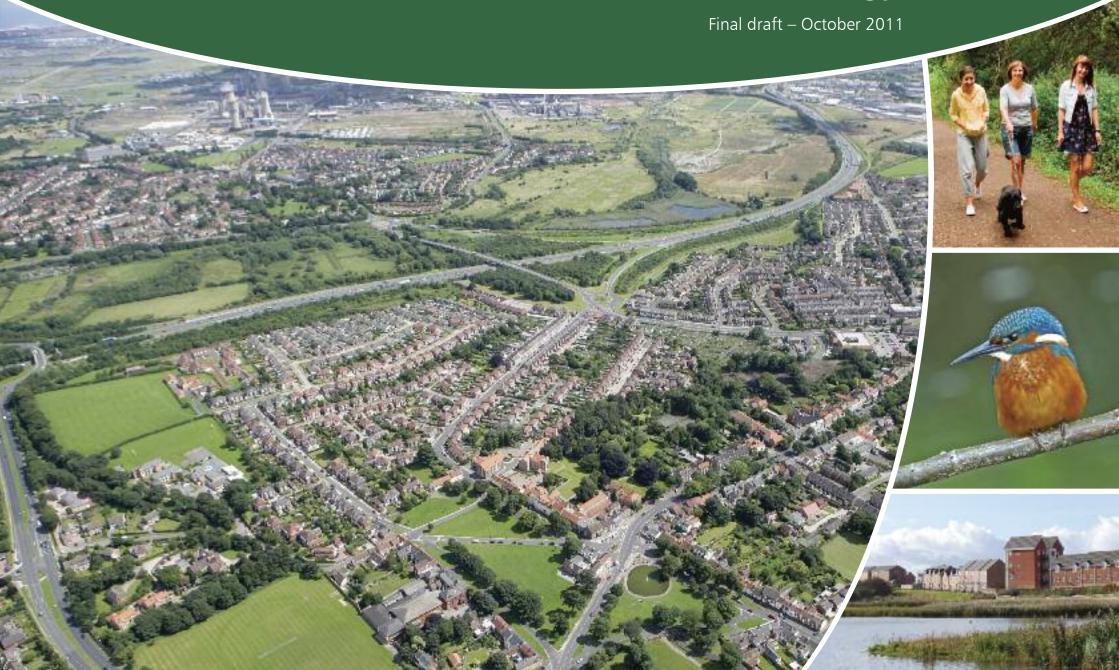


Stockton-on-Tees

Green Infrastructure Strategy





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The Strategy, accompanying Action Plan and relevant background information is available via the Stockton-on-Tees Green Infrastructure website:

http://www.stockton.gov.uk/greeninfrastructure



Foreword

What do we mean by Green Infrastructure? It may seem like a technical term but it is a part of our everyday lives. It's your favourite park, the nearby countryside, the woods where you walk the dog, the local playing fields or allotments, the cycle route to school, the tree or green space just outside your house, or even your own garden.

These may seem like incidental features but we are increasingly recognising the immense value of our green spaces, countryside, trees, rivers, streams and other environmental assets. For so many reasons they are important to us all:

- They provide places for people to relax, socialise, play and enjoy exercise.
- Attractive green environments make the Borough a place where people want to live and work. They offer attractive settings for homes and businesses and provide destinations that people want to visit.
- High quality cycle routes and footpaths encourage 'active travel' keeping us healthy and reducing our reliance on the car.
- Our countryside and green spaces are highly productive providing us with food and renewable energy.
- Trees help to ensure our streets and town centres remain cool in the middle of summer, while green spaces help to absorb the heavy rainfall that might otherwise cause flooding.
- Our urban and rural landscapes reflect our rich heritage and provide habitats for all kinds of wildlife.

In short, green infrastructure can be seen as a kind of 'life-support system' that helps to provide essential services across the Borough and which enriches the lives of us all.

However, in order to realise the full potential of the Borough's green infrastructure it must be carefully planned and well-maintained in much the same way as we manage other types of infrastructure such as roads and utilities. This Strategy provides us with a framework for doing this. It seeks to make the most of the high quality green infrastructure we already have and presents a vision for how we might develop green infrastructure networks in the future. Importantly, the Strategy shows how green infrastructure can help to address many of the current priorities for the Borough and meet future challenges, such as the need to promote economic regeneration, adapt to the impacts of climate change and tackle health inequalities.

We are very grateful to all the organisations and individuals who have contributed to the development of the Strategy and we recognise that given its very broad scope it can only be delivered with the support and active participation of residents, businesses, community groups and a wide range of partner organisations. Working together we can help to ensure that Stockton-on-Tees continues to develop as one of the greenest, healthiest and most prosperous places in the North East.

Councillor Bob Cook

Leader of Stockton-on-Tees Borough Council and Chair of Stockton Renaissance on behalf of the Stockton-on-Tees Green Infrastructure Steering Group





















Executive summary

Chapter 1: Introduction

Green Infrastructure incorporates all types of open spaces, water bodies and environmental features within and between our towns and cities. Strategically planned and well-managed green infrastructure performs many different functions which in turn deliver multiple environmental, social, health and economic benefits.

This Strategy and associated Action Plan provides a framework for the future development and management of the Borough's green infrastructure. The Strategy has been developed, and will be delivered, through a partnership approach - overseen by the Stockton-on-Tees Green Infrastructure Steering Group.

Chapter 2: Policy and strategic context

The Strategy complements the *Tees Valley Green Infrastructure Strategy (2008)*, while also addressing many of the specific Borough-wide priorities as set out in *Shaping Our Future: A Sustainable Community Strategy for the Borough of Stockton-on-Tees 2008-2021*. The emerging *Stockton-on-Tees Borough Local Development Framework* provides the spatial planning context for green infrastructure development across the Borough, and will provide the planning policy and guidance to support delivery of this Strategy.

Chapter 3: Vision and strategic objectives

Our vision is for a well-developed Green Infrastructure network covering all parts of the Borough:

- providing a diverse, rich, locally distinctive, high quality environment;
- promoting enjoyment, health and well-being;
- making a major contribution to the regeneration and long term sustainability of Stockton-on-Tees.

We will achieve this by private, public and third sector partners working together, and by helping communities to shape their local environment.

We wish to see significant improvements in the short-term, but our overall ambitions are long-term and will benefit not only those who live and work in the Borough today but also future generations.

The Strategy identifies 10 Strategic Objectives which will be tackled through the management and development of the Borough's green infrastructure, addressing many of the Borough's priorities as set out in the Borough's Sustainable Community Strategy:

- a) Promoting regeneration
- b) Addressing the impacts of climate change
- c) Improving health and well-being
- d) Promoting leisure and tourism
- e) Promoting active and sustainable travel
- f) Increasing biodiversity and conserving other natural resources
- g) Enhancing landscape and the historic environment
- h) Producing food and renewable energy
- i) Promoting awareness and lifelong learning

j) Making places safe, welcoming and accessible

Under each theme the key issues and priorities for action are identified.

Chapter 4: Developing Stockton Borough's green infrastructure network

A hierarchy of green infrastructure corridors has been identified, forming an integrated network across the whole Borough. This network comprises three tiers which will involve planning and management at different spatial scales; from the strategic Tees Valley and Borough-wide level, through to the local, neighbourhood scale:

- Primary green infrastructure network based on the sub-regional network of 17 green corridors identified in the *Tees Valley Green Infrastructure Strategy (2008)*. The Borough's primary green infrastructure network comprises those 9 corridors which are located entirely or partially within the Borough of Stockton-on-Tees.
- Secondary' green infrastructure network 15 smaller green corridors, identified through an analysis of the Borough's existing green infrastructure resource.
- **Urban and rural 'green grids'** including small-scale features such as tree avenues, hedgerows, footpaths and small open spaces. These networks are significant in a particular locality or neighbourhood, and collectively represent an important element of the Borough's green infrastructure resource.

A brief description of each primary and secondary corridor is provided.

