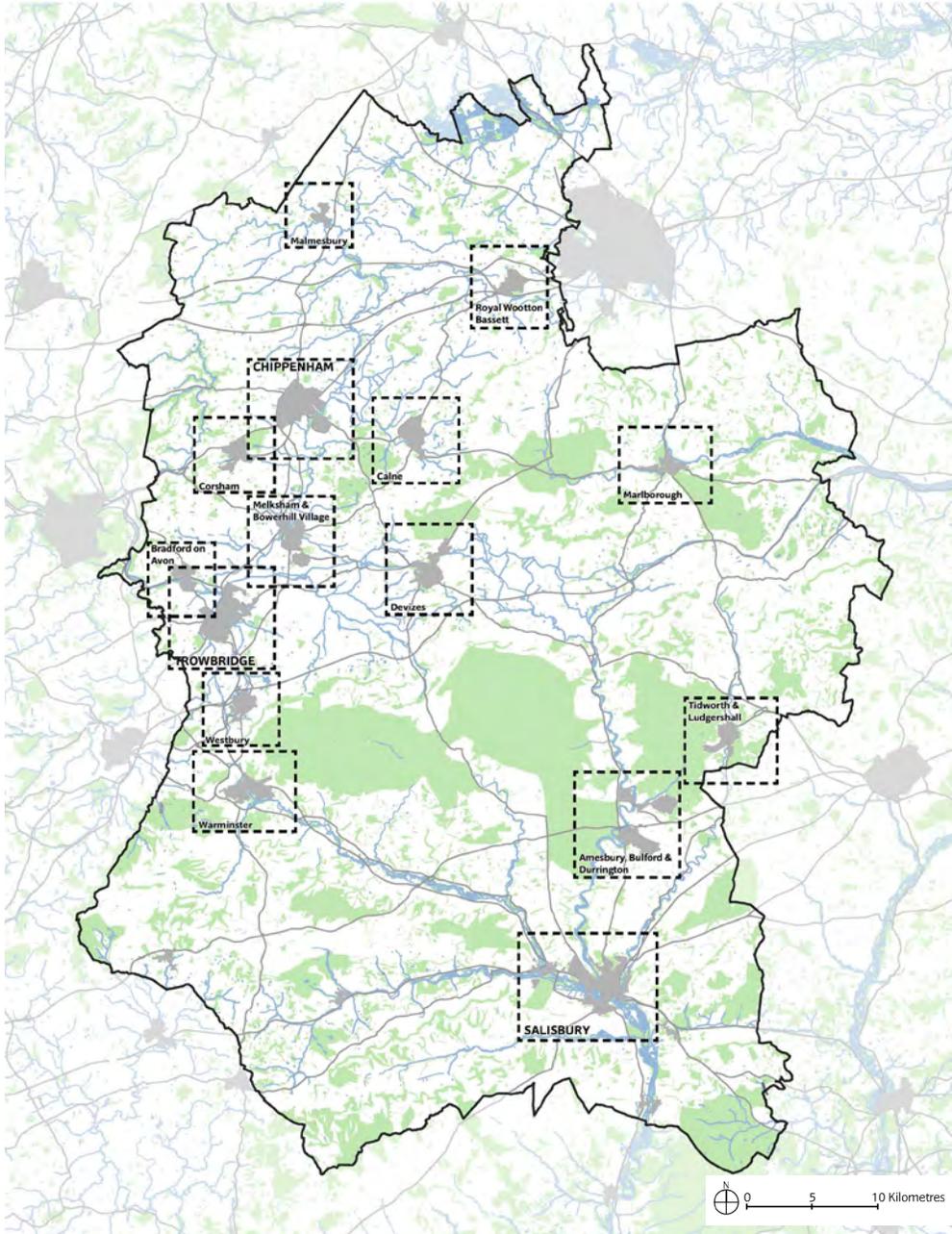
- Chippenham
- Salisbury
- Trowbridge

Market Towns:

- Amesbury, Bulford & Durrington
- Bradford on Avon
- Calne
- Corsham
- Devizes
- Malmesbury
- Marlborough
- Melksham & Bowerhill Village
- Royal Wootton Bassett
- Tidworth & Ludgershall
- Warminster
- Westbury



MAP 2.16 Potential Settlement GBI Frameworks



Local needs and opportunities will be informed by the GBI **Evidence Base** and through engagement with town and parish councils, and other local stakeholders as appropriate.

The Settlement GBI Frameworks will have a central role in informing local planning and delivery of GBI to support planned sustainable growth of these communities.

In addition to supporting the Local Plan's place-making approach, the Frameworks will also provide a tool for identifying shared priorities for improving Local GBI Networks in line with this Strategy's goals through partnerships and specific local initiatives.

While Settlement GBI Frameworks will not be developed for all settlements in Wiltshire, any town or village may wish to collate and develop its own local priorities and objectives for GBI linked into their Neighbourhood Plan.

Section three - Our shared vision

Developing the Vision - the Big Challenges

Our Vision for GBI in Wiltshire

Our Goals for GBI



Section three - Our shared vision

3.1 Developing the Vision - the Big Challenges

'The most important issue of the 21st century will be the condition of the global environment'

(Ian McHarg, Design with Nature)

There are many challenges, global and local. However, the following three overarching themes are important considerations for all well-managed, multi-functional GBI networks:

- **Climate Change**
- **Biodiversity**
- **Health & Wellbeing**

Our environment faces big challenges for current and future generations. The scale of human impact on the planet has never been greater than it is now.

At a global level, the 20th century brought many technological benefits and changes to our way of life, but we have also experienced unprecedented expansion in population, consumption, energy use, waste and pollution, and the conversion of land to agriculture.

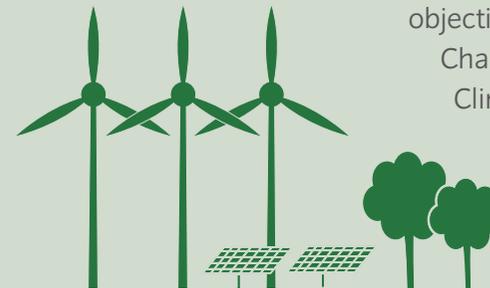
Climate change is a defining issue of our times that will have serious impacts for future generations...

There is a growing body of scientific evidence that suggests that the UK's climate is changing, causing higher average temperatures and increasing the frequency and intensity of extreme weather events. Climate change is one of the greatest threats to Wiltshire's GBI assets, as well as our economy and society more broadly. The resultant environmental change will have significant impacts on wildlife, natural processes and human populations.

The GBI network can play an important role in the mitigation of environmental impacts of climate change and GBI solutions are increasingly central to climate change adaptation. In response to the global climate crisis, Wiltshire Council's ambition is to seek to make the county of Wiltshire carbon neutral by 2030. National policy requires local planning policies to address provisions of the Climate Act (see **Box 3.1**), Wiltshire Council has committed to a goal of achieving net zero carbon and becoming carbon neutral by 2030. The council has developed a draft Climate Strategy which sets out high-level objectives across 7 themes, including 'Natural Environment, Food and Farming' which has close links with the GBI Strategy.

BOX 3.1 National Policy & Climate Change

National planning policy requires local planning policies to be in line with the objectives and provisions of the Climate Change Act 2008. In August 2019, the Climate Change Act was amended to set a target for carbon emissions in the UK to become net zero carbon by 2050.



Net zero carbon means, on balance, not creating more CO₂ than is stored up or offset. Any carbon emissions we create through burning fossil fuels must be balanced out by schemes to absorb it back out of the atmosphere – such as planting trees or using technology such as carbon capture and storage.

In reality, we can only absorb and offset a small amount of CO2. This means the vast majority of our energy needs must be met by renewable forms of energy, and this will only be possible by reducing our energy use drastically.

With the Council seeking to be carbon neutral by 2030 it is likely to present both challenges and opportunities for Wiltshire's landscapes, wildlife, businesses (including agriculture) and communities.

Scenarios could include large-scale planting of trees and woodlands to store carbon and reduce flood risk; substantially increased woodland to help store carbon and planting of street trees to help counter the urban heat effect; and/or reducing carbon emissions through increased renewable energy generation.



Our Local Plan will play a key role in helping us achieve this challenge. It will influence where we plan for development, and how it is designed, as we move towards low-carbon lifestyles and encourage low carbon activities and alternatives to private car use.

Balancing measures for combatting climate with other land use planning priorities will be a significant challenge, which will require novel ways of thinking and strong leadership. As well as carbon reduction and climate change mitigation, we also need to put measures in place to help us adapt and be more resilient to a changing climate.

Flood risk cannot be eliminated but it can be managed to protect lives, communities and economic growth. Climate change is increasing the risk of flooding, and population growth means more people are likely to live in affected areas.



In recent years we have been experiencing greater incidents of flooding in the UK. The situation is likely to intensify as temperatures continue to rise: a warmer atmosphere can hold more moisture, leading to heavier rainfall; oceans are likely to become more acid, polar ice reduce and sea-levels rise.

Wiltshire's Surface Water Management Plan suggests that Wiltshire has a significant number of settlements that are susceptible to surface water flooding with up to 16,000 properties estimated to be at risk.

Under UK climate change projections, median rainfall in the South West of England is predicted to rise from 6-18% in 2020 to 18-41% by 2050, suggesting heavier, more intense rainfall during winter months.

Halting the significant decline of biodiversity is now widely recognised as a major global and local issue...

Biological diversity, or 'Biodiversity', is simply the variety of life on Earth – the variety of ecosystems or habitats, of species and of the genetic diversity they contain. We value wildlife in its own right but biodiversity also underpins much of the economic and social benefit we gain from nature.

The ecological network of diverse terrestrial and freshwater habitats across Wiltshire support a wide variety of flora and fauna. A healthy and biodiverse environment is important to ensure Wiltshire's future prosperity and the wellbeing of all who live, work and visit here.

Wiltshire on the face of it seems very green. However, in recent decades biodiversity in the area has been decreasing. Rural areas are dominated by agricultural land, which in some areas is often not biodiverse, and in urban areas the loss of gardens and increase in urban uses often reduces biodiversity. Where chalk streams run very low due to over-abstraction of groundwater, this can impact on riparian wildlife.

In line with national policy (see **Box 3.2**), we will explore how the Local Plan can improve the GBI network for biodiversity as part of the overall development strategy for the area and the wider response to climate change.

BOX 3.2 National Policy & Biodiversity

National planning policy requires us to protect and enhance valued wildlife habitats and sites of biodiversity importance. It also requires development to achieve a net gain for biodiversity to ensure habitats for wildlife are enhanced and left in a measurably better state than they were in before development.

Local Plans need to take a strategic approach to promoting the restoration and enhancement of the GBI network, taking into account its varied benefits including supporting biodiversity, providing opportunities for recreation, mitigating and adapting to climate change and enhancing landscape character.



Unhealthy lifestyles and lack of access to green space is an increasing well-being issue for many...

Wiltshire overall is a prosperous area, but it includes communities and individuals that do not experience the benefits of this wealth. Within Wiltshire, there are specific health and well-being issues facing some of those living in urban communities (such as poor air quality along some road corridors and access to local green space) and in rural communities (such as limited access to services and transport).

BOX 3.3 National Policy and Health & Wellbeing

National planning policy requires that Local Plans should aim to achieve healthy, inclusive and safe places by:

- Creating places that promote social interaction between people who might not otherwise come into contact with each other.
- Making sure places are safe and accessible so that the fear of crime does not undermine quality of life.
- Supporting healthy lifestyles by provision of greenspaces and sports facilities, and opportunities to walk and cycle in accordance with the Local Transport Plan
- Meeting the variety of needs in our community.

Plans need to ensure development is right for its location, and consider impacts of the development itself, including for issues like air quality and noise. Plans should also consider how they can contribute to the achievement of wider objectives, such as in Air Quality Management Plans.

...and poorly designed places can also reduce the well-being benefits of growth and new development

Wiltshire is a largely rural area with a nationally valued and distinctive landscape, including the iconic Stonehenge and Avebury World Heritage Site. In addition to the historic cathedral city of Salisbury, Wiltshire contains numerous market towns and villages, many of which are cherished for their architectural heritage and distinctive qualities, making them very desirable places to live and to visit.

Some of Wiltshire's towns have experienced growth over recent years, but we have a track record as a place where good contemporary design and the historic environment co-exist in harmony.



The need for sustainable growth supported by resilient infrastructure is also a key issue...

Achieving strong economic growth and successfully developing strong and resilient communities depends on a healthy natural environment. The need for a green economic recovery after the COVID-19 coronavirus pandemic is at the forefront of national and local government strategy.

Planning for jobs, homes and community facilities must be fully integrated with the planning of a resilient, multi-functional green and blue infrastructure network.

For development to be sustainable, we need to ensure that infrastructure is available to support new jobs and homes. Traditionally, people think about transport, schools and health facilities, utility networks like water and power, and telecommunications such as broadband. However, Green and Blue Infrastructure is equally important and must be considered in combination, in order to provide socio-economic, environmental and health benefits.

Resilient infrastructure that combines green/blue and grey infrastructure and makes full use of nature-based solutions will be key to supporting sustainable growth (see **Box 3.4**).

BOX 3.4 Blending Green/Blue and Grey Infrastructure

Combining green/blue and traditional grey infrastructure while creating assets, such as parks, not only contributes to clean air and storm water retention but also provide public amenities that improve quality of life. From renewable energy to sustainable transport systems, the environmental benefits of integrating GBI and grey infrastructure assets are manifold:

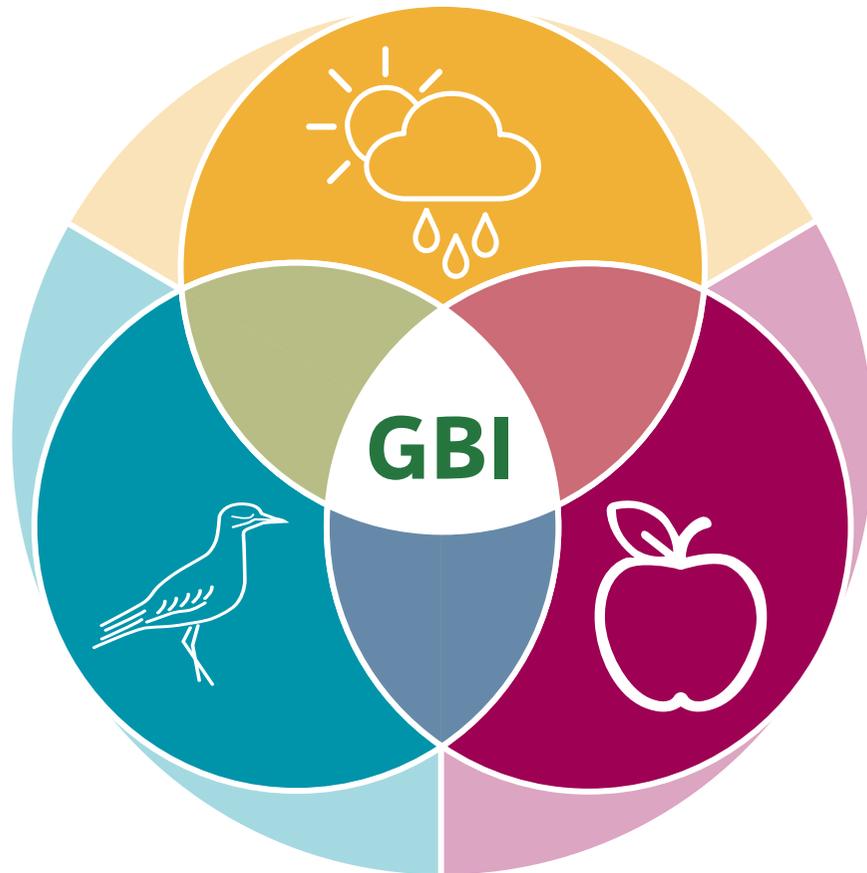
- Sustainable grey infrastructure assets can help manage climate and natural hazards, reduce greenhouse gas emissions, manage natural capital and enhance resource use efficiency.
- Integrating GBI such as trees and woodlands, following the "Right Tree Right Place" principle, into grey infrastructure assets can improve air quality and contribute to removing carbon dioxide from the atmosphere, increase flood protection and prevent soil erosion.
- Green roofs, where viable, act as giant sponges, soaking up rain water before it pollutes waterbodies, assisting with flood control and, collectively, can reduce temperatures in towns during the summer.



Our big themes for the GBI Strategy...

Through looking at the challenges faced by Wiltshire in its local and global context, three big themes stand out that form a basis for the GBI Strategy's vision, goals and implementation:

- Mitigation, adaptation & resilience to climate change
- Halting the loss of & improving biodiversity
- Contributing to health & well-being



3.2 Our Vision for GBI in Wiltshire

GBI has an important role to play in helping address many of the big challenges facing our environment...

The natural environment is one of our most valuable assets. Our diverse and distinctive downland landscapes, wildlife and iconic world heritage help define Wiltshire. Nature underpins our wellbeing and prosperity, and the aspiration is for our communities, businesses and visitors to benefit from Wiltshire's natural capital.

The natural environment has the capacity to deliver multiple well-being benefits to the citizens of Wiltshire. These benefits include clean water, flood protection, space for leisure and recreation, food and fuel production, a sense of tranquillity, jobs and economic activity associated with a range of sectors including forestry, tourism, leisure and agriculture.

If future generations are going to realise the benefits that the natural environment can provide, then we need to pass on natural areas in a healthier and better condition than they are now. This means that we need to work together to develop approaches which protect and enhance the health of our natural resources as an important asset for Wiltshire.

Our shared vision and goals for GBI in Wiltshire have been shaped by discussions with a wide range of partners and stakeholders.



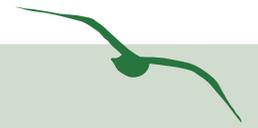
Our shared long-term vision for Wiltshire's GBI Network...

Wiltshire's multi-functional network of high quality, biodiverse and accessible green and blue infrastructure is widely valued by our communities, businesses and visitors.

Managed sustainably through strong leadership and partnerships, the green and blue infrastructure network provides a range of well-being benefits for people, places and nature across Wiltshire.

As a result of working with natural processes to support delivery of multi-functional ecosystem services, Wiltshire is better able to adapt to a changing climate and biodiversity loss has been reversed.

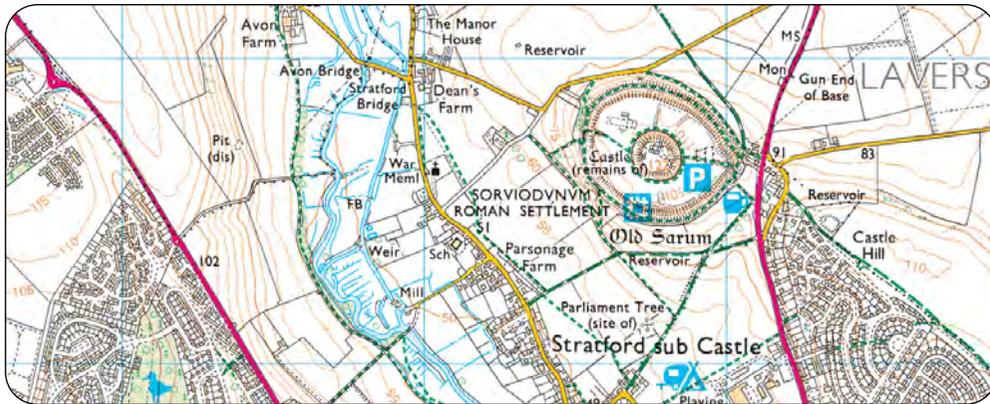
Networks of green and blue spaces and corridors in the countryside and our towns support access to nature and healthy lifestyles, and provide high quality landscapes and beautiful places for people to live, work and visit.



This GBI Strategy provides a framework for delivery of our vision...

The GBI Strategy is intended to set a framework that can be responsive to opportunities and constraints - such as land ownership, community aspirations, access to funding, land drainage requirements, development opportunities, conservation considerations, etc.

This vision is supported by the Strategic and Local GBI Networks outlined in **Section 2.0** and will be reflected in the Settlement GBI Frameworks. Together, these focus attention on priority areas, at the strategic and local level, that need to be safeguarded and managed to create a multi-functional network of green and blue spaces and links, for which investment can deliver the greatest range of benefits.



The GBI Networks encompass a range of GBI assets, functions, locations, sizes and levels of accessibility and use, and operates at every spatial scale and in all geographic areas, both rural and urban.

It provides the context for the delivery of strategic and local GBI interventions for improving the quality and connectivity of existing GBI assets, as well as the creation of new GBI assets in areas where there are identified needs.

As highlighted in **Box 3.5**, it is important to ensure that the integrity of the overall GBI Network is not compromised by inappropriate development or land management.

BOX 3.5 Safeguarding the Integrity of the GBI Network

In order to ensure that the integrity of the overall GBI Network is not compromised by inappropriate development or land management, there needs to be flexibility in how the GBI Network is protected and managed.

In cases where there is an unavoidable harm to existing GBI assets in order to meet essential social and economic needs, this should be offset by mitigation and compensation measures to enhance the functionality of other GBI assets elsewhere within the GI Network. However, some habitats, such as ancient woodlands, are irreplaceable and need protection in accordance with the mitigation hierarchy outlined in the National Planning Policy Framework.

Where development is planned within or in close proximity to a GBI asset, it should become an integral feature to the layout, design and 'identity' of the development to ensure that the connectivity of the GBI Network for both public benefit and biodiversity is retained and enhanced.

Focusing investment on management of Wiltshire's existing GBI assets to improve their condition and quality is a clear priority for strengthening the resilience of the Strategic and Local GBI Networks - in particular, management of natural and semi-natural greenspaces, urban trees and urban green spaces.

Effective protection of existing GBI assets where under pressure from land use changes, inappropriate management and use, pests and diseases and/or climate change is also of importance. Addressing deficits in local GBI provision to meet the existing and future needs of communities in Wiltshire who are likely to experience growth-related pressures is also a priority.

The Strategic GBI Network paints the 'big picture' for GBI in Wiltshire...

Comprising a mosaic of land uses, natural features and habitats, built heritage, archaeological resources and towns and villages, the multi-functional Strategic GBI Network illustrated on **Map 2.1** has the potential to deliver a range of economic, environmental and social well-being benefits for people, place and nature in Wiltshire.

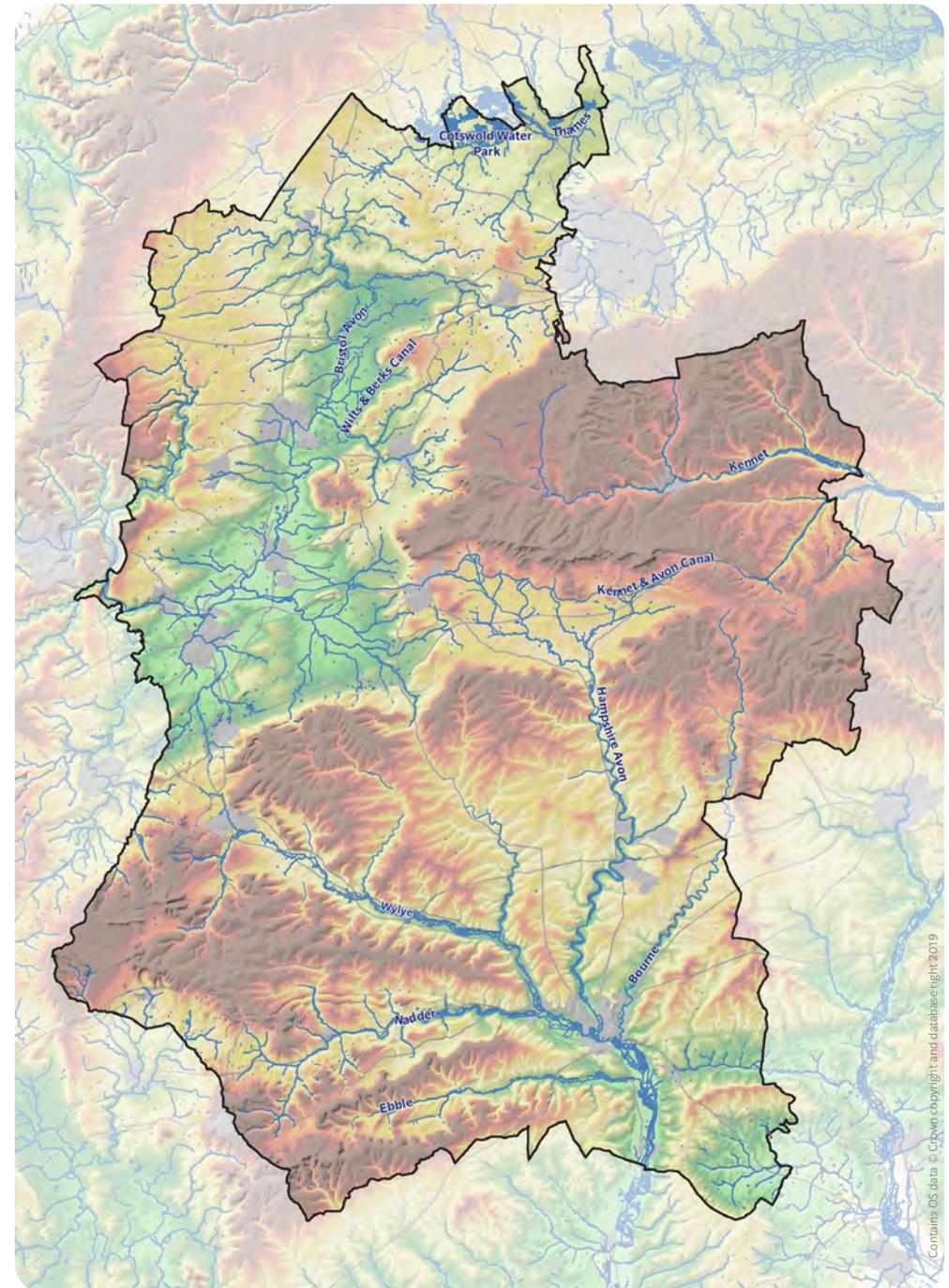
The Strategic GBI Network provides a framework for identifying priorities and opportunities to improve ecological connectivity at a landscape-scale by creating more, on a bigger scale with better management of more joined up habitats.

Buffering and extending designated wildlife sites by restoration of habitats creates stepping stones and corridors for dispersal of wildlife between these sites. Provision of pollen/nectar-rich wildflower habitats support bees, butterflies and other pollinators.

A network of green and blue access links provide multi-user, predominantly off-road, strategic access routes for pedestrians and cyclists including existing Rights of Way, linking and integrating residential and business areas to public transport services, leisure destinations and urban green spaces across Wiltshire's towns. While these links have the primary function of providing access and recreational route linkages, with appropriate management they also provide corridors for wildlife dispersal to the designated wildlife sites.

The access network that connects communities in Wiltshire's towns and villages via the national cycle network to major destinations providing accessible natural greenspace - such as the Cotswolds AONB and Cotswolds Water Park, the North Wessex Downs and Avebury, Salisbury Plain and Stonehenge, Cranborne Chase AONB and the New Forest National Park.

New access connections along some sections of the links may be needed and existing access upgraded where appropriate to accommodate cycle use, such as along canal towpaths.



The Local GBI Networks highlight needs and opportunities for Wiltshire's key settlements...

Set within the context of the Wiltshire-wide Strategic GBI Network, the Local GBI Networks set out in the Settlement GBI Frameworks will identify GBI assets threading through the built environment, weaving together urban green spaces in areas where people live and work with public transport networks and the wider countryside.

With investment and appropriate management, the Local GBI Networks can deliver a range of well-being benefits for local communities.

GBI in and around settlements provides communities with green and blue spaces for recreation and access to nature and contributes to sense of place and sustainable travel opportunities by providing safe active travel routes for walking and cycling.

Street trees, woodlands and amenity greenspace in urban areas help counter the 'urban heat island effect' by providing shade to regulate the micro-climate, and domestic gardens and green roofs/walls, where viable, can provide linkages for wildlife through built-up areas.

These local GBI Assets also help in managing surface water runoff in urban areas and mitigate flooding and conveyance of pollutants to watercourses.

Local GBI needs and opportunities will be identified through the preparation of Neighbourhood Plans prepared by town/parish councils with the support of Wiltshire Council, and Community Environmental Plans developed using the Wiltshire Community Environmental Toolkit.



In a nutshell, our vision can be summarised as:

- **More GBI** – creating new GBI assets to protect, enhance and expand what we already have.
- **Higher quality GBI** – improved and well-managed, resilient and multifunctional GBI Networks
- **Better connected GBI** – green corridors and active travel networks linking people and wildlife throughout our towns and countryside.

3.3 Our Goals for GBI

In working towards achieving our long-term vision, we will focus action on delivering positive outcomes and benefits from investment in Wiltshire's GBI Network under the following three big themes illustrated on **Diagram 3.1**.

- **Mitigation, adaptation & resilience to climate change**
- **Halting the loss of & improving biodiversity**
- **Contributing to health & well-being**

These themes reflect the UN's Sustainable Development Goals to take urgent action to combat climate change and its impacts (Goal 13); halt biodiversity loss (Goal 15); and to ensure healthy lives and promote well-being for all at all ages (Goal 3).