This entire network should be developed and managed in ways which address the Strategy's 10 Strategic Objectives, and the priorities for each corridor or local 'green grid' should reflect the particular issues and opportunities in that area.

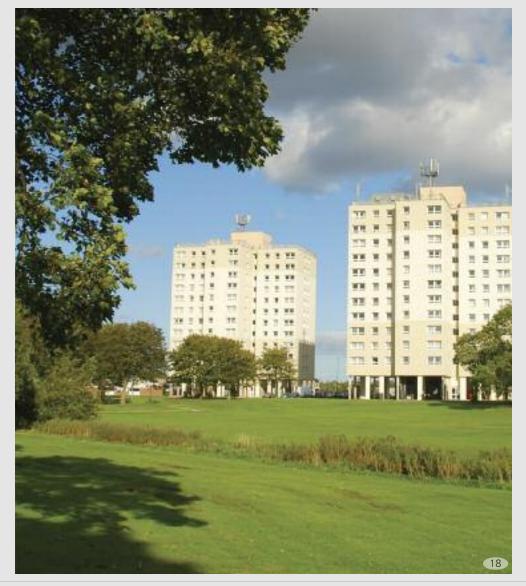
Chapter 5: Delivery

This Strategy will be delivered through coordinated action at many different levels and by drawing on a wide range of resources. This will be achieved by:

- Working in partnership across the public, private and third sectors working through Stockton Renaissance (Stockton Borough's Local Strategic Partnership) and through other existing and new partnership structures. The Stockton-on-Tees Green Infrastructure Steering Group will help to ensure a coordinated approach across key agencies and organisations.
- Promoting community participation with local people being given opportunities to put forward their views, to get actively involved in the planning and delivery of projects, and the on-going management of the Borough's green infrastructure.
- Developing and delivering a robust Action Plan which evolves over time to reflect emerging priorities and opportunities. This includes:
- Borough-wide Projects/Actions: focusing on individual green infrastructure components (such as trees and woodlands) or functions (such as flood risk management).
- Area & Site-Specific Projects: aimed at achieving an integrated approach to green infrastructure planning and delivery in a given geographical area.
- Supporting Actions/Partnership Working: providing the organisational and operational framework for delivery of the strategy.
- Delivery through other plans and strategies including the emerging Local Development Framework as well as numerous other Borough-wide plans and strategies and local neighbourhood or village plans.
- Utilising a wide variety of funding opportunities and delivery mechanisms –
 both to develop green infrastructure and to deliver long-term sustainable
 management. Various funding and delivery mechanisms have been
 identified, but new and innovative delivery mechanisms should be
 developed over time.

Chapter 6: Monitoring, evaluation and review

Measures are to be put in place to monitor delivery of the Strategy Action Plan and to evaluate the way the Strategy is being delivered and the impact it is having. This information will be used to review and revise the Action Plan on an annual basis and, in the longer term, the Strategy as a whole.





Chapter 1: Introduction

Background

- 1.1 The Stockton-on-Tees Green Infrastructure Strategy provides a framework for the future development and management of the Borough's green infrastructure. It aims to enhance our environment and to maximise the contribution it makes to people's well-being and quality of life. It also looks ahead to the challenges facing the Borough and shows how we can begin to meet some of those challenges through the way we plan and manage green infrastructure; for example, by helping to adapt to climate change and contributing to the on-going regeneration of Stockton-on-Tees.
- 1.2 The Strategy must not be seen in isolation. It complements the existing Tees Valley Green Infrastructure Strategy¹, supports delivery of the Borough's Sustainable Community Strategy², and is integrated into the emerging Stockton-on-Tees Borough Local Development Framework³.
- 1.3 The Strategy and associated Action Plan has been developed by Stocktonon-Tees Borough Council with the on-going support and involvement of the Stockton-on-Tees Green Infrastructure Steering Group and several other partners. A wide range of partners will play a part in its implementation.
- 1.4 Background information and related documents are available at: http://www.stockton.gov.uk/greeninfrastructure

¹Published in 2008 and available at: http://www.stockton.gov.uk/greeninfrastructure

²Shaping Our Future: A Sustainable Community Strategy for the Borough of Stockton-on-Tees 2008-2021: http://www.stockton.gov.uk/resources/council/sustainablecommunitystrategy/sustainablecommunitystrat.pdf

 $^{{\}it 3} http://www.stockton.gov.uk/citizenservices/planningdepartment/dev_plans/ldfhome/$

Why produce a green infrastructure strategy for Stockton borough?

- 1.5 The purpose of this Strategy is to:
 - provide a vision for the future development and management of the Borough's green infrastructure;
 - ensure that green infrastructure is planned and managed in ways which support delivery of the Stockton-on-Tees Sustainable Community Strategy;
 - identify the priorities for the future development and management of the Borough's green infrastructure and to provide a framework for delivery;



- facilitate local delivery of the Tees Valley Green Infrastructure Strategy;
- 1.6 In addition the Strategy:
 - highlights the many functions and benefits of green infrastructure, promoting wider recognition of the contribution that green infrastructure makes to quality of life, quality of place and sustainable development;
 - provides a tool to facilitate on-going engagement with partners and stakeholders – seeking broad support for the principles of green infrastructure planning and promoting delivery through partnership working;
 - will be used to help embed green infrastructure into other plans and strategies, ensuring it features as a key element in the long-term growth and development of the Borough.

What is green infrastructure?

- 1.7 The Tees Valley Green Infrastructure Strategy (2008) defines Green Infrastructure as:
 - Green or open spaces that can link together to create an informal but planned network across a wide geographical area.
 - Parks, gardens woodland, green corridors, wildlife sites, open spaces, watercourses, street trees and the open countryside.
 - Spaces that can perform a number of different functions such as formal and informal recreation, nature conservation, food protection, enhanced settings for existing and new development, routes for walkways and cycle ways, areas for flood risk management, and an educational resource.

- 1.8 Natural England adopts the following definition⁴:
 - Green Infrastructure is a strategically planned and delivered network comprising the broadest range of high quality green spaces and other environmental features. It should be designed and managed as a multi-functional resource capable of delivering those ecological services and quality of life benefits required by the communities it serves and needed to underpin sustainability. Its design and management should also respect and enhance the character and distinctiveness of an area with regard to habitats and landscape types.
 - Green Infrastructure includes established green spaces and new sites and should thread through and surround the built environment and connect the urban area to its wider rural hinterland. Consequently, it needs to be delivered at all spatial scales – regional, sub-regional, local and neighbourhood levels, accommodating both accessible natural green spaces within local communities and often much larger sites in the urban fringe and wider countryside.
- 1.9 In short, Green Infrastructure:
 - is an interconnected network of open spaces, water bodies and environmental features, and the natural systems that these support;
 - should be planned and managed in a strategic way at different spatial scales;
 - performs many different functions and delivers multiple benefits.