In addition, the GBI Strategy will also make a contribution to many of the other UN Sustainable Development Goals - including Goal 6 (clean water); Goal 7 (clean energy); Goal 8 (sustainable economic growth); Goal 9 (resilient infrastructure); Goal 11 (sustainable cities and communities); and Goal 12 (sustainable water, energy and food consumption/production).

We will act locally to achieve outcomes that contribute to national goals and targets for improving the UK's environment set out in the Government's 25-year Environment Plan published in 2018 (see **Box 3.6**).

BOX 3.6 Government's 25-year Environment Plan Goals

By adopting this Plan, we will achieve:

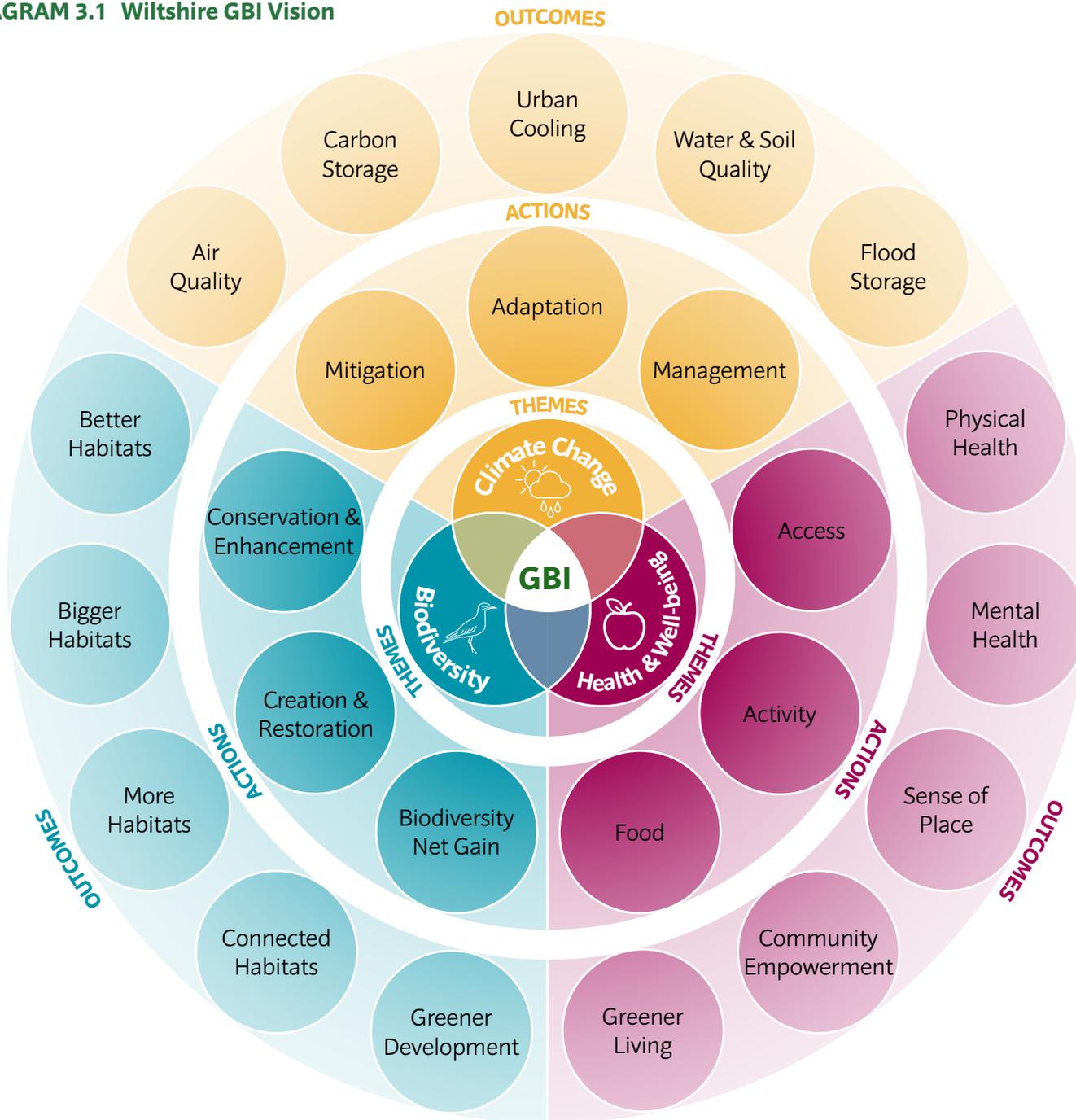
1. Clean air.
2. Clean and plentiful water.
3. Thriving plants and wildlife.
4. A reduced risk of harm from environmental hazards (eg flooding/drought).
5. Using resources from nature more sustainably and efficiently.
6. Enhanced beauty, heritage and engagement with the natural environment.

In addition, we will manage pressures on the environment by:

7. Mitigating and adapting to climate change.
8. Minimising waste.
9. Managing exposure to chemicals.
10. Enhancing biosecurity.

25-Year Environment Plan Targets

DIAGRAM 3.1 Wiltshire GBI Vision



Our goals for improving Wiltshire's GBI Network are framed around the vision's 3 themes...



Goal 1: Mitigation, adaptation and resilience to climate change

By 2030, we will have increased our ability to mitigate and adapt to climate change through adoption of nature-based solutions...

Working in partnership we will do this by:

- Contributing to national targets and Wiltshire Council Climate Strategy objectives for cutting greenhouse gas emissions (including from urban and rural land use change, opportunities for active travel, and the agriculture and waste sectors)
- Considering the best nature-based pathways to help support 'Net Zero' for the county
- Supporting the delivery of climate change adaptation strategies and management plans for Wiltshire to improve its resilience to impacts of climate change associated with a 2°C temperature rise
- Reducing risks of harm from natural hazards through adoption of natural flood and water management approaches alongside traditional grey infrastructure at the local and catchment level
- Contributing to national targets for reducing over-abstraction of water, and meeting water quality objectives for biodiversity and drinking water
- Promoting nature-based carbon removal from the atmosphere through better soil management, the protection of existing natural carbon sinks and the promotion of tree and woodland establishment.

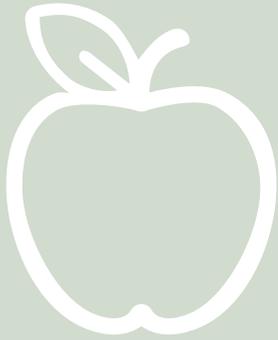


Goal 2: Halting loss of and improving biodiversity

By 2030, we will have gained a more biodiverse and resilient ecological network in Wiltshire...

Working in partnership, we will do this by:

- Supporting the development of a Local Nature Recovery Strategy to help build resilience to climate change and provide opportunities for species and ecosystem recovery.
- Helping to restore our terrestrial and freshwater protected sites to favourable condition, securing their wildlife value for the long term.
- Creating or restoring wildlife-rich habitat outside the protected site network, focusing on priority habitats as part of a wider set of land management changes providing extensive benefits.
- Taking action to recover threatened, iconic or economically important species of animals, plants and fungi, and where possible to prevent human induced extinction or loss of known threatened species.
- Increasing carbon storage capacity of woodlands in England in line with the Government's aspiration of 12% woodland cover by 2060 in England involving planting 180,000 hectares by end of 2042.



Goal 3: Contributing to health and well-being

By 2030, we will have increased the health and well-being benefits of access to nature, and improved the sustainable use and health of our natural resources...

Working in partnership, we will do this by:

- Safeguarding and enhancing the outstanding natural beauty and character of our landscapes to enhance a sense of place and support the local economy.
- Help make sure that there are high quality, accessible green spaces close to where people live and work, particularly to help adapt to climate change in urban areas.
- Encouraging more people to be active outdoors, participate in active travel opportunities and get involved with community food growing by encouraging better access to our GBI networks
- Empowering communities to get more involved in the management and protection of local GBI, taking ownership of local assets and managing them for the benefit of the whole community where necessary.
- Improving our approach to sustainable soil, food and forestry management.
- Enhancing biosecurity measures to protect our wildlife and livestock, boost the resilience of plants and trees to pests and diseases and tackle invasive non-native species.
- Promoting nature-based solutions to improve air quality for people in locations that fail to meet national standards

Our key priorities for action...

While good progress has been made in recent decades to improve Wiltshire's environment, there is much more that we can still do to deliver GBI benefits for people, places and nature.

We recognise that some of the goals for GBI outlined above are likely to take longer than others to achieve. So we have identified six key priorities for action to deliver GBI benefits in the short-medium term (see **Box 3.7**).

BOX 3.7 Priorities for Action

1. **Creating more and better green spaces in our towns** to help prevent flooding and attract people to live, work and invest in the area.
2. **Planting the right trees in the right places** to support natural flood management, contribute to carbon net zero targets and strengthen ecological connectivity, provide shade and improve air quality.
3. **Supporting access to nature** via a viable walking and cycling network
4. **Encouraging environmentally sensitive farming** in ways that enhance soil quality, sequester carbon, encourage wildlife, produce food and provide employment.
5. **Supporting a green economic recovery** from the COVID-19 coronavirus pandemic
6. **Embedding GBI into development and place-making** to include nature-based solutions such as implementing sustainable drainage systems, green roofs and living walls



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Section four - Delivering the vision

Overview

Delivery Themes

Delivery Principles

Section four - Delivering the vision

4.1 Overview

Our vision is for a high quality, well-connected and multi-functional GBI network in Wiltshire...

This GBI Strategy is the start of a new way of working, in partnership, across Wiltshire and beyond, to achieve the shared vision and goals.

Although the Strategy will need to evolve as things change, we have identified some immediate priorities. Work will focus on the priorities highlighted in **Box 3.7** to start with, whilst further priorities and opportunities are identified in support of the Strategy's three overarching goals.

Any actions that are undertaken in support of the Strategy must contribute to a high-quality, well-connected and multi-functional GBI network that achieves benefits for people, place and nature.

These are broken down into delivery themes and a set of principles to guide future initiatives and decisions.



4.2 Delivery Themes

-  Flooding & Water Management
-  Sustainable Farming & Land Management
-  Nature Recovery & Landscape Management
-  Woodland & Trees
-  Healthy Living
-  Economic Recovery & Valuing Natural Capital

The areas of work outlined here will be an important contribution towards achieving our priorities. These are areas where often there are commitments already in place and a level of agreement between Wiltshire GBI partners. But further specific actions will need to be developed with the relevant partners.

Also included are some examples of work already happening.





Theme 1: Flooding & Water Management

We will encourage greater use of natural flood risk management solutions...

In line with the National Planning Policy Framework, the GBI Network and Strategy will be used as a starting point for planning developments that are flood resilient and do not increase flood risk.

In addition, we will also encourage greater use of natural flood risk management solutions alongside traditional flood defence infrastructure as highlighted below.

Natural flood management solutions

The GBI Strategy seeks to promote the use of more nature-based flood management solutions where appropriate, developed in accordance with the principles of the Working with Natural Processes (WWNP) approach to reducing flood risk (see **Box 4.1**).

Natural flood management can play an important role in flood risk management alongside more traditional defences (see case study in **Box 4.2**).

BOX 4.1 The Working with Natural Processes Approach to Reducing Flood Risk

Working with Natural Processes (WWNP) to reduce flood and coastal erosion risk (FCRM) involves implementing measures that help to protect, restore and emulate the natural functions of catchments, floodplains, rivers and the coast. WWNP takes many different forms and can be applied in urban and rural areas, and on rivers, estuaries and coasts.

The WWNP evidence base provides flood risk managers with access to up-to-date information on WWNP measures to understand their potential multiple benefits; any gaps in knowledge; where it has been done before and any lessons learnt; and where in a catchment they might be most effective.

WWNP Evidence Base

Techniques can include river bank restoration, reconnecting rivers with their flood plains and storing water temporarily on open land. Building leaky debris dams can reduce soil erosion and trap sediment, protect water courses and manage water flow. Trees have an important role to play as a nature-based solution to flooding and water management. Trees can:

- Catch rainfall to prevent water reaching the soil and adding to flooding, which can amount to 40% of annual rainfall
- Increase infiltration of water deep into the soil reducing surface water flows and recharging the ground water, helping prevent future drought
- Stabilise soil and prevent erosion
- "Slow the flow" by increasing surface roughness, helping to reduce flooding
- Provide woody material for leaky debris dams

By working with natural processes, we can better protect ourselves from hazards such as flooding while delivering wider benefits such as better wildlife habitats, recreation opportunities and water quality. For example, floodplain meadows can lock up significant amounts of carbon in the soil, and landscape-scale restoration of flower-rich floodplain meadows offers the potential to deliver multiple benefits.

BOX 4.2 Case Study: Hills to Levels Project, Somerset

The drained, farmed landscape of the Somerset Levels provides a testing case for working with natural process, one which local partners have risen to address.

Work is underway to 'slow the flow' of water from the hills to the Levels, across a large catchment (2,871 km²). The project's measures are working to improve infiltration of rainfall into soils, intercept runoff by diversion and attenuation, slow the flow in-stream and attenuate flood water on re-connected floodplains.

So far this has helped protect properties in the upper catchment that suffer from surface water flooding and 150 properties in and around the Somerset Levels. The project has provided approximately 15,000m³ of floodwater storage in water attenuation features alone.

Sustainable Drainage Systems

Surface water flooding poses a significant and increasing risk, which can lead to sewer flooding and environmental pollution.

The GBI Strategy seeks to promote the increased use of sustainable drainage systems (SuDS), especially in new developments (see **Box 4.3**).

BOX 4.3 Sustainable Drainage Systems

Sustainable Drainage Systems (SuDS) manage surface water run-off from rainfall close to where it falls in a more natural way, reducing pressure on existing piped systems and therefore reducing risk of flooding. SuDS can include permeable surfaces, storage tanks and ponds to reduce the risk of surface water flooding.

In addition to providing flood risk mitigation, well-designed SuDS can increase property value and enhance the GBI of a development.

SuDS can moderate microclimate, benefit ecology, improve water quality and provide amenity spaces with opportunities for recreation, exercise and active travel. SuDS can also help make communities more resilient to climate change. The cost of SuDS construction can also work out much cheaper than traditional drainage methods if planned properly from the very start.

Good practice guidance for major new developments is provided by **Water People Places – a guide for master planning sustainable drainage into developments (2013)**.

We will work with developers and planners to realise the multiple benefits of designing SuDS as both flood mitigation and local GBI for the benefit of wildlife and recreation (see case study in **Box 4.4**).

In its capacity as Lead Local Flood Authority, Wiltshire Council is a statutory consultee on surface water drainage for all new major developments in Wiltshire.

The Council provides advice to applicants on meeting the requirements of **Defra's National Technical Standards for Sustainable Drainage**, the evidence required to support an application and what standard conditions may be with respect to surface water drainage.

Wiltshire Council will work together with water and sewerage companies, highways authorities and other risk management authorities to manage flood risk and adoption and maintenance of SuDS.

BOX 4.4 Case Study: Sustainable Drainage Systems at Sandpit Lane housing development, Calne

In 2010, planning permission was granted for up to 350 dwellings to be developed on a site to the east of Calne.

In order to support this major urban extension to the town, a Sustainable Drainage System was required to accommodate drainage from the site and reduce the impact of surface flooding in the town centre downstream where properties are known to be at increasing risk from fluvial flooding as a result of climate change. An attenuation pond was created close to the nearby Abberd Brook in 2012 in order to serve the developments drainage needs, and was designed to include areas of wildflower grassland, wetland margins and an access track.

The system is managed sensitively for biodiversity and one year on it already has well established habitats supporting a range of birds, amphibians and invertebrates, and is used by residents for recreation. In addition to supporting sustainable development and reducing future flood risk for Calne, this feature has helped to reinforce landscape character in the Abberd Brook valley, provided a place for local residents to connect with nature, and created a refuge to help local wildlife thrive and move through the landscape.

We will encourage greater respect for nature in how we use water...

It is vital that we maintain sustainable supplies of water for future generations. We recognise that this will require both reducing demand and increasing supply.

Groundwater supplies and rivers are refilled naturally by rainfall and snow melt. If too much water is extracted too fast, supplies may become depleted or over-abstracted. The affects of drought and heatwaves can also be mitigated by effective GBI.

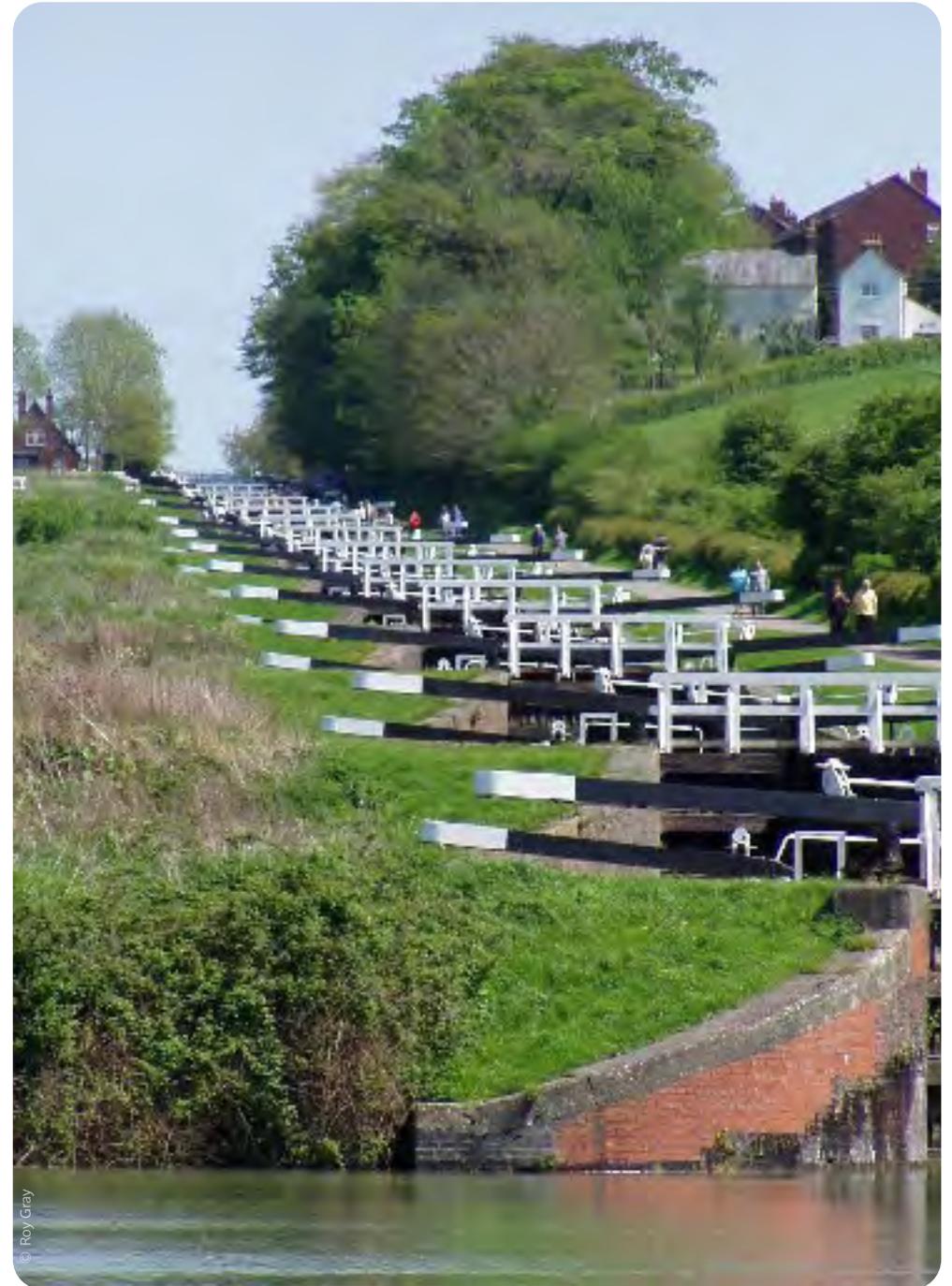
Groundwater sources can, in some cases, take decades to recharge if they are emptied. Over-abstraction leads to physical changes that, along with other changes we make to watercourses, risk reducing the diverse range of plant and animal life.

Supporting a strong catchment focus that brings together the Environment Agency, abstractors and catchment partnerships to address unsustainable abstraction and to improve access to water is vital.

We will work with water companies to support development of new water resources where needed that can also deliver net environmental benefits.

New supplies may include new large infrastructure schemes, such as reservoirs and water transfers, which are needed to make sure the water industry can provide sufficient water for homes and businesses and reduce abstraction from some sources to protect the environment.

Excessive nutrients and other pollutants from agricultural practices are a key issue for water quality in Wiltshire. There are opportunities to link nutrient reduction measures with wider biodiversity and natural flood management approaches to deliver multi-functional solutions. There is also potential for adopting nature-based solutions for tackling the issue of nutrient neutrality from developments.



Theme 2: Sustainable Farming & Land Management

We will support the Government's ambition for a more sustainable farming sector

We will work with our partner organisations to support farmers and land managers across Wiltshire in the adoption of long-term sustainable land management practices (see case study in **Box 4.5**).

We will support the uptake of the new environmental land management system by promoting the benefits of the new approach and continuing to strengthen relationships and coordination between Wiltshire Council, our partner organisations, landowners, the local NFU, and individual farmers.

We will also work with Natural England to provide technical support to our farmers and land managers in securing targeted landscape-scale environmental improvements at a catchment level through the new environmental land management system, guided by Wiltshire's Local Nature Recovery Strategy (see **Theme 3**).

Healthy and fertile soil is the foundation for farming and forestry. The quality and type of the soil, in part determined by underpinning geology, also influences the distribution of plant species and provides a habitat for a wide range of organisms.

We need to ensure healthier soils by addressing factors in soil degradation such as erosion, compaction and the decline in organic matter.

Agroforestry and regenerative farming practices will be supported to increase biodiversity, enrich soils, improve watersheds, and enhance ecosystem services.

Planting trees and hedgerows as part of an **agroforestry** system has an important role to play as a nature-based solution for supporting wider ecosystem services through sustainable farming and land management. Trees and hedgerows can increase food production potential by rapidly improving soil quality as tree roots ameliorate soil compaction, add nutrients and carbon to the soil more quickly and tree roots also help reduce soil erosion.

In addition to habitat creation, agroforestry also provides fodder, shade and shelter for livestock ensuring healthier and more productive animals.

Regenerative farming encourages farmers to maintain good soil health through adoption of beneficial soil management practices such as making appropriate tillage choices reintroducing grass leys into arable rotations and the use of cover crops, which can help increase crop yields and reduce the risk of environmental damage, and benefit carbon sequestration in coordination with protected landscape management plans.

BOX 4.5 Case Study: a farmer-led approach to environmental enhancement in the Marlborough Downs

The Marlborough Downs Nature Enhancement Partnership is a farmer-led collaborative landscape-scale conservation initiative established in 2015 which Wiltshire Council is a partner. The Partnership's **Marlborough Downs Space for Nature Project** aims to deliver more, on a bigger scale with better management of more joined up habitat to make the Downs a better place for wildlife, local communities and visitors by:

Improving habitats: the Partnership is working to ensure all designated **chalk grassland** wildlife sites are managed appropriately, and buffered and extended through habitat restoration where needed to provide stepping stones and corridors for wildlife. It has also created a necklace of traditional downland **dewponds**.

Improving species recovery: the Partnership aims to provide nectar-rich grassland habitat for pollinators across the landscape through the **Marlborough Downs Bee Roadz Project**. It also aims to create habitats for farmland birds and set aside areas for arable plants through the **Marlborough Downs Farmland Bird Project**.

The Partnership undertakes **monitoring** and surveys to evaluate impact of projects on the wildlife, landscape and people of the Marlborough Downs. It also offers opportunities for everyone to learn about the landscape while getting the added benefit of fresh air and exercise through its **Friend of the Marlborough Downs** and **Space for Nature Volunteer** programmes.

Theme 3: Nature Recovery & Landscape Management

We will develop a Local Nature Recovery Strategy to complement and connect our best wildlife sites, providing opportunities for species conservation and reintroduction of species...

As part of changes in the way we manage farmland, woodland and urban green space for multiple benefits, we will develop a well-connected nature recovery network for Wiltshire that offers greater opportunities for wildlife to disperse between increasingly fragmented habitats.

We will work with our partners at a landscape-scale to protect Wiltshire's "biodiversity hotspots", and develop an expanded patchwork of high value habitats, in better condition and in bigger patches that are more closely connected, augmenting our network of protected wildlife sites and linking green spaces in our towns.

In accordance with the Environment Act 2021, we will develop a Local Nature Recovery Strategy for Wiltshire to help build resilience to climate change, and provide opportunities for species and ecosystem recovery, and reintroduction of formerly native species. As well as helping wildlife thrive, this will provide a wide range of additional ecosystem benefits including greater public enjoyment; pollination; carbon capture; water quality improvements and flood management.

We will work with partners to explore opportunities for nature recovery through implementation of Buglife's B-Lines initiative in Wiltshire (see **Box 4.6**). This innovative landscape-scale approach to conservation and restoration of wildflower-rich grassland, meadows and heathlands aims to provide an improved network of habitats for insect pollinators alongside better access to nature for people. Landscape scale 'rewilding' projects offer similar opportunities for nature recovery although their outcomes cannot be so clearly defined and their introduction needs to be undertaken with the consent of the local community.

Wiltshire Council's Highways and Streetscene team are also supporting wildflower growth in road verges by amending management regimes throughout the county.

BOX 4.6 The B-Lines Initiative

Buglife - The Invertebrate Conservation Trust - is committed to halting declines in our native insect pollinators, which have suffered significant declines over recent decades as a consequence of habitat loss, pesticide use and other factors.



Native insect pollinators provide an essential 'ecosystem service' and are responsible for pollination of a large proportion of our food crops and our native plants. Further declines could lead to dramatic reductions in crop yields, alongside further deterioration in our native flora. Large areas of wildflower-rich habitat need to be both restored and created to provide essential food and shelter for pollinators.

To increase opportunities for species to move around the countryside as our climate changes, Buglife is promoting the need to identify and develop priority dispersal corridors – The B-Lines.

[Buglife B-Lines Initiative Webpages](#)

[B-Lines Pollinator Guidance](#)



Building on, and learning from, the success of the Marlborough Downs Space for Nature Project (see **Box 4.5**), we will work with our partners to identify and explore opportunities for developing catchment or landscape-scale nature recovery areas in other parts of Wiltshire.

Opportunities for piloting landscape-scale “re-wilding” initiatives will also be considered with interested land owners where appropriate.

We will explore opportunities with our partners and communities to promote nature recovery through natural flood management and woodland planting linked to new and existing GBI to extend wildlife corridors into towns.

Using innovative biodiversity opportunity mapping tools and techniques to target areas where action to improve and restore habitats would be most effective, we will work with local communities and businesses to identify opportunities for developing Wiltshire’s Local Nature Recovery Strategy in ways that offer maximum economic and social gains.

In exploring options for funding delivery of the strategies, we will consider opportunities provided by the new environmental land management system and a wider range of innovative funding mechanisms.

We will also work with partners to monitor and evaluate the wider economic and social benefits of Wiltshire’s nature recovery network as it develops.

In addition to providing expanded habitats to support conservation of rare and threatened species populations, we will also work with Natural England, our other partners and local communities to explore opportunities, risks and benefits of reintroducing native species to Wiltshire as part of the Local Nature Recovery Strategy, taking into account their potential to contribute to global and national conservation priorities.

Working with partners, we will continue to raise awareness about the need for biosecurity measures to protect our animals, cultivated crops, native wild plants, trees and woodland and other natural capital in Wiltshire from the threats of pests and diseases and introduction of invasive non-native species.

In line with the Government’s Plant Health Biosecurity Strategy, we will encourage stakeholders to implement strong biosecurity and contingency plans for controlling risks from pests and diseases and invasive non-native species in accordance with legislation, national policy and good practice guidance (see **Box 4.7**).

BOX 4.7 Biosecurity

The **Landscape Institute’s Plant Health and Biosecurity Toolkit** provides good practice guidance for landscape architects on biosecurity measures for tackling pests and diseases that may affect plant health, and controlling invasive non-native plants that need to be removed or remediated. The toolkit is applicable to all stages of the landscape design process from concept and detailed design through to construction and landscape maintenance.

Breeding bird populations are particularly sensitive to human disturbance, especially in areas such as Salisbury Plain and the New Forest National Park which attract large numbers of recreational visitors from a wide area.

We anticipate that this pressure is likely to increase as Wiltshire’s population increases and the tourism industry continues to grow.

Research has shown that providing high quality, accessible green spaces close to where people live can significantly help reduce visits to these more sensitive sites and decrease pressure on sensitive species, while enabling economic growth.

Where internationally designated wildlife sites are identified as being threatened by unsustainable levels of recreational use, we will work with our partners to develop strategies for providing high quality, accessible green space close to where people live (aka Suitable Alternative Natural Greenspace) to disperse recreational activity away from these sensitive sites, and to monitor impacts of recreational visits.

Embedding ecological enhancements into buildings and structures can also contribute to nature recovery. For example, incorporating measures for encouraging bird nesting and bat roosting, such as bird/bat boxes, ornamental slit holes, swift/bat bricks, stone ledges and wood cladding.