Green infrastructure components

- 1.10 The following can be seen as the individual 'components' or 'assets' which make up the overall green infrastructure network:
 - Amenity space
 - Green corridors
 - Brownfield sites
 - Industrial and commercial sites
 - Urban parks
 - Country parks
 - Historic parks and gardens
 - Village greens
 - Public and private gardens
 - Nature reserves
 - Natural and semi-natural habitats
 - Trees and woodlands
 - Rivers, streams and other water bodies
 - Outdoor sports pitches and playing fields
 - Children's play spaces
 - Cemeteries and churchyards
 - Allotments and community gardens
 - Orchards
 - Farmland
 - Green roofs and walls
 - · Cycleways, footpaths and bridleways
 - Archaeological sites and other heritage features
 - Civic spaces/public realm

 $^{^4} Natural\ England\ (2009),\ \textit{Green\ Infrastructure\ Guidance}:\ http://www.naturalengland.org.uk/ourwork/planningtransportlocalgov/greeninfrastructure/$

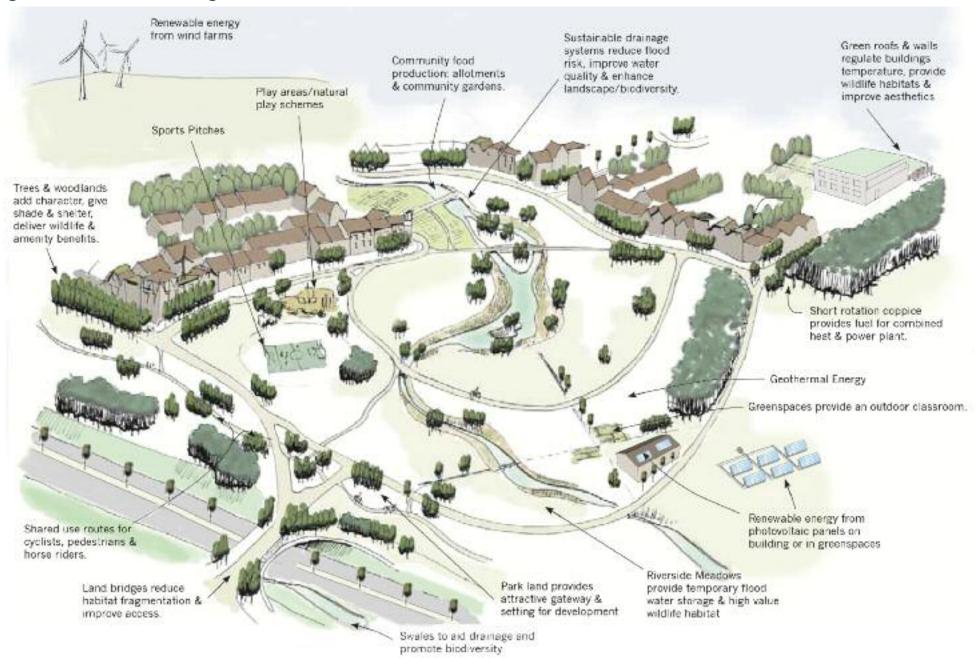
Functions of green infrastructure

- 1.11 Green infrastructure can perform a very wide range of functions, these include:
 - Active and passive recreation
 - Routes for sustainable travel
 - Social venues/meeting places
 - Venues for sports, cultural and other events
 - Outdoor environments for education and training
 - Heritage conservation
 - Wildlife conservation
 - Sustainable water management and flood alleviation
 - Settings for new development
 - Renewable energy production
 - Green produce and food production
 - A focus for community involvement and engagement
- 1.12 A well-developed green infrastructure network will perform all of these functions, as illustrated in **Figure 1**. Indeed, many individual green infrastructure components can be multifunctional. For example, an area of woodland might be a valuable wildlife habitat, a popular place for recreation, an 'outdoor classroom' and act as an important 'cooling' system during hot summers.





Figure 1: Multifunctional green infrastructure⁵



⁵Adapted from Natural England (2009), Green Infrastructure Guidance

Benefits of Green Infrastructure

- 1.13 Well-designed, appropriately located and well-managed green infrastructure can deliver numerous benefits for people, the environment and the economy⁶, including:
 - Improved image, helping to attract business and inward investment
 - Increased land values
 - Higher labour productivity
 - New and sustained business opportunities based on tourism and recreational activity
 - Improved capacity to respond and adapt to the impacts of climate change
 - Reduced flood risk
 - Improved health and well-being
 - Greater recreation and leisure opportunities
 - Enhanced landscapes
 - Increased biodiversity
 - Improved air and water quality
 - Increased local food and renewable energy production
 - Greater 'sense of place' and pride in local area
 - Education and learning
 - Reduced crime and anti-social behaviour



Ecosystem services and valuing the benefits of green infrastructure

1.14 The term 'ecosystem services' is sometimes used to describe the wide range of valuable benefits that a healthy natural environment provides for people, either directly or indirectly. The UK National Ecosystem Assessment⁷ is the first comprehensive analysis of the UK's natural environment in terms of the economic, health and social benefits it provides. The assessment provides values for a range of ecosystem services, and helps to demonstrate how important these services are to our well-being and economic prosperity and why it is essential to sustain those benefits into the future. In addition, work is on-going to develop a Green Infrastructure Valuation Toolkit⁸ to assess the potential economic and wider returns from investment in green infrastructure and other environmental improvements. By placing a monetary value on the benefits derived from the natural environment and green infrastructure this work can inform decision-making and help to justify investment in the environmental improvements and management.

Information on the benefits of green infrastructure is summarised in: Forest Research (2010). Benefits of green infrastructure. Report to Defra and CLG: http://www.forestry.gov.uk/pdf/urgp_benefits_of_green_infrastructure_main_report.pdf/\$FILE/urgp_benefits_of_green_infrastructure_main_report.pdf. In addition the following report explains how green infrastructure can underpin the success of other economic sectors: Natural Economy Northwest (2008), The economic value of green infrastructure: http://www.naturaleconomynorthwest.co.uk/resources+reports.php
Thttp://uknea.unep-wcmc.org/

 $^{{\}it \$http://www.green} in frastructurenw.co.uk/html/index.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php?page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastructureValuationToolkit=true.php.page=projects\&GreenInfrastrue.php.page=projects\&GreenInfrastrue.php.page=projects\&GreenInfrastr$



Planning and managing green infrastructure

- 1.15 Green infrastructure needs to be planned and managed as a network in a similar way to 'grey infrastructure' such as roads. This requires a strategic, long-term approach with green infrastructure planned as an integral part of new development or delivered in advance of development. Elsewhere opportunities should also be sought to create or enhance green infrastructure in existing urban and rural areas.
- 1.16 Green infrastructure should also be planned at different spatial scales, from the local or 'neighbourhood' level right up to the sub-regional scale. At the neighbourhood scale this could involve planning the local footpath network to ensure safe and convenient access to a park or play space. While at the Tees Valley scale it might mean managing a river corridor to enhance its landscape value and manage flood risk. This requires a coordinated approach where local green infrastructure components are seen as part of a wider strategic network.
- 1.17 A commitment to **long-term management and maintenance** is essential. Poorly managed green infrastructure provides few benefits and can have a negative impact on communities and the local economy.
- 1.18 Finally, green infrastructure planning requires a multi-disciplinary approach, with input needed from partners and stakeholders with an interest in a diverse range of environmental, economic and social issues.





Chapter 2: Policy and strategic context

- 2.1 The Strategy reflects emerging national policy and guidance on green infrastructure and the natural environment. For example, the Natural Environment White Paper, *The Natural Choice: Securing the Value of Nature (2011)*⁹ highlights the need for green infrastructure to complete the links in our ecological networks, as well recognising the multiple benefits of growing a green economy and strengthening the connections between people and nature.
- 2.2 A number of Borough and sub-regional plans and strategies have also informed development of the Green Infrastructure Strategy and will support its delivery. These are summarised in **Figure 2** and it is particularly important to emphasise the relationship to the following:
 - Shaping Our Future: A Sustainable Community Strategy for the Borough of Stockton-on-Tees 2008-2021¹⁰
- 2.3 This Strategy sets out the following vision for the Borough:
 - Stockton-on-Tees driving economic regeneration at the heart of a vibrant Tees Valley city region.
 - An enhanced quality of place, including renewed town centres and improved local neighbourhoods.
 - Enhanced well-being and achievement for local people.