We will conserve, enhance and celebrate the outstanding natural beauty and character of our landscapes...

The landscape provides the ever-changing backdrop to people's daily lives in Wiltshire and is more than just 'the view' – it is about the relationship between people, place and nature.

Landscape results from the way that different components of the natural and cultural environment interact and are experienced and perceived by people.

As people value landscape for many different reasons, understanding what the landscape is like today, how it evolved and how it is likely to change in the future is important.

Wiltshire's most beautiful landscapes are of national importance as Areas of Outstanding Natural Beauty (the Cotswolds, North Wessex Downs and Cranborne Chase) and as the New Forest National Park. The Stonehenge and Avebury landscapes are also internationally recognised as a UNESCO World Heritage Site.

We will work with the AONB Partnerships, the National Park Authority, the World Heritage Sites and our other partners to conserve and enhance the special qualities of these valuable GBI assets, including fuller appreciation of the well-being benefits provided by dark skies.

Many of the actions set out in this GBI Strategy will contribute to the objectives of the AONB and National Park management plans for enhancing these nationally protected landscapes, and encouraging people to connect with and celebrate their natural beauty (see case study in **Box 4.8**).

Defra's new Farming in Protected Landscapes programme provides a significant opportunity to fund projects tailored to conserving and enhancing local landscape character, strengthening biodiversity and improving soils delivered in partnership with local farming communities.

BOX 4.8 Case Study: Cranborne Chase & Chalke Valley Landscape Partnership Project

Celebrated by artists, archaeologists, scholars and writers, the name 'Cranborne Chase' evokes an ancient landscape with a rich patina of interrelated natural, built and cultural assets. This is a dramatic, distinctive and historic chalk landscape where 'voices in the landscape' can still be heard. Along with a sense of remoteness, tranquillity and a recognised International Dark Sky Reserve, Cranborne Chase offers a deep sense of place.

Located within the Cranborne Chase Area of Outstanding Natural Beauty (AONB), the Cranborne Chase & Chalke Valley Landscape Partnership Project aims to enable a wide range of people to engage in the conservation, celebration and enjoyment of the area's distinctive historic, natural and cultural landscapes.

The Landscape Partnership Project focuses on the traditional heart of the Medieval royal hunting ground, and the river valley to the north known locally as the Chalke Valley. There have always been historical, natural and social links between the valley and the Chase downland, which the project is exploring and reinforcing. A broad range of activities will allow individuals, communities and new audiences to help conserve, enhance, understand and learn about this unique heritage and to become the beating heart of the Cranborne Chase itself.

The Cranborne Chase AONB was awarded a £1.68m grant from The National Lottery Heritage Fund in 2019 towards the £2.7m Project.

[Cranborne Chase AONB Website](#)



Theme 4: Woodland & Trees

We will contribute to our climate change, biodiversity and health and well-being goals by planting the right trees and woodlands in the right places...

As highlighted in **Box 4.9**, trees, woodlands and hedgerows play an important role in capturing carbon and improving air quality.

BOX 4.9 Carbon Capture and Improving Air Quality

Carbon emissions per person in Wiltshire are 16% higher than England as a whole. However, the long-term trend does indicate that carbon emissions are reducing in Wiltshire in line with regional and national trends. Wiltshire's roads are responsible for half a tonne more CO₂ emissions per person compared to the national average. Use of road vehicles in Wiltshire is predicted to increase by 28% by 2025.

Air quality is reduced in some urban areas due to carbon emissions produced by road transport. Air Quality Management Areas have been declared in Bradford on Avon, Calne, Devizes, Marlborough, Westbury and Salisbury to monitor and alleviate traffic emissions.

Trees, woodlands and hedgerows play an important role in capturing and storing carbon by absorbing CO₂ and acting as carbon sinks. In urban and rural areas, trees and woodlands also help improve air quality by absorbing gaseous pollutants, lowering temperatures, preventing pollutant concentration, and by producing oxygen during photosynthesis.



In addition to capturing carbon and improving air quality, well-placed and well-chosen urban trees can provide a range of other ecosystem services – such as regulating micro-climatic conditions by reducing wind speeds, noise pollution and light levels, providing shade and supporting bats, birds and invertebrates and supporting recreation, wellbeing and providing a pleasant environment and sense of place (see **Box 4.10**).

BOX 4.10 Urban Trees

Well-placed and well-chosen trees on streets and in urban green spaces can provide a range of benefits or ecosystem services such as:

- Reducing noise and excessive heat.
- Supporting sustainable drainage.
- Encouraging walking and enhanced physical and mental health.
- Contributing to local environmental character and distinctiveness.
- Providing habitats for wildlife.

As a changing climate, in particular hotter summers and more frequent periods of dry weather, and unknown pests and diseases, will place new pressures on GBI in the long-term, selecting trees of the right species and age profile for planting is essential.

The Trees & Design Action Group's **Tree Species Selection for Green Infrastructure Guide** provides advice on selecting appropriate species for a range of tree planting scenarios in around towns and cities. In addition to guidance on maximising desired ecosystem services from trees, the Guide sets out advice for achieving aesthetic impact through appropriate tree selection.



In line with our ambition to be carbon neutral by 2030, we will work with our partners to develop a target for increasing tree canopy cover in Wiltshire as part of our new Tree & Woodland Strategy.

The Tree & Woodland Strategy will set out a sustainable approach to how Wiltshire can benefit from planting new trees, and expanding woodland through natural regeneration and succession, in line with the following principles:

- **Partnership working** – we will collaborate with partners to develop a balanced approach to large-scale tree planting that reflects the challenges and opportunities presented by Wiltshire's characteristic open landscapes.
- **Right Tree Right Place** – we will adopt and advocate planting the right trees in the right place to protect and enhance our finest landscapes, strengthen ecological connectivity and protect our heritage, whilst reducing risks and building resilience for existing and new trees planted.
- **Effective planting and aftercare** – we will adopt and advocate best practice planting, protection, and long term maintenance to ensure planted trees and naturally regenerated woodland survive and thrive.
- **Leading by example** – we will identify areas of the Council's estate where trees and woodland can be planted with appropriate selected species to increase coverage in rural and urban areas (see **Box 4.11**).
- **Protecting valued trees and woodland** – we will develop a comprehensive approach to the management and protection of ancient woodland and veteran trees.

The Great Western Community Forest offers the greatest opportunity for woodland creation in Wiltshire. We will continue to support Swindon Borough Council in developing the Great Western Community Forest for the benefit of current and future generations, taking into account the Forest Management Plan's aims and objectives to provide accessible community woodland and ecological corridors, while helping contribute to our carbon reduction goals.

BOX 4.11 Increasing Urban Tree Canopy Cover

Trees are an integral component of GBI in our towns offering a range of social, environmental and economic well-being benefits for communities in Wiltshire.

The urban forest comprises trees in towns and cities along linear transport routes and waterways (e.g. canals and rivers), in amenity areas, urban woodlands, parks and informal open spaces, along streets, in domestic gardens and on institutional land.

Urban forests support the growth of local economies, increase residential value and are good for business. Street trees help cool the air naturally, reduce pollution and tackle climate change. Woodlands in urban areas provide green places for relaxation and enjoyment, make people healthy and happy and help bring communities together.

The Forestry Commission recommends a 20% target for increasing tree canopy cover in urban areas as a good aspiration, depending on the current level.

As part of our Local Nature Recovery Strategy, we will work with landowners, farmers and forestry stakeholders, and local communities, to identify and target areas in Wiltshire most suitable for, and likely to benefit from large-scale woodland creation developed and planned at a landscape scale, consistent with catchment-based approaches to natural flood management (see **Theme 1**).

We will also consider how incentives offered by the Government's potential new woodland creation grant scheme, and private sector investment, can be used to encourage tree planting on private and marginal agricultural land for agroforestry, bio-energy production and carbon offset purposes.

Theme 5: Healthy Living

We will help people improve their health and wellbeing by securing more opportunities to access green and blue spaces and engage with nature...

Health and well-being refers to both the physical and mental health of people and is more than simply an absence of ill health and disease; it is a feeling of physical, emotional and psychological wellness.

Good health isn't just about the treatment of illness; it is also about the environments in which we live, work, learn and play, and the food we eat.

BOX 4.12 Physical Health & Wellbeing Benefits of Access to Nature

Access to green space for exercise can help to improve the physical health of communities and address issues such as obesity and cardiovascular disease. Regular exercise and healthy lifestyle choices can significantly reduce the impacts of cardiovascular disease and other serious health problems.

It is well established that regular exercise, including walking and cycling, can reduce the negative effects of health threats such as obesity, coronary heart disease and respiratory disorders.

Studies have found that a relationship exists between proximity of access to GBI and physical health – the further away from open space or a rights of way network that people live, the more likely they are to suffer health problems. Evidence also suggests that the quality of green spaces are also a major influence on the wellbeing of local communities.



The relationship between access to nature and improved public health and wellbeing is well established.

Numerous recent studies have shown significant health and well-being benefits for people involved in both creating and managing GBI assets, and from access to good quality greenspace. For example, Natural England's People and Nature Survey 2020 found that almost nine in 10 adults in England report that being in nature made them very happy. The [**review of health and well-being evidence for green infrastructure**](#) published by Natural England in 2020 provides further information

Regular contact with nature and outdoor activity can have substantial benefits for people's physical (see **Box 4.12**) and mental (see **Box 4.13**) health and wellbeing.

BOX 4.13 Mental Health & Wellbeing Benefits of Access to Nature

Access to natural green space can help families and communities spend time together, strengthening social networks and combatting isolation and loneliness. Connecting people to a healthy environment is a vital part of this, and a powerful tool for combatting mental health issues such as chronic stress, depression and anxiety.

Access to green space, outdoor exercise and green activities, such as gardening or habitat conservation, can have positive impacts on people with mental ill health.

Evidence shows that access to good quality green space is essential for good mental health and childhood development. Natural green spaces and access to open, green environments provide opportunities for relaxation, relative tranquillity and meditation.

For children and young people, the effectiveness of green space to promote improved mood, improved attention, reduced stress and anxiety and reduced severity of attention deficit hyperactivity disorder are well documented.



Working with our partners in the environmental and health sectors, we will explore opportunities to support the Wiltshire Health & Wellbeing Strategy 2019-2022 by encouraging more people, from all backgrounds, ages and abilities, to engage with and spend time undertaking physical activity in green and blue spaces in their everyday lives and understand the barriers they face.

Increased countryside access that enables all our communities to participate is a key measure for monitoring health inequalities.

Where existing open space in and around our towns is below the standards being developed by the Wiltshire Open Space Study or the National Green Infrastructure Standards (see **Box 4.14**), we will work with our partners, local communities and developers to identify opportunities to create more, better and well-connected open spaces.

We will continue to develop and improve our rights of way network, and country parks and open spaces, in accordance with the priorities set out in the Wiltshire Countryside Access Improvement Plan.

We will work with partners and local communities to plant more trees in and around our towns close to where people live and work, which will help bring people closer to nature and improve air quality, with consequent positive health impacts.

We will connect mental health providers to environmental and community voluntary sector organisations providing “eco-therapy” opportunities – such as gardening, outdoor exercise and care farming in natural settings.

We will work with our partners to promote the health and well-being benefits of access to GBI by improving partnerships between health, planning, transport, environment, community and leisure sectors across Wiltshire; supporting health awareness campaigns; and working closely with schools and community youth groups.

BOX 4.14 National Green Infrastructure Standards

Nature Nearby (2010) sets out Natural England’s current guidance on recommended standards for provision of accessible natural greenspace to ensure people have the opportunity to interact with nature locally and encourage healthier lifestyles:

- **Access to Natural Greenspace Standard** – seeks to improve greenspace access, naturalness and connectivity by encouraging provision of a range of site types and sizes within walking and sustainable transport distance of people’s homes.
- **Service Standards** – national standards for delivery of core services/ facilities for specific greenspace types (e.g. Country Park Accreditation, selection/declaration of Local Nature Reserves).
- **Quality Standard** – the Green Flag Award scheme provides a national quality standard for management of existing green spaces.

In line with the Government's 25 Year Environment Plan, Natural England is developing new National Green Infrastructure Standards to encourage increased investment in the establishment and long-term maintenance of GI over and above current levels across England.

The new Standards will provide a consistent framework and guidance to help local authorities, developers, landowners and communities deliver GI improvements, particularly in areas where need is greatest.

Prior to the launch of the full Framework in 2022, Natural England has published a set of GI Principles and a GI Mapping Database to support local authorities in planning GI strategically at different scales, and targeting investment where it is most needed.

The remaining elements of the Framework (GI Standards, GI Design Guide and GI Case Studies) are under development and will be published in 2022.



Working with our partners in the education sector, we will explore opportunities for helping primary schools create nature-friendly grounds that support learning about the natural world and provide activities that support pupils' health and wellbeing through contact with nature.

We will also connect schools to environmental and community voluntary sector organisations providing opportunities for pupils to visit a farm, a local nature reserve, community woodland or National Park where they can combine learning about nature with feeling healthier and happier.

We will work closely with Community Area Boards to identify opportunities for sustainable transport options that use GBI corridors for active travel routes as an alternative to car use, linking communities to the wider GBI network.

...and we will help people improve their health and wellbeing by providing opportunities for local food-growing...

We will work with our partners to explore opportunities for integrating sustainable local food systems (see **Box 4.15**) into the GBI networks, ensuring access to private gardens or shared community spaces along local streets, parks and gardens, and school grounds, for food-growing.



BOX 4.15 Sustainable Local Food Systems

The UK is far from self-sufficient in food, not least in a context of climate change and its impacts on global food prices and food security.

Sustainable local food systems encourage healthy eating and community food-growing and promoting opportunities for producing, processing and distributing food locally.

It brings together farms in rural areas with urban farms, allotments, community orchards, farmers' markets and food co-operatives.

At all scales, providing opportunities for food-growing have implications for the way a place is planned, designed, delivered and managed in the long term.

Embedding sustainable local food systems into planning can provide a wide range of benefits such as:

- **Health & wellbeing benefits** - increased physical activity; healthy consumption/lifestyles; improved mental health/well-being; greater nutritional value.
- **Inclusive community benefits** - improved community interaction/social cohesion; reduced food poverty.
- **Environmental sustainability benefits** - reduced food miles/carbon footprints; enhanced GBI/ecosystem services; climate change resilience; improved soil quality, which in turn sequesters more carbon.
- **Economic benefits** – learning/education; green economy; attractive places; employment opportunities; less waste.

Green Infrastructure & Food Factsheet

£ Theme 6: Economic Recovery & Valuing Natural Capital

Wiltshire's recovery after the COVID-19 coronavirus pandemic is at the forefront of Wiltshire Council's activities and will be a central factor in many Council decisions, plans and day-to-day business.