⁹http://www.defra.gov.uk/environment/natural/whitepaper

¹⁰http://www.stockton.gov.uk/resources/council/sustainablecommunitystrategy/sustainablecommunitystrat.pdf

2.4 The Sustainable Community Strategy identifies a number of improvement themes, and green infrastructure will play an important role in addressing many of the key priorities and future challenges under each of these themes:

Core improvement themes:

- 1. Economic Regeneration and Transport
- 2. Environment and Housing
- 3. Safer Communities
- 4. Children and Young People
- 5. Healthier Communities and Adults

Supporting themes:

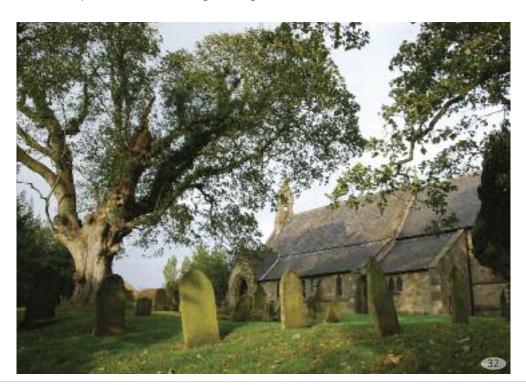
- 1. Stronger Communities
- 2. Older Adults
- 3. Arts, Leisure and Culture

Tees Valley Green Infrastructure Strategy 2008¹¹

2.5 This Strategy provides the overarching framework for strategic green infrastructure planning and management. In particular it identifies a network of strategic green infrastructure corridors across the Tees Valley; sets out priorities for each corridor; and provides a series of guidelines to inform green infrastructure planning. Further information is provided in **Chapter 4**.

Stockton-on-Tees Borough Local Development Framework (LDF)¹²

- 2.6 The LDF sets the spatial planning context for green infrastructure development across the Borough, and will provide the planning policy and guidance to support delivery of this Strategy. One of the strategic objectives under the Core Strategy Development Plan Document¹³ is to "protect and enhance the Borough's natural environment and to promote the creation, extension and better management of green infrastructure and biodiversity, taking advantage of the Borough's special qualities and location at the mouth of the River Tees". Further details on how the LDF will support delivery of the Strategy are set out in section 5.16.
- 2.7 Further information on the policy and strategic context for green infrastructure planning is available at: http://www.stockton.gov.uk/greeninfrastructure

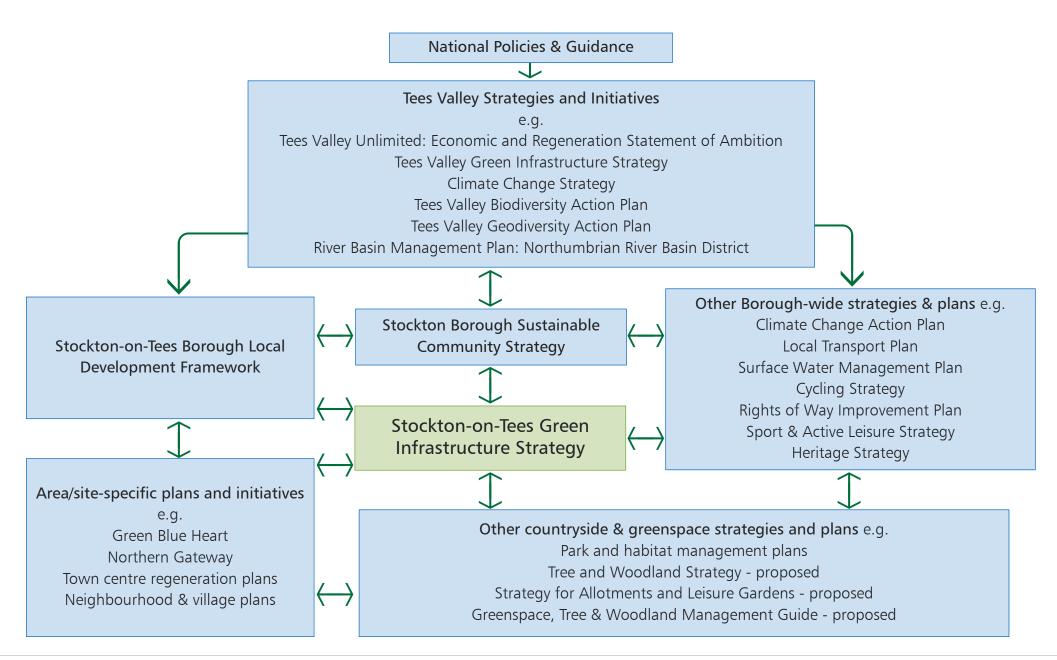


¹¹Available at: http://www.stockton.gov.uk/greeninfrastructure

¹²http://www.stockton.gov.uk/citizenservices/planningdepartment/dev_plans/ldfhome/

¹³http://www.stockton.gov.uk/resources/planning/CoreStrategy/CoreStrategyDPD2050133.pdf

Figure 2: Strategic context for green infrastructure planning and management in Stockton-on-Tees







Chapter 3: Vision and strategic objectives

Our vision is for a well-developed Green Infrastructure network covering all parts of the Borough:

- providing a diverse, rich, locally distinctive, high quality environment;
- · promoting enjoyment, health and well-being;
- making a major contribution to the regeneration and long term sustainability of Stockton-on-Tees.

We will achieve this by private, public and third sector partners working together, and by helping communities to shape their local environment.

We wish to see significant improvements in the shortterm, but our overall ambitions are long-term and will benefit not only those who live and work in the Borough today but also future generations.

Strategic Objectives

- 3.1 As a first step towards achieving this Vision we need to understand the characteristics of the Borough's existing green infrastructure resource; its key assets and any emerging opportunities to enhance or extend the green infrastructure network. We should also take into account wider environmental, social, health and economic issues and consider how green infrastructure can help to address some of main challenges facing the Borough.
- 3.2 In the remainder of this chapter these issues are explored in more detail, under 10 broad themes or 'Strategic Objectives':

a) Promoting regeneration (pages 24-25)



b) Addressing the impacts of climate change (pages 26-27)



c) Improving health and well being (pages 28-29)



d) Promoting leisure and tourism (pages 30-31)



e) Promoting active and sustainable travel

(pages 32-33)



f) Increasing biodiversity and conserving other natural resources (pages 34-35)



) Promoting awareness and lifelong learning (pages 40-41)



g) Enhancing landscape and the historic environment (pages 36-37)



j) Making places safe, welcoming and accessible (pages 42-43)



h) Producing food and renewable energy (pages 38-39)



- 3.3 All actions which stem from this Strategy should focus on achieving one or more of these Strategic Objectives, which in turn reflect many of the local priorities and aspirations identified in the Borough's Sustainable Community Strategy (see 2.3 & 2.4).
- 3.4 By addressing these objectives in an integrated way the Strategy will contribute towards the future sustainable development of the Borough. Importantly, progress made under any one theme will help to drive improvements elsewhere. In this way the Strategy will help to create a virtuous circle which supports, drives and sustains regeneration, with a greener environment leading to increased inward investment and greater community participation and 'ownership', which in turn will help to deliver further improvements into the future.



a) Promoting regeneration

Why is it important?

- 3.5 Tees Valley Unlimited's Economic and Regeneration Statement of Ambition (2011) identifies two overarching aspirations for the Tees Valley: to drive the transition to a high value low carbon economy, and to create a more diversified and inclusive economy. The Statement recognises that "efforts to promote economic growth must be matched by a continued improvement in the Tees Valley's quality of place" 14, so that it appeals to prospective workers, residents and visitors; helps to further increase investor confidence; and provides attractive settings for new development. Development and effective management of green infrastructure will play a fundamental role in achieving this 15, as well as directly supporting the development of a low carbon economy; for example, through local food and renewable energy production and measures which help to reduce our carbon footprint.
- 3.6 Provision of green infrastructure will make a major contribution to the quality and sustainability of those sites and areas already identified as priorities for regeneration within Stockton-on-Tees (Map 1). This includes the 'Core Area' of the Borough (the River Tees corridor, central Stockton and its gateways), as well as other town centres and sites allocated for new housing¹⁶. But in all areas well managed green infrastructure helps to create a powerful first impression and provides a range of 'ecosystem services' which will improve quality of life for all and underpin sustainable development.

http://www.teesvalleyunlimited.gov.uk/documents/Statement%20of%20Ambition.pdf

¹⁶Stockton-on-Tees Borough Council (2010), *Stockton-on-Tees Borough Local Development Framework: Core Strategy Development Plan Document*

¹⁴Tees Valley Unlimited (2011), *Economic and Regeneration Statement of Ambition* - which sets out our vision for the Tees Valley for the next 15 years, taking forward the work of the *Tees Valley Vision (2002)* and the *City Region Business Case (2006)*:

¹⁵Natural Economy Northwest (2008), *The economic benefits of Green Infrastructure: the public and business case for investing in Green Infrastructure and a review of the underpinning evidence:* http://www.naturaleconomynorthwest.co.uk/resources+reports.php - highlights the importance of environmental factors in promoting regeneration, maintaining staff productivity and retaining high calibre staff.