The potential for GBI as an inherent part of this Green Recovery must be accepted, and existing work can form the basis of the Council's approach.

Local Enterprise Partnerships (LEPs) across the country are developing Local Industrial Strategies (LISs) to co-ordinate local economic policy with national funding streams and promote public-private partnerships to deliver economic growth and job creation.

As part of this, LEPs are being encouraged by the Government to assess the role that natural capital (see **Box 4.16**) may play in contributing towards economic growth.

BOX 4.16 What is Natural Capital?

Natural capital is the sum of our ecosystems, species, freshwater, land, soils, minerals, our air and our seas. These are all elements of nature that either directly or indirectly bring value to people and the country at large. They do this in many ways but chiefly by providing us with food, clean air and water, wildlife, energy, wood, recreation and protection from hazards.

Increasingly, natural capital is seen as an essential basis for economic growth and productivity over the long term. When we measure the value of the environment as a natural capital asset and key contributor to the overall economy, we are more likely to protect and enhance it.

The relationship between environmental quality and economic prosperity is now increasingly recognised...

The natural capital concept is likely to be used more in the future as policy trade-offs between the environment and other economic goals will become ever more important. The Swindon and Wiltshire Local Enterprise Partnership (SWLEP) has undertaken a lot of work on better understanding natural capital.

Examples of natural capital opportunities for supporting economic growth and prosperity may include, for example:

- Protecting infrastructure from climate risks, such as flooding, drought and extreme temperatures
- Securing industrial supply chains against climate-induced shortages of raw materials, especially from agriculture
- Providing uninterrupted supplies of water to consumers and industrial water users
- Providing opportunities for environmental net gain through the planning system
- Increasing competitive advantage of a local economy by creating healthy places people want to live, work and visit (and in some cases increasing property values)
- Green jobs linked to the protection and enhancement of natural capital to deliver the above benefits

The Swindon & Wiltshire Local Enterprise Partnership recognise Wiltshire's environment as a key economic advantage for attracting new residents and businesses to Wiltshire. The quality of Wiltshire's GBI goes hand in hand with Wiltshire's prospects for economic growth and development.

The Wiltshire Business Perception Survey highlighted that the quality of life, historic and natural environment and high quality workforce are among the top reasons as to why companies located in Wiltshire.

Evidence also suggest that investment in high quality green and blue spaces attracts and retains a motivated and skilled labour force, improves business property values and creates new employment opportunities.

GBI also assists in maintaining the physical and mental health of a workforce. Absenteeism through ill health is suggested to cost businesses millions of pounds each year. GBI has a vital role to play in ensuring that Wiltshire's workforce is fit and healthy by providing easy access to open spaces and rights of way networks for active travel, relaxation and leisure.



VisitWiltshire counts our natural beauty and wealth of cultural and historic assets as one of the primary reasons that national and international tourists visit Wiltshire.

In recent years, Wiltshire's tourism industry generates £1 billion per year and supports over 21,000 jobs in Wiltshire, representing around 7% of total employment in Wiltshire. This further demonstrates the value of our natural capital to the local economy.

Improving, enhancing and protecting Wiltshire's GBI is crucial to the continued resilience of Wiltshire's tourist industry and its associated economic benefits (see case study in **Box 4.17**).



BOX 4.17 Case Study: the economic benefits of the Kennet and Avon Canal restoration

The Kennet and Avon Canal connects the city of Bristol to the River Thames at Reading, dissecting Wiltshire east to west between Hungerford and Bradford on Avon. Originally opened in 1810, the canal fell into disrepair and eventually closed in 1955. The canal reopened as a navigable waterway in 2002 following a 30 year restoration programme.

The latest studies suggest that in Wiltshire alone, the value of direct visitor spend in 2009 was over £14.4 million. When indirect spending is included in this estimation, the 3.3 million visitors to the canal in Wiltshire improved the local economy by almost £19 million. This level of tourism generated by the canal supported 444 jobs along the Wiltshire stretch of the canal alone. This ranks well alongside other local authority areas through which the canal is routed, being second only to Bath & NE Somerset in terms of visitor spend and job creation.

In addition to these findings the study report suggests the canal restoration attracted up to £435 million in property investment and development along the canal corridor between 1995 and 2005, creating a further 2,700 jobs along the canal. Beyond tourism and visitor spend, the canal is estimated to have improved local property prices by £47.3 million whilst providing up to £4.7 million in non-monetary value such as heritage, landscape and drainage.



The GBI Strategy aims to support local economic prosperity by enhancing our natural capital...

Swindon & Wiltshire Local Enterprise Partnership and this GBI Strategy set out complimentary approaches to future-proofing our economy and safeguarding our environment.

We will work in partnership with SWLEP and VisitWiltshire to maximise the economic competitive advantage provided by our natural environment in promoting Wiltshire as an ideal place to live, work, invest and visit. This will include exploring opportunities for continuing to promote our natural environment to inward investors and potential residents.

4.3 Delivery Principles

The strategy provides not only a shared vision and goals that can help to improve integration and collaboration between partner organisations, but it also provides a set of delivery tools and principles that provide guidance for co-ordinated planning and delivery of GBI in Wiltshire.

We will work together in partnership towards achieving our shared vision, focussing on the priorities, goals and opportunities set out in this Strategy, and guided by the following delivery principles:

-  Partnership Working
-  An Integrated Approach
-  Goal Oriented and Mainstreamed
-  Evidence-led
-  Nature-based Solutions
-  Planning Principles

Principle 1: Partnership Working

Delivering our aspirational vision and goals will require an effective, well-coordinated and multi-faceted collaborative approach, drawing on multi-stakeholder partner networks. This approach involves:

- A joint approach across multiple departments within Wiltshire Council.
- Engagement and support from Wiltshire Council Councillors and town/city and parish Councillors.
- Engagement and inclusion of local communities and volunteers
- Collaboration with neighbouring local authorities and local nature, enterprise and health & well-being partnerships.
- Greater collaboration between local communities and businesses, planning authorities and developers.
- Collaboration and communication with our supporting partner organisations.
- Working together to share information, pool resources and resolve delivery issues.





Principle 2: An Integrated Approach

An integrated approach is key to the implementation of this Strategy. GBI incorporates a variety of linked issues, impacts and benefits. It must therefore be planned and managed in an integrated way. There are a number of existing tools that can be used.

A key principle of this Strategy is that landscape, biodiversity and catchment-based approaches, together with consideration of well-being and carbon-neutral outcomes, should be used to ensure benefits for people, place and nature.

This GBI Strategy supports a Catchment Based Approach (CaBA) to the integrated management of water resources in Wiltshire. This approach embeds collaborative working at a river catchment scale to deliver multiple environmental, social and economic benefits, while protecting our water environment (see **Box 4.18**).

The CaBA seeks to deliver benefits such as improvements to water quality; enhanced biodiversity; reduced flood risk and increased resilience to climate change; more resource efficient and sustainable businesses; and health and wellbeing benefits for local communities as they engage with and take ownership of their local river environment.

The principles of the CaBA approach are reflected in the emerging Wiltshire Landscape Strategy, which advocates a cross-cutting and integrated approach to protecting and enhancing the character, diversity, multifunctionality and natural beauty of Wiltshire's landscapes. Landscape is "more than just a view", and is strongly shaped by water.

BOX 4.18 The Catchment Based Approach

The Catchment Based Approach (CaBA) is an inclusive, civil society-led initiative that works in partnership with Government, Local Authorities, Water Companies, businesses and more, to maximise the natural value of our environment.

CaBA partnerships are actively working in all 100+ river catchments across England and cross-border with Wales. The CaBA partnerships undertake integrated management of land and water, addressing each river catchment as a whole and delivering practical interventions on the ground.

Due to its cross-cutting and integrated nature, CaBA provides a framework to support delivery of many of the goals and targets under the Government's 25-year Environment Plan.

www.catchmentbasedapproach.org

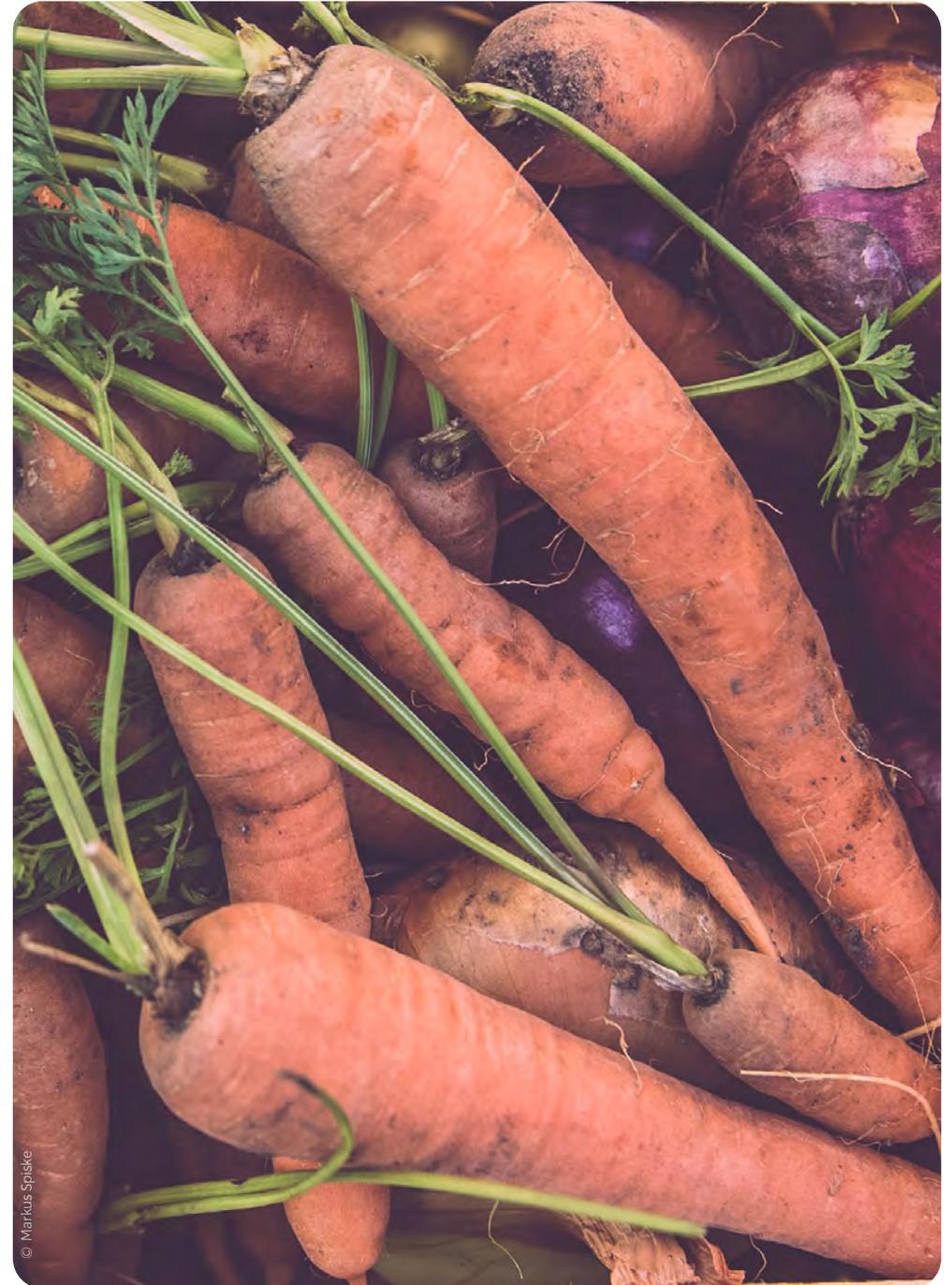
From the source of our rivers to the sea, across our towns, cities, countryside and coasts – a healthy water environment is essential to all of us...

✓ Principle 3: Goal Oriented & Mainstreamed

Although some sectors have adopted an integrated way of planning and managing, for the majority it will require a cultural shift.

To support this cultural shift and ensure it becomes part of mainstream decision-making, planning and project management:

- We will need to work within our organisations and in partnership with others to adapt our day-to-day processes.
- We will develop new processes or management tools that enable us to mainstream this integrated thinking and a 'GBI-led approach' within our organisations.
- Wiltshire Council will work to increase collaborative working on green and blue infrastructure. This will mean increased use of an integrated, place-making approach in planning that has GBI at its heart.
- Wiltshire Council will also bring together representatives of all of the Council's services to embed integrated thinking and working towards shared outcomes, incorporating the multiple functions and benefits of GBI in all of the Council's policy, projects and programmes.
- We will work with partners to continue to develop this Strategy and our shared goals through an ongoing action planning cycle, identifying ways to add value on top of existing initiatives, and eliminating any barriers to success.
- We will work together to develop specific targets in relation to actions, and to identify relevant organisations or individuals that can facilitate delivery of the actions.





Principle 4: Evidence-led

We acknowledge that science and understanding is changing quickly, and while we need to focus on achieving priorities and working towards the identified goals, we also need to keep abreast of new evidence to inform any necessary changes to the Strategy.

We commit to sharing information in order to support implementation of the GBI Strategy. Where further information is needed to support specific actions, partners will work together to further develop the **Evidence Base**.

Defining and Mapping the GBI Network

A key element of this GBI Strategy has been to define the existing GBI Network in Wiltshire and update mapping data.

We will continue to maintain and update the mapping database, as a reference and a tool to inform the implementation of this strategy, as well as a means to enable analysis and communication. We will also work to make the GIS mapping data available as an interactive, live database.

Measuring our Natural Capital

As part of mainstreaming and integrating natural capital, and GBI, organisations have been looking at Natural Capital Accounting tools to monetise impacts on natural capital as a way to inform decision-making, planning and management of their businesses.

As highlighted in **Box 4.19**, the Swindon & Wiltshire Local Enterprise Partnership (SWLEP) is using the natural capital approach as a tool to inform long-term policy choices, which will help to shape priorities for economic development in the Swindon and Wiltshire area over the coming years.

We will work with SWLEP and other partners to develop a natural capital accounting tools that can help inform decision-makers about the impacts of decisions, developments and projects, such as environmental net gain.

BOX 4.19 Measuring Wiltshire's Natural Capital

SWLEP has collaborated with the University of Bath's Economics Group on a research project to develop a framework for measuring natural capital based on best practice approaches.

The project applied the framework to measuring the baseline value of natural capital – the air, water, soil and ecosystems that support all forms of life – for the Swindon and Wiltshire area.

The baseline is intended to be used by SWLEP to inform the approach to achieving sustainable, inclusive growth.



Principle 5: Nature-Based solutions

Wiltshire's green and blue infrastructure network provides a range of well-being benefits for people, places and nature across Wiltshire...