What we need to do

- Harness development to extend and enhance the Borough's green infrastructure network. Delivery of high quality, multi-functional green infrastructure through major regeneration projects and programmes will provide attractive settings for new development, improve the Borough's town centres, enhance image and contribute to long-term sustainability.
- Provide guidance to developers on provision of green infrastructure.
- Create and maintain attractive green approaches and gateways along major transport corridors such as the A66 and A19 and at other strategic locations, improving the image of the Borough and creating an enhanced 'sense of place'. This may include the development of 'green ribbons' or 'linear parks', comprising attractive, multi-functional landscapes.
- Remediate and utilise areas of derelict and under-used land through a green infrastructure approach; integrating these sites with new built development and recognising the biodiversity value of some existing brownfield sites. This may include temporary 'greening', for example, through the production of energy crops.



Map 1: Major regeneration and housing areas

- 1 Hotel & Executive Housing
 - 2 Billingham Town Centre
 - 3 Peacocks Yard
 - 4 Hardwick
 - 5 Swainby Road
 - 6 Queens Park North

 - 7 White Water Glade
 - 8 North Shore
 - 9 Victoria Estate
 - 10 Stockton Town Centre

- 11- Parkfield Phase 2
- 12 Southern Gateway
- 13 Parkfield Phase 1
- 14 Boathouse Lane
- 15 Kvaerner/Kingsmoor
- 16 Visqueen Site/Queensgate
- 17 Bowesfield North
- 18 Mandale
- 19 Allens West
- 20 Sandhill



b) Addressing the impacts of climate change

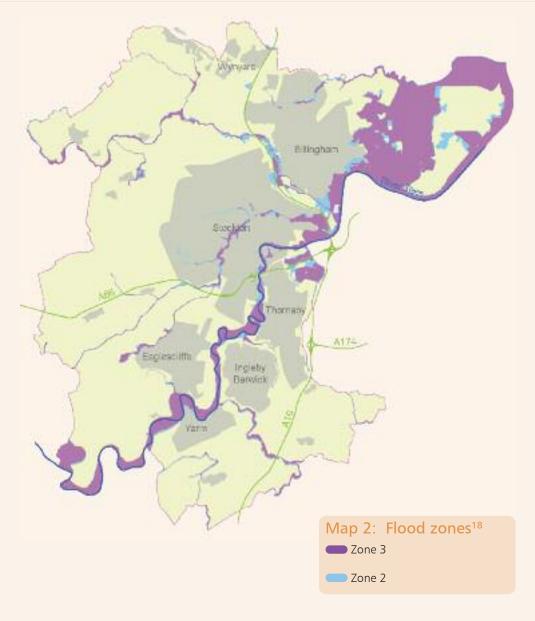
Why is it important?

- 3.7 Climate change is likely to result in hotter, dryer summers and wetter, milder winters¹⁷, together with a probable increase in the number and extent of extreme weather events such as flooding (from rivers, sea and land), storms, droughts and heat waves. These changes will have significant impacts: on our everyday lives, on people's health, the local economy and the environment.
- 3.8 Green infrastructure will play a vital role in adapting to and mitigating the impacts of climate change. For example, by incorporating measures which will help reduce flood risk (the Borough's flood zones are shown in Map 2); by moderating high summer temperatures through the provision of tree cover and areas of open water; and enabling biodiversity to better adapt to climate change.
- In addition green infrastructure can contribute in a small way to reducing the emissions which cause climate change. These are covered elsewhere in this Strategy, but include measures to encourage sustainable travel and increase renewable energy production.

¹⁷The Tees Valley Climate Change Strategy 2006-2012 states that: "In the North East a 0.5°C to 1°C increase in annual temperature is expected by the 2020s, rising to 1.5 to 2.5°C by the 2050s. We could also experience up to 20% more winter rainfall and 30% less summer rainfall. Sea level along the Tees Valley coastline could rise by up to 20cm by 2020, leading to a greater risk of coastal erosion and flooding". More information available at: http://www.stockton.gov.uk/resources/techsvcs/envkway/dlcchange/TVCCAP.pdf

What we need to do

- Design and manage green infrastructure to deliver sustainable water management and reduce the risk of flooding, especially within the River Tees corridor and major urban watercourses such as Lustrum Beck. Measures might include the following, many of which can deliver additional landscape, biodiversity, recreational and amenity benefits:
 - river restoration projects including the reinstatement of functional flood plains and 'de-culverting' of watercourses where appropriate;
 - creation of new wetlands and other flood storage areas;
 - increased use of Sustainable Drainage Systems (SUDs) to reduce surface water runoff and to provide areas to store water and allow infiltration
- Achieve a net gain in tree canopy cover and support other types of urban greening (such the introduction of green roofs and green walls) with the aim of reducing surface water run-off, providing shade and moderating urban temperatures.
- Create more areas of open water in urban areas to increase cooling.
- Adopt measures which help to ensure the natural environment, including wildlife and habitats, is resilient in the face of climate change.
- Review the design and maintenance of green spaces, including sports pitches and parks, to take account of the likely impacts of climate change.



¹⁸Data provided by the Environment Agency. These maps provide an indication of the likelihood of flooding from rivers and the sea, assuming there are no flood defences. Land within Flood Zone 2 (Medium Probability) has been assessed as having between a 1 in 100 and 1 in 1000 annual probability of river flooding, or between a 1 in 200 and 1 in 1000 annual probability of sea flooding in any year. Land in Flood Zone 3 (High Probability) has been assessed as having a 1 in 100 or greater annual probability of river flooding or a 1 in 200 or greater annual probability of flooding from the sea in any year.



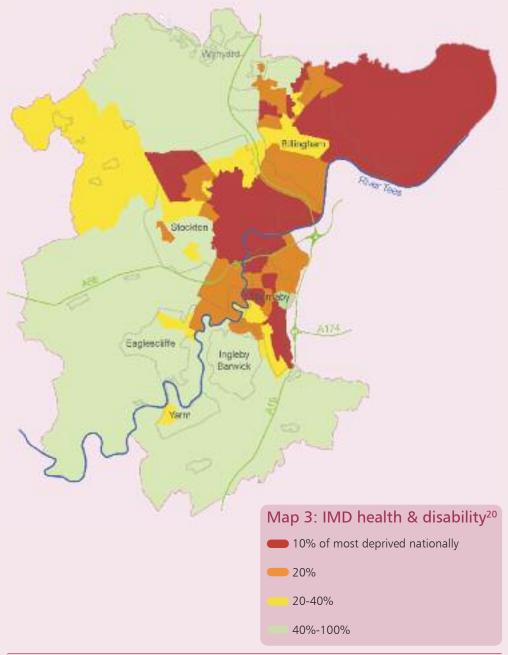
c) Improving health and well-being

Why is it important?

- 3.10 Some serious health inequalities exist within Stockton-on-Tees, resulting in life expectancy in some wards being 10 years lower than elsewhere in the Borough. Indeed there is an almost continuous gradient in health inequalities from many of the rural and suburban areas of the Borough to the more deprived areas closer to central Stockton, Billingham and Thornaby (Map 3). For example, 50% more people have a long-term illness in Hardwick compared to Yarm, while locally there are also "some very marked differences in risks to health and health outcomes between adjacent communities" 19.
- 3.11 There is a strong commitment to measures which will prevent ill-health and encourage residents to live more healthy lifestyles, especially in those areas of the Borough with poorer health records. Providing access to safe, good quality greenspaces and path networks, together with those specific facilities and activities which enable people to participate in physical exercise, will make a positive contribution to addressing local health inequalities; for example, by reducing levels of obesity and improving mental health and emotional well-being.