Nature-based solutions are as defined by the International Commission on Ecosystem Management as “actions to protect, sustainably manage, and restore natural or modified ecosystems that address societal challenges effectively and adaptively, simultaneously providing human well-being and biodiversity benefits”.

The GBI Strategy embraces the concept of nature-based solutions. As well as encouraging specific solutions such as SuDS, green roofs (where viable) and green walls, we will adopt the Global Standard for Nature-based Solutions developed by the International Union for Conservation of Nature to ensure that our interventions not only use natural process, but also identify and combat socio-economic challenges.

The following are examples of tools and approaches that can embrace Nature-based Solutions.

Environmental Land Management

The Common Agricultural Policy (CAP) has been one of the main drivers of land use and management over the last 45 years, encouraging farming practices that has caused significant environmental damage and poorer soil health.

In addition to producing food, our farms also provide recreational activities and farmland and woodland help filter the air. Agriculture remains a major source of water pollution, and farmland birds have declined by more than half since 1970.

In the past, environmental land management schemes have supported the creation of nesting and food resources for nationally scarce farmland bird and pollinator species, helping populations of stone curlew, marsh fritillary butterfly and the short haired bumblebee to recover for example. They have also enabled improvements in water quality, and protected and restored landscape and heritage assets.

After a transition period following leaving the EU, the UK will leave the CAP and the Government plans to introduce a new system of paying farmers public money for public goods. The new system will be based on a natural capital approach to valuing the ecosystem services provided by the environment.

The Agriculture Act 2020 introduced a new agri-environmental land management system to incentivise farmers and land managers to restore and improve our natural capital and rural landscapes, whilst producing food more sustainably (see **Box 4.20**). These principles are adopted by this Strategy to guide land management practices in Wiltshire.



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BOX 4.20 Agriculture Act 2020

The Agriculture Act establishes a new agricultural system based on the principle of paying public money to farmers, foresters and other land managers for public goods that provide societal benefits – such as better environmental protection, improved public access to the countryside or higher animal welfare standards.

Part 1 of the Agriculture Act includes, among other things, powers for the Government to give financial assistance for:

- Supporting public access to and enjoyment of the countryside, farmland and woodland, and enhancing understanding about the environmental benefits that such land can provide.
- Managing land or water in a way that maintains, restores or enhances cultural or natural heritage.
- Managing land, water or livestock in such a way as to mitigate or adapt to the effects of climate change.
- Managing land or water in such a way as to prevent, reduce or protect from hazards to, or caused by, the environment such as flooding.
- Measures which protect or improve the health of plants, including wild plants, agricultural and horticultural crops, trees and bushes by reducing risks from harmful pests and disease.
- Protecting or improving the quality and health of soil.

Landscape Management

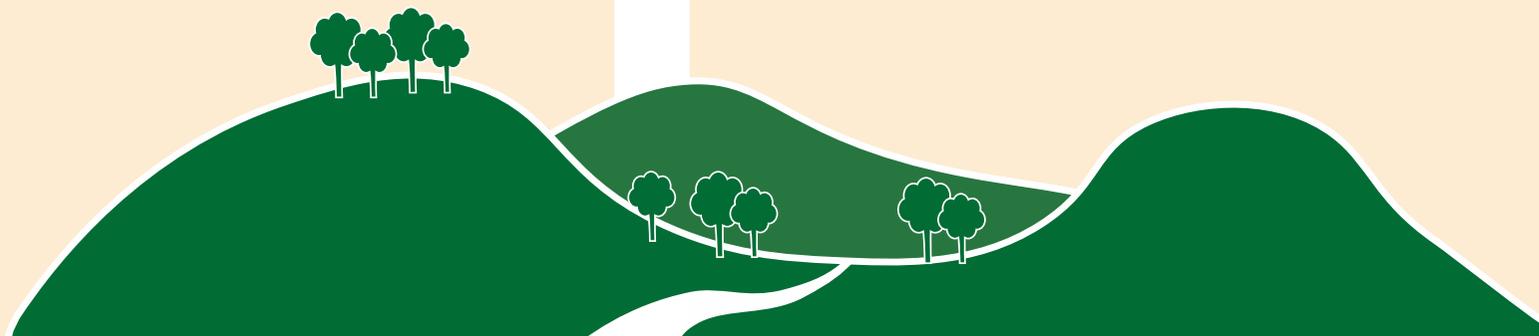
The Wiltshire Landscape Strategy will advocate an integrated character-based approach to protecting and enhancing the character, diversity, multifunctionality and natural beauty of Wiltshire's landscapes.

We will work with our partners to deliver the actions highlighted in the Wiltshire Landscape Strategy (see **Box 4.21**).

We will also promote use of the Wiltshire Landscape Strategy as a decision-making tool for strengthening the character of all Wiltshire's landscapes by ensuring that valued landscape features and qualities are conserved and enhanced by land management and development proposals.

BOX 4.21 Wiltshire Landscape Strategy Actions

- Integrating Landscape into Policy
- Identifying and Assessing Landscapes
- Setting Landscape Objectives
- Protecting Landscapes
- Managing Landscapes
- Planning Landscapes
- Monitoring Landscape Change
- Promoting Education and Training
- Raising Awareness, Understanding and Involvement



Principle 6: Planning Principles

We will seek to secure proportionate biodiversity and wider environmental net gains for our natural capital from new development by encouraging applicants to take into account the GBI planning principles highlighted in **Box 4.22**.

Development proposals should also consider opportunities for engaging local communities at all stages of the planning and design process to foster a sense of ownership and responsibility for the long-term care and maintenance of green spaces.



BOX 4.22 GBI Planning Principles

In line with this GBI Strategy's goals, development in Wiltshire should seek to:

1. Contribute to the delivery of high quality multi-functional networks of GBI to provide long-term benefits for people, places and nature in Wiltshire.
2. Embed GBI in ways that help reinforce and enhance the local built, natural and historic character of Wiltshire's landscapes and townscapes.
3. Embed GBI in ways that help support nature recovery and reverse the decline in biodiversity in Wiltshire by providing a net biodiversity gain.
4. Embed GBI in ways that help Wiltshire's communities and wildlife be more resilient to a changing climate.
5. Embed GBI in ways that help contribute to healthy living and well-being by providing spaces for recreation, relaxation and growing local food in Wiltshire.
6. Contribute to long-term management and maintenance of related GBI through financial contributions, management schemes and management plans as appropriate.

These overarching GBI planning principles will be used to develop local planning guidelines in Settlement GBI Frameworks.



Section five - The way forward

Turning Aspirations into Positive Actions

Leadership & Partnership Working

Empowering Communities

Funding & Priorities for Action

Monitoring & Reviewing



Section five - The way forward

5.1 Turning Aspirations into Positive Actions

This GBI Strategy outlines a bold vision for developing a functional, connected network of natural areas that will help support the current and future well-being needs of local populations in Wiltshire.

To reap the benefits of the GBI Network, many interventions are best implemented at a landscape-scale so that linkages are optimal, and the network is consolidated.

Every small improvement such as pocket parks, back garden initiatives and planting a single tree can be beneficial. However, the aspirations of the Strategy will only become a reality if we collaborate to identify some significant landscape-scale initiatives.

To achieve our biggest ambitions, our natural areas need to be managed collectively as one of Wiltshire's most important assets. This GBI Strategy provides the strategic or "big picture" framework for coordinating GI delivery action by partnerships working at both regional and local levels.

Working together through a shared commitment to implementation of this GBI Strategy, we can, with strong leadership, turn the aspirational vision into positive actions that can deliver our desired outcomes.

Through this GBI Strategy, we will:

- Work collaboratively in partnership with land managers, owners and service providers, and Community Area Boards, towards the shared vision for GBI.
- Commit to following the common set of principles, priorities and opportunities for strengthening the resilience and connectivity of Wiltshire's GI network.
- Pool resources to support a planned approach to GBI project delivery and investment.
- Identify opportunities to manage our GBI assets more sustainably for the long-term.

Although having individual operational objectives, the partners all share a common aim – to manage natural resources to improve the well-being of Wiltshire's communities. The GBI Strategy supports this aim by helping partners work towards aligning their future ways of working with the GBI approach.



5.2 Leadership & Partnership Working

As GBI is a cross-cutting concept, the Strategy will need to be delivered by stakeholders and partners working across a broad range of agendas eg: economic growth, development and regeneration; water resources and soil management; carbon neutral economy; sustainable transport; public health and wellbeing, recreation and tourism; agriculture; biodiversity; and heritage conservation.

Having strong multi-stakeholder partnerships in place to champion and support delivery of the Strategy is key to maximising the benefits of GBI for people, places and nature in Wiltshire.

As highlighted in the **Evidence Base**, there are a wide and varied network of stakeholders with a potential role to play in helping deliver GBI across Wiltshire. This list is not exhaustive; the network of stakeholders and partners also includes local volunteers and community groups, businesses and other public sector/charitable organisations.

These networks provide firm foundations on which to develop a shared understanding of priorities and opportunities for improving Wiltshire's GBI.

Some of the key multi-stakeholder partnerships involved in developing this GBI Strategy, and that will be key in realising our vision and goals, are highlighted below.

Wiltshire Council will play a key leadership role...

A shared understanding of the vision for GBI in Wiltshire across departments will provide a strong platform for helping local communities achieve their own goals.

This Strategy informs and develops the way that GBI is considered throughout the Council, and therefore directly informs relevant departmental strategies.

Wiltshire Council plays a central role in the coordination of partnership working and facilitates community liaison throughout Wiltshire. As a lead partner in the delivery of many strategic GBI projects and initiatives, the Council will act as a principal partner in championing delivery of this GBI Strategy.

At the strategic level, the Council will continue to work collaboratively with the partnerships illustrated on **Diagram 5.1** towards achieving the shared vision and goals for GBI in Wiltshire, such as the three AONB Partnerships.

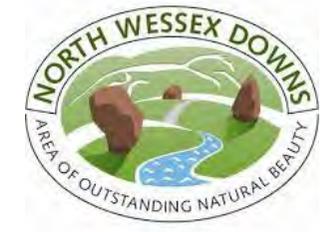
These partnerships and other stakeholder organisations can provide information and advice to land owners and managers, local community groups and developers on priorities and opportunities for strengthening Wiltshire's GBI network.



DIAGRAM 5.1 GBI Delivery Partnerships in Wiltshire



Wiltshire Council



A new Wiltshire Climate and Environment Forum will be established to co-ordinate delivery of the GBI Strategy...

A new Wiltshire Climate and Environment Forum will pick up much of the work of the former Wiltshire & Swindon Local Nature Partnership.

This will provide an opportunity to deliver the GBI aspirations through co-ordinating cross-boundary delivery at a regional-scale in liaison with neighbouring Local Nature Partnerships (see **Box 5.1**).

BOX 5.1 Neighbouring Local Nature Partnerships

- West of England Local Nature Partnership
- Somerset Local Nature Partnership
- Dorset Local Nature Partnership
- Hampshire & Isle of White Local Nature Partnership
- Berkshire Local Nature Partnership
- Wild Oxfordshire Local Nature Partnership
- Gloucestershire Local Nature Partnership



The new Partnership would be dedicated to supporting, championing and coordinating strategic and local GBI delivery and Local Nature Recovery Strategy.

It would create a central place where experience and expertise could be coordinated and shared between partners, enabling best practice to be improved and common risks to be identified across the Partnership.



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5.3 Empowering Communities

We will empower communities to take ownership and responsibility for managing local GBI assets...

The local nature, health and well-being and enterprise partnerships in Wiltshire will work collaboratively with local communities and businesses towards achieving the shared vision.

Wiltshire Community Areas Boards have a key role in identifying local priorities and opportunities for the delivery of GBI improvements in their areas.

We will empower local communities to take ownership of local GBI assets by providing opportunities for local communities and town/parish councils to take ownership of GBI assets.

Wiltshire Council's Community Asset Transfer Policy enables the transfer the management and/or ownership of Wiltshire Council owned assets to community groups or town/parish councils. This includes GBI assets such as public parks, gardens, play areas, allotments, open land and forested areas.

Successfully transferred assets are owned, managed and maintained by the community group or local town/parish council for the benefit and enjoyment of the whole community.

Through raising awareness of this policy and highlighting the opportunities to community groups, Wiltshire's communities can be in control of their own community GBI and can plan for the improvement, enhancement and protection of their own local networks and assets using the Community Environmental Toolkit and neighbourhood plans (see case studies in **Box 5.2** and **Box 5.3**).

BOX 5.2 Case Study: The Wiltshire Community Land Trust

A Community Land Trust is a legally incorporated, volunteer led organisation that owns and manages assets for the benefit of a defined community.

They offer great opportunities for local ownership of GBI and provide local control over the shaping of a community's future, improving the quality of life for all members of the community.

Wiltshire Community Land Trust has been set up to help community groups take on the ownership and management of assets, such as land for recreation and growing food, wildlife reserves and a range of community facilities and local services.

The Trust fosters bottom-up development, strengthening communities by supporting local people to contribute to meeting their own needs and aspirations through the vehicle of Community Land Trusts.

Through general information provision, targeted advice, setting up of appropriate partnerships, and one-to-one support, Wiltshire Community Land Trust is well placed to take community groups through the whole process of deciding whether a local Community Land Trust is right for them, and if so, helping to set one up.



BOX 5.3 Case Study: Friends of Biss Meadows Country Park, Trowbridge

Biss Meadows is an area of public space to the southeast of Trowbridge town centre. The area includes a section of the River Biss, open grasslands, wildflower meadows and a number of paths for public access.

The Friends of Biss Meadows Country Park is a community group formed in 2008 to improve, enhance and protect the site for the enjoyment of all the community.

The group run a number of 'working parties' throughout the year and alongside this general maintenance, the group manage a number of ambitious projects to improve the GBI asset.

Following a successful application to the Big Lottery Fund in 2011, the group were awarded £50,000 to undertake major improvements to the pond area of the site.

The improvements include new seating, path-work and educational facilities for the use of youth organisations and schools. The group are now seeking funding for the creation of a nature trail through the site.



Wiltshire Council is working with partner organisations to increase volunteering throughout Wiltshire (see case study in **Box 5.4**) and to publicise the benefits that volunteering can bring to the individual, to the Council and to communities.

The Wiltshire Volunteering Strategy and Action Plan identifies the need to develop and promote volunteering in Wiltshire in partnership with the Volunteer Centre Wiltshire who serve as a Wiltshire-wide coordinator for voluntary services.

BOX 5.4 Case Study: Volunteering and the Wiltshire Rights of Way & Countryside Service

The Wiltshire Rights of Way Service has a long and successful record of working with town and parish councils, local community groups and volunteers who help to look after and maintain Wiltshire's 6,000km public rights of way network. Volunteer groups typically get involved in clearing paths of vegetation, installing stiles, gates and bridges, inspecting and recording the condition of the network and improving waymarking.

A number of parish and town councils have volunteer groups which undertake practical tasks using materials supplied by Wiltshire Council. There are also groups of volunteers who will travel to wherever help is needed. They find it a great opportunity to explore lesser known areas of Wiltshire and it is a social event. It is estimated that the value of work carried out annually on footpaths and bridleways by working parties of members of the Ramblers is in the region of £100,000.

Volunteers are also involved in the protection and maintenance of Wiltshire's countryside sites and country parks. Here, the work undertaken by volunteers includes tree planting; managing areas for wild flowers; managing woodland; creating hibernacula for reptiles and wild mammals; pond works and the erection of bird boxes.

In many cases across Wiltshire, GBI assets have come under the protection and care of volunteers and community partnership groups (see case study in **Box 5.5**). The potential of these localised groups to gain maximum value for communities from local GBI is significant.

Through local membership, which can often be extensive, 'friends of' groups can serve to substantially improve, enhance and protect local GBI for the benefit of an entire community.

There is a role to play for Wiltshire Council and its partners in providing the necessary support to these community groups. Early engagement between community groups and council officers for advice and support is vital to ensure the momentum and drive of the community is harnessed.

Creating structured guidance for community groups and developing a network for community groups to liaise with each other are some of the ways in which this GBI Strategy will help community groups achieve their goals.



BOX 5.5 Case Study: The Salisbury Green Space Partnership

The Salisbury Green Space Partnership (SGSP) was launched in early 2012. The partnership is a community led initiative comprising of partner organisations and individuals that represent a wide range of green space interests in and around the city of Salisbury.

The SGSP Committee members are active advocates for the maintenance and protection of Salisbury's green spaces for recreational use and for the enjoyment for Salisbury residents both now and in the future.

The partnership have established themselves in Salisbury and Wiltshire as a key consultation group in discussions that concern GBI as part of Salisbury's future growth plans, ensuring that the aspirations of the local community are represented to developers, the local authority and local businesses.

The SGSP is committed to working with partner organisations to identify, enhance and protect GBI in Salisbury. This includes:

- Awareness raising of GBI issues in the Salisbury Community Area and surrounding Community Areas
- Supporting local community groups initiate GBI projects
- Auditing and researching GBI provision in and around Salisbury
- Identifying improvements to local rights of way networks.

The SGSP has worked closely with Wiltshire Council on a number of GBI projects and is currently assisting in the data collection for a Wiltshire-wide open spaces audit.



5.4 Funding & Priorities for Action

We will explore opportunities to access a wide range of potential sources of funding...

The broad range of benefits, assets and stakeholders which GBI brings together is represented in the diversity of funding opportunities available to support GBI delivery.

A list of potential sources of funding for GBI projects and initiatives at both a strategic scale and local community scale in Wiltshire is set out in the **Evidence Base**.

...to support delivery

Priorities for action will need to be developed by the partners to support delivery of GBI Strategy in a phased way over the next 10 years or so.

The Council will develop a prioritised action plan to deliver:

- **Strategic GBI initiatives** delivered with partners working at the landscape-scale
- **Local GBI projects** delivered through engagement with local communities in and around Wiltshire's settlements

Priorities for exploring approaches to achieving the GBI Strategy's aims in the **short-term (next 3 years)** could include:

- Strengthening the GBI **Evidence Base**
- Integrating the GBI approach into policy/developing guidance
- Raising awareness and involvement in GBI delivery
- Exemplifying new GBI approaches through pilot projects
- Highlighting potential funding streams and partnering on bids where appropriate

Priorities for realising opportunities to scale-up delivery of GBI improvements in the **medium-term (3-10 years)** could include:

- Supporting GBI community ownership/management
- Strengthening resilience of urban GBI

In the **longer-term (over 10 years and beyond)**, we will focus on actions for transforming how we work together, and with private and third sector landowners and local communities, to secure sustainable management of Wiltshire's GBI network for future generations.

The existing strategic landscape-scale GBI projects and initiatives set out in the **Evidence Base** contribute to delivery of the identified priorities for improving Wiltshire's Strategic GBI Network.

These projects and initiatives provide the basis for future GBI investment in Wiltshire. They build on the strengths of our partnerships, and are key strategic priorities for improving Wiltshire's GBI for the benefit of our communities, visitors, wildlife, economy and environment.

Priorities for improving the Local GBI Networks in and around our towns will be identified by the Settlement GBI Frameworks and defined as part of the neighbourhood planning process.



5.5 Monitoring & Reviewing

We will monitor delivery of the GBI Strategy...

In line with national planning policy, the GBI Strategy will be regularly reviewed to ensure that information on habitats, species and other GBI assets is kept up-to-date, so that development management decisions are informed by appropriate information about potential effects of development on GBI.

Wiltshire Council in its role as the local planning authority will use best available data to review a set of priority species (eg. swifts), priority habitats or other key GBI assets to indicate whether there has been a net gain or loss of biodiversity, and use the trends identified to determine future priorities for planning and decision making.

The monitoring of success and delivery of mitigation requirements secured through planning conditions and obligations will be evaluated.

The Council will develop a plan and indicators for monitoring implementation of the GBI Strategy.

...and respond flexibly to changing priorities and opportunities as necessary

This GBI Strategy success will rely on its ability to evolve over time. Whilst the strategic framework for delivery of GBI is in place, the needs of Wiltshire are likely to change over the delivery period up to 2030 and as such, the priorities in this Strategy are also likely to change.

In this context, the GBI Strategy will be reviewed every 5 years so that progress can be checked, the **Evidence Base** updated as necessary and new priorities developed that reflect the Council's strategic direction.





Glossary

Allotments: An area of land leased from a local authority or private landlord for growing fruit and vegetables. The land may also be used to grow ornamental plants and keep hens and bees etc.

Amenity: Positive element or elements that contribute to the overall character or enjoyment of an area. For example, open land, trees, historic buildings and the inter-relationship between them, or less tangible factors such as tranquillity.

Benefits: Positive impacts for people and wildlife derived from green infrastructure and natural capital

Biodiversity: The variation among living organisms in all environments, including terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part. Includes diversity within and between species, and ecosystems.

Biodiversity net gain: Development that leaves biodiversity in a better state than before. It is also an approach where developers work with local governments, wildlife groups, land owners and other stakeholders in order to support priorities for nature conservation.

Blue infrastructure: Riverine and coastal environments, and canals and other strategic water features within a green infrastructure network

Carbon sequestration: The uptake and storage of carbon, for instance by absorption of carbon dioxide by trees and plants which then release oxygen

Climate change: The large-scale, long-term shift in weather patterns and average temperatures across the world due to the release of greenhouse gases (most notably carbon dioxide) into the air since the mid-1800s by humans – causing temperatures to rise and resulting in permanent changes to the climate, affecting people through flooding and damage to ecosystems.

Climate change adaptation: Adjustments made to natural or human systems in response to the actual or anticipated impacts of climate change, to mitigate harm or exploit beneficial opportunities

Climate change mitigation: Action to reduce the impact of human activity on the climate system, primarily through reducing the sources of, or enhance the sinks for, greenhouse gases

Community orchard: A collection of fruit trees planted among grass for the use of local residents, which provide places in which people can meet and plant/cultivate local food.

Conservation: The protection, improvement and use of natural resources in line with principles that assure the highest economic or social benefits for people and the environment

Designated biodiversity sites: International sites (Special Areas of Conservation, Special Protection Areas, and Ramsar sites), national sites (Sites of Special Scientific Interest) and locally designated sites including Local Wildlife Sites

Ecological stepping stones: Pockets of habitat that, while not necessarily connected, facilitate the movement of species across otherwise fragmented and often intensively farmed arable landscapes

Ecosystem: A dynamic community of living organisms – animals, plants, fungi and microorganisms – and their physical environment that interact as a functional unit.

Ecosystem services: The functions of the natural environment that directly or indirectly provide benefits for people. Ecosystem services include:

- **Provisioning services:** The products obtained from ecosystems, for example food, fibre and fresh water
- **Regulating services:** The benefits obtained from the regulation of ecosystem processes, for example, the regulation of climate, water, air quality, human diseases and erosion control
- **Cultural services:** The non-material benefits people obtain from ecosystems for instance through spiritual enrichment, cognitive development, recreation, and aesthetics
- **Supporting services:** Ecosystem services that are necessary for the production and maintenance of all other ecosystem services. For example soil formation and retention, nutrient cycling, water cycling, and provisioning of habitat. These services often reflect the function and condition of natural capital stock

Environmental net gain: Improving all aspects of environmental quality through a scheme or project. Achieving environmental net gain means achieving biodiversity net gain first, and going further to achieve net increases in the capacity of affected natural capital to deliver ecosystem services

Green corridor: A strip of green land that connects green areas or hubs and allows the movement and dispersal of wildlife, usually through urban landscapes. Green corridors can also be used to link housing areas to, for example, cycle networks, places of employment, town centres and community facilities, thus promoting walking and cycling.

Green infrastructure: A network of multi-functional green and blue spaces and other natural features, urban and rural, which is capable of delivering a wide range of environmental, economic, health and wellbeing benefits for nature, climate, local and wider communities and prosperity (National Planning Policy Framework, 2021)

Green (or living) wall: A vertical wall (partially) covered in greenery, often planted in soil at the base, but sometimes using wall-mounted boxes or special panels. Green walls offer several benefits such as contributing to heat retention and cooling, storm water retention and capturing pollutants.

Green roof: A vegetative roof system that hosts plants in a growing medium installed over a waterproof membrane. Green roofs can be designed as wildlife habitats and to optimise energy conservation (through insulation) and/or for aesthetic value, and can be a source of water.

Green space: Patch of vegetated land within the urban fabric ranging from pockets of amenity grassland to large parks.

Green space creation: The creation, from space that was previously not green at all, of public open space comprising areas of grass, trees and other vegetation, set apart for recreational or aesthetic purposes in an otherwise urban environment.

Green space enhancement: Improvement to existing green space to make it more attractive, safer and/or of increased biodiversity value. Better management and stewardship can often allow green spaces to flourish so that they can be enjoyed by more people.

Landscape: An area, as perceived by people, whose character is the result of the action and interaction of their natural and/or human factors (e.g. geology, landform, soils, vegetation, land use and human settlement).

Landscape-scale conservation: The pursuit of multiple benefits from enhancing nature across a defined area that make links to wider economic and social priorities (e.g. water quality, access to nature)

Mental health benefits: Connecting people to a healthy environment is a powerful tool for combatting mental health issues such as chronic stress, depression and anxiety. Access to green space, outdoor exercise and green activities, such as gardening or habitat conservation, can have positive impacts on people with mental ill health.

Multi-functionality - The ability to provide multiple functions by integrating different activities and land uses on individual sites and across a whole green infrastructure network.

Natural capital: The stock of natural ecosystems that yields a flow of valuable ecosystem goods or services, directly or indirectly, to people, including ecosystems, species, freshwater, land, minerals, the air and oceans, as well as natural processes and functions. Natural capital includes many different components of the natural environment, as well as the processes/functions that link these and sustain life.

Natural capital asset: A natural resource that provides a flow of ecosystem services and benefits over time

Natural flood management: Managing flood and coastal erosion risk by protecting, restoring and mimicking the natural 'regulating' function of catchments, rivers, floodplains and coasts.

Nature-based solutions: Actions that are inspired or supported by natural processes and which simultaneously provide environmental, social and economic benefits. Such solutions bring natural features and processes to cities, landscapes and seascapes.

Nature recovery network: 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. Includes the existing network of designated sites and priority habitats, as well as landscape or catchment scale recovery areas where there is coordinated action for species and habitats.

Open space: All open space of public value, including not just land, but also areas of water (such as rivers, canals, lakes and reservoirs) which offer important opportunities for sport and recreation and can act as a visual amenity

Park: A publicly accessible area of natural, semi-natural or planted space intended for human enjoyment and recreation and often for the protection of wildlife or natural habitats. Parks often host facilities for play and rest.

Physical health benefits: Access to green space for regular exercise can significantly reduce the impacts of cardiovascular disease and other serious health problems. Regular exercise, including walking, can reduce the negative effects of health threats such as obesity, coronary heart disease and respiratory disorders.

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

Rewilding: A form of ecological management which aims to support nature recovery by restoring natural processes that allow the natural succession of habitats and species to occur. In some cases, it may be considered necessary to reintroduce missing keystone species to re-establish natural processes.

Right Tree Right Place – ensuring the right tree is established in the right place, using the right method, for the right reasons, and with the right aftercare. This means increasing tree cover whilst protecting and enhancing what is special and valued in the landscape and keeping the environmental benefits already being delivered. New trees in the wrong locations could result in unintended negative consequences for biodiversity, landscape character and heritage assets, and also reduce resilience to climate change.

Sustainability: Meeting the needs of the present without compromising the ability of future generations to meet their own needs

Sustainable drainage system (SuDS): An approach to managing surface water run-off from rainfall close to where it falls that replicates natural drainage by slowing and holding back run-off, reducing pressure on existing piped systems and reducing risk of flooding. Where designed as vegetated/green systems, SuDS can help to moderate microclimate, benefit ecology, improve water quality and provide amenity spaces with opportunities for recreation.

Sustainable transport: Environmentally sustainable modes of travel, including walking and cycling, low and ultra-low emission vehicles, car sharing and public transport.

Swales: Linear grass covered depressions which lead surface water overland from the drained surface to a storage or discharge system, typically using road verges.

Urban tree planting: The process of planting young trees in towns and cities. As urban sites may not be the natural habitat for trees, tree choice and location are vital if trees are to grow and flourish. Planting trees in urban areas can yield many benefits in addition to their aesthetic value, such as reductions in air pollution and noise levels.

Wellbeing: The state of being happy and healthy. Being in or close to nature can reduce anger, fear, and stress and increases pleasant feelings. Exposure to nature not only make us feel better emotionally, it can contribute to our physical wellbeing, reducing blood pressure, heart rate, muscle tension, and the production of stress hormones.

Wetland creation: The creation of a distinct wetland ecosystem inundated by water, either permanently or seasonally, where aquatic vegetation thrives. Wetlands can be used for water purification, water storage, sequestration of carbon and other nutrients, the stabilisation of shorelines, and in support of unique plants and animals.

Wildlife corridor: linear features that enable migration and dispersal or otherwise act to link habitats in ways that reduce the isolation of wildlife populations.

Woodland creation: The planting of new trees to form woodland or low-density forest, providing open habitats with plenty of sunlight for inhabitants and some limited shade at ground level. It can help in urban cooling, in providing shade and shelter, in minimising run-off from fields, and in reducing the impact of flooding.

Working towards a vision for more, higher quality and better connected multi-functional green and blue infrastructure in Wiltshire...

Wiltshire Council

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