What we need to do

- Provide accessible, attractive and stimulating green environments which encourage people to lead healthy lifestyles and contribute towards mental well-being. This includes both 'active environments' and spaces for relaxation and quiet enjoyment of the outdoors.
- Ensure people across the Borough have easy access to outdoor spaces for formal/informal sport, recreation and play.





d) Promoting leisure and tourism

Why is it important?

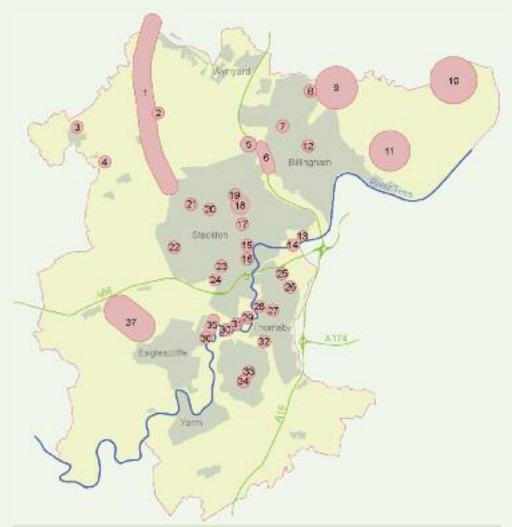
- 3.12 Over the past decade tourism has proved a growth area for the Tees Valley²¹ and continues to make an important contribution to economic regeneration. The outdoors represents an important part of the tourism offer and, as demonstrated by RSPB Saltholme, has the potential to create new jobs and generate business for local service providers. In addition, research has shown that different forms of outdoor recreation already constitute the most popular form of leisure activity amongst local residents²².
- 3.13 The Borough already has a number of excellent parks and other high-quality outdoor destinations which are popular with visitors and residents alike (Map 4), many of which (such as the River Tees, Tees Barrage, Stockton Riverside and Preston Park) also provide excellent venues for major outdoor events including the hugely popular Stockton International Riverside Festival. The further development and promotion of these destinations will make the Borough an even better place to live and to visit; providing great places to enjoy often at little or no cost.
- A green infrastructure planning approach will help to ensure spaces and facilities are planned in a coordinated way, avoiding duplication, improving access and connectivity and ensuring that development of these destinations takes account of their wider environmental setting. By working together, partners can also ensure destinations are managed and marketed in a co-ordinated way to maximise benefits for users and the local economy.

 $^{^{21}}$ Tees Valley Unlimited (2009): State of the Tees Valley - noted an increase of over 30% in both visitor numbers and spending since 2003

 $^{^{22}}$ NWA Social & Market Research/Stockton-on-Tees Borough Council (2008): Sport, Recreation and Leisure Survey

What we need to do

- Develop and promote key areas as destinations for nature/activity-based tourism and recreation, utilising existing sites as 'hubs', enhancing connectivity and improving facilities for visitors:
 - River Tees Corridor providing greater opportunities for land and river-based recreation, including the delivery of the River Tees Heritage Park and the further development of sport and leisure facilities at locations such as the Tees Barrage.
 - North Tees area incorporating RSPB Saltholme, sites such as
 Teesmouth National Nature Reserve, Cowpen Bewley Woodland
 Park and Charlton's Pond. This area offers great opportunities for
 nature-based tourism and recreation.
 - Wynyard to Ingleby Barwick corridor incorporating the Castle Eden Walkway (National Cycle Network Route 1), Wynyard Woodland Park, Ropner Park, Six Fields & Brick Ponds, and Preston Park.
 - Stockton to Darlington Corridor including National Cycle Network Route 14 and Coatham Wood.
 - Billingham Beck and Thorpe Beck corridors incorporating Billingham Beck Valley Country Park and the wider countryside west of Billingham and north of Stockton/Norton.
- Build on the Borough's strong track record in the development and management of urban and country parks, further improving the quality of these destinations, the range of facilities available to visitors and maximising their use as venues for events and activities.
- Encourage partnership working between the public, private and third sector to ensure nature-based and activity-based tourism and recreation benefit local communities and the local economy (e.g. providing opportunities for local accommodation and transport providers, and catering and retail sectors).



Map 4: Parks and other destination sites

١	1 – Wynyard Woodland Park	14 - Tees Barrage
,	2 – Thorpe Wood LNR	15 -Stockton Riverside
	3 – Stillington Forest Park LNR	16 - Trinity Green
	4 – Honey Pot Wood	17 - Primrose Hill Park
	5 – Gravel Hole Nature Reserve	18 - Great North Park
	6 - Billingham Beck Valley Country Park	19 - Norton Grange Marsh LNR
	7 – John Whitehead Park	20 - Newham Grange Park
	8 - Daffodil Park	21 - Hardwick Dene & Elm Tree Wood
	9 – Cowpen Bewerly Woodland Park	LNR
	10 – Teesmouth NNR	22 - Greenvale LNR
	11- RSPB Saltholme	23 - Ropner Park
	12 - Charlton's Pond LNR	24 - Six Fields & Brick Pond

13 - Portrack Marsh Nature Reserve 25 - Harewood Pleasure Gardens

14 - Tees Barrage 26 - Littleboy Park
15 - Stockton Riverside 27 - Village Park
16 - Trinity Green 28 - Black Bobby's Field LNR
17 - Primrose Hill Park 29 - Bassleton Wood & The Holmes
18 - Great North Park LNR
19 - Norton Grange Marsh LNR 30 - Preston Farm Wetlands
20 - Newham Grange Park 31 - Bowesfield Nature Reserve
21 - Hardwick Dene & Elm Tree Woods 32 - Thornaby Wood
LNR 33 - Romano Park
22 - Greenvale LNR 34 - Barwick Pond LNR
23 - Ropner Park 35 - Quarry Wood LNR
24 - Six Fields & Brick Pond 36 - Preston Park

37 - Coatham Wood



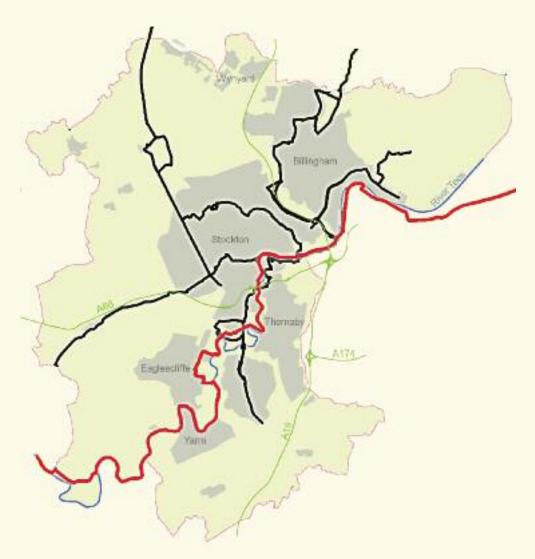
e) Promoting active & sustainable travel

Why is it important?

- Reducing the rate of traffic growth and promoting active and sustainable travel are important priorities for the Borough; together this will help to limit carbon emissions, reduce traffic congestion and promote healthy exercise. We can help to achieve these objectives by encouraging greater use of our footpath, cycleway and bridleway networks. In addition, by enhancing and expanding those access networks we can also support the continued development of activity/nature-based tourism and recreation across the Borough.
- The Borough's strategic access routes are shown on Map 5, and in combination with a much more extensive network of local paths these can be used for everyday journeys to work, to school, or to the shops, as well as providing opportunities for recreational walking, cycling, walking and horse-riding. However, further work can be done to address significant 'gaps' in these access networks, to enhance the quality of some routes, and improve public knowledge of path networks. Improving connectivity with public transport is also important, particularly since around 29% of households in the Borough do not have a car.

What we need to do

- Develop, market and maintain a network of strategic, high quality routes for walking, cycling and horse-riding, Where possible these should serve the key parks and 'destination sites' identified on Map 4 and will contribute towards the development of nature/activity-based tourism and recreation.
- Develop a series of promoted trails for walking, cycling and horseriding. These should include both linear and circular routes, and may
 incorporate interpretation, public art and other environmental
 improvements. As well as the creation of new trails, existing routes
 such as the Teesdale Way and the Eight Bridges Way should be
 promoted and enhanced where possible.
- Carry out targeted local improvements to footpaths, cycleways and bridleways - improving accessibility and addressing significant gaps in the access network.
- Create new and improved connections with public transport, enhancing access to path networks and major destinations, e.g. connections to rail and bus services and any future developments such as a possible river taxi service on the River Tees.
- Ensure new road construction or highway improvement schemes make provision for 'active travel' routes.



Map 5: Strategic access routes

- —— National Cycleway Network & Other Selected Cycle Routes
- Teesdale Way



f) Increasing biodiversity and conserving other natural resources

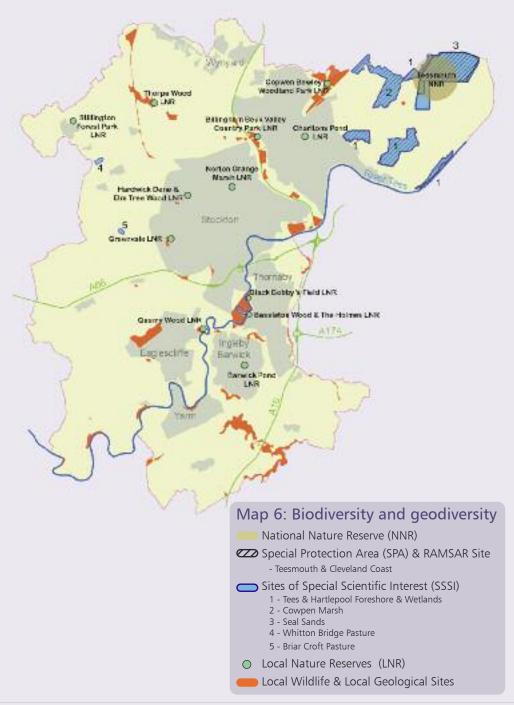
Why is it important?

- 3.17 Biodiversity and other natural resources such as air, water and soils are essential to us all, providing our basic life support system. Maintaining and enhancing the quality of these natural environmental assets is essential for long-term sustainability.
- 3.18 Stockton-on-Tees has a rich and diverse natural environment, ranging from the internationally and nationally significant habitats around the Tees Estuary to small Local Nature Reserves in the heart of the Borough's towns. Several Local Wildlife/Geological Sites have also been identified²³ (Map 6). In addition numerous rural and urban environments provide essential habitats for wildlife, including: farmland, parks and amenity areas, industrial sites, churchyards, transport corridors, cemeteries, school grounds, gardens and allotments.
- 3.19 Through effective green infrastructure planning and management local wildlife habitats will be conserved and extended; the quality of our rivers, streams and other environmental resources can be improved; and other features such as geodiversity sites conserved. We can also harness the full potential of natural systems to provide essential 'ecosystem services'; for example, utilising trees to improve local air quality and enriching our lives through increased access to nature.

²³In 2011 there were 12 Local Nature Reserves in the Borough and a total of 57 Local Sites

What we need to do

- Contribute towards targets for locally occurring priority habitats and species identified in the Tees Valley Biodiversity Action Plan²⁴. This includes measures which reduce habitat fragmentation; for example, through the creation, extension and restoration of priority wildlife habitats, and maintaining a network of wildlife corridors in urban and rural areas.
- Conserve and enhance the Borough's designated wildlife and geological sites through the implementation of agreed management plans
- Highlight the wildlife value of non-designated sites, including current and post-industrial sites, business premises, farmland, private gardens and urban open space, and encourage measures which conserve and enhance biodiversity.
- Maintain and improve the condition of water bodies across the Borough, contributing to targets set out in the River Basin Management Plan for the Northumbria River Basin District²⁵.
- Improve air quality by reducing pollution and mitigating its impacts, for example through maintaining and increasing tree cover.



²⁴Tees Valley Biodiversity Partnership: *Tees Valley Biodiversity Action Plan:* http://teesvalleybiodiversity.org.uk/tees-valley-biodiversity-action-plan/

²⁵Environment Agency (2009), Water for Life & Livelihoods – River Basin Management Plan: Northumbria River Basin District: http://wfdconsultation.environment-agency.gov.uk/wfdcms/Libraries/Northumbria_Main/Main%20document.sflb?download=true. The plan has been prepared under the European Union Water Framework Directive which sets a target of aiming to achieve at least 'good status' in all water bodies by 2015. However, provided that certain conditions are satisfied, in some cases the achievement of good status may be delayed until 2021 or 2027.



g) Enhancing landscape and the historic environment

Why is it important?

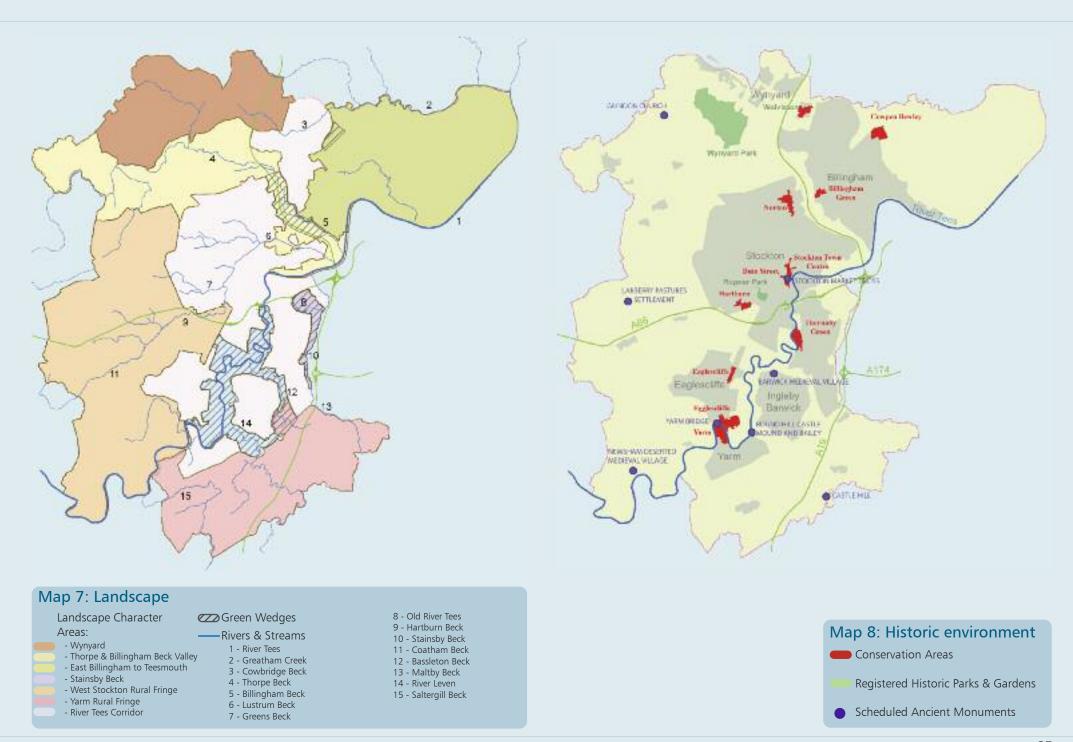
- Stockton-on-Tees has a diversity of landscapes²⁶ and a rich built and cultural heritage (Maps 7 & 8). Combined with the Borough's natural heritage, it is to a large extent these characteristics which make the Borough distinctive, creating a real 'sense of place' for those who live or work here, and making it an attractive place to visit.
- 3.21 Green infrastructure planning and management should seek to strengthen landscape character, and conserve and enhance cultural and heritage features which are currently not fully recognised or valued²⁷. This includes everything from ancient archaeological sites to the area's recent industrial heritage. There is also a need in some parts of the Borough to focus attention on those degraded landscapes which detract from people's quality of life and create a negative image.

What we need to do

- Conserve local landscape character and identify, enhance, promote and interpret those landscape features which are locally valued and unique to the Borough.
- Contribute to the conservation, enhancement and interpretation of the Borough's historic environment through a green infrastructure planning approach.
- Tackle issues of poor landscape quality through landscape restoration projects or the creation of new, contemporary landscapes.

²⁶WYG/Stockton-on-Tees Borough Council (2010), *Stockton-on-Tees Landscape Character Assessment* - divides the Borough into seven Landscape Character Areas, i.e. areas of land that demonstrate consistent landscape patterns or attributes. These incorporate 197 much smaller Landscape Units.

²⁷In line with the objectives of the *Stockton-on-Tees Heritage Strategy*, Stockton Borough Council (2011): http://www.stockton.gov.uk/resources/council/heritagestrategy/heritagestrategy.pdf



h) Producing food and renewable energy

Why is it important?

- 3.22 Sustainable food and energy production will make an important contribution to the future regeneration of the Borough, and can deliver many social and environmental benefits. This is particularly significant given that approximately half of the Borough is farmed, and that domestic gardens and allotments represent a significant proportion of our towns and villages. Other potentially productive land includes brownfield sites and other urban greenspace.
- 3.23 Maintaining a profitable and sustainable local agricultural sector is vitally important for the local economy. Meanwhile local food production of all kinds can have a wide range of environmental, social and health benefits: helping to reconnect people to their local environment, reducing 'food-miles' and encouraging healthy eating.
- 3.24 There are also significant local opportunities to utilise countryside and greenspace for the production of renewable energy, for example, through the production of biomass, wind, and solar power all potentially contributing to national targets for 20% of electricity to come from renewable sources by 2020²⁸. Perhaps most significantly the current and future development of new biomass-fed power plants and heating systems in the Tees Valley is likely to provide a growing local market for energy crops.

²⁸UK Renewable Energy Strategy 2009:

 $http://www.decc.gov.uk/assets/decc/What\%20we\%20do/UK\%20energy\%20supply/Energy\%20mix/Renewable\%20energy/Renewable\%20Energy\%20Strategy/1_20090717120647_e@@_TheUKRenewableEnergyStrategy2009.pdf$

What we need to do

- Support a sustainable food and farming sector within the Borough, contributing to a strong rural and urban economy, maintaining and enhancing the quality of the local environment and delivering wider social benefits.
- Encourage food producers to market produce locally through retailers, high street and 'farmers' markets, and direct from the farm
 thus reducing food miles, promoting healthy eating, and bringing about wider educational and social benefits; e.g complementing other rural or farm-based leisure activities and improving the public's understating of food and farming.
- Promote community food production and deliver wider social, educational and environmental objectives through the provision of allotments and other community-based schemes.
- Utilise green space, countryside and brownfield sites for the production of energy crops and for the appropriate development of renewable energy infrastructure - where sustainable supply chains can be established and where compatible with other uses and landscape and biodiversity objectives.





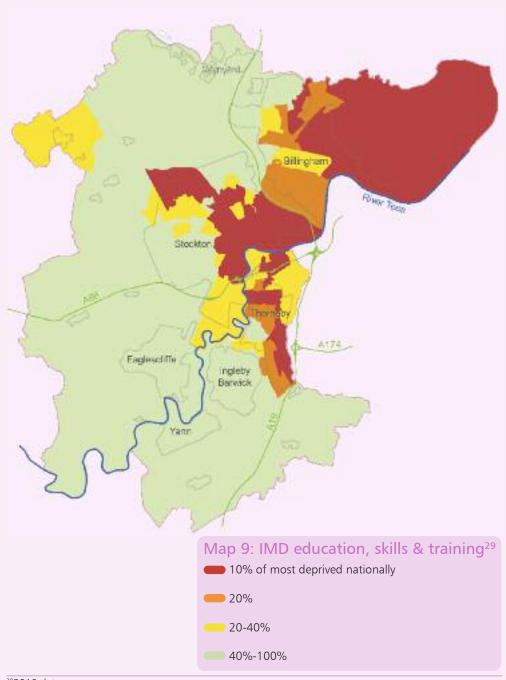
i) Promoting awareness and lifelong learning

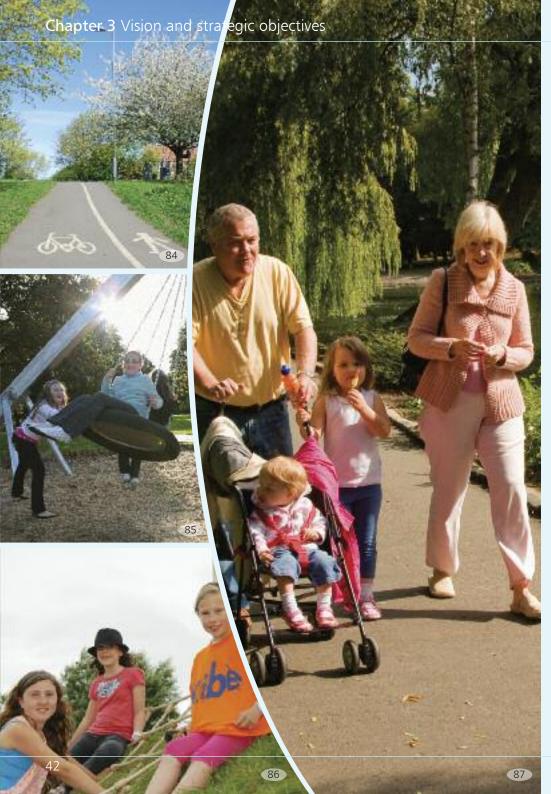
Why is it important?

- 3.25 Many people are keen to learn more about their local environment, and increased awareness and understanding helps to engender a greater sense of local pride and community 'ownership'. This often represents the first step towards increased public involvement and participation. While in some cases changing people's attitudes to the local environment may be as important as changing the environment itself
- The outdoor environment can also be used for a variety of educational and training activities for people of all ages, potentially helping to increase educational attainment and develop young people's and adult skills across the Borough (Map 9). The 'outdoor classroom' offers a stimulating learning environment across all areas of the curriculum, while for young people and adults a variety of skills can be developed through the management and enhancement of green infrastructure. This might be achieved through structured training courses or more informal volunteering programmes. Skills and confidence gained will increase employability and help individuals and communities take a more active role in caring for their local environment.

What we need to do

- Provide opportunities for people of all ages and backgrounds to access and learn about the Borough's natural environment and heritage through education and interpretation, maximising the use of new technologies as appropriate.
- Promote awareness and understanding of the importance green infrastructure.
- Provide the infrastructure and support which encourages the use of greenspace and countryside as an 'outdoor classroom' for all kinds of educational activities – not just those related directly to the environment.
- Promote an integrated approach to environmental education within the Borough through joint-working between organisations.
- Deliver training and volunteer programmes linked to green infrastructure projects and management





j) Making places safe, welcoming and accessible

Why is it important?

- 3.27 Greenspaces play a significant role in our everyday lives, providing places where children can play, friends meet and areas for relaxation, sport and events. Safe, welcoming and attractive greenspaces will encourage high levels of use, which in turn helps to reduce any incidences of anti-social behaviour. More generally, well-maintained green infrastructure in the form of local 'green grids' enhances our neighbourhoods and provides everyone with easy access to greenspace.
- Recent investment in the Borough's parks and greenspaces has resulted in increased levels of satisfaction amongst local residents³⁰. However, more can be done to make our greenspaces more socially inclusive and to overcome the barriers which discourage use. This may be due to a fear of crime or anti-social behaviour; poor management or maintenance; a lack of information and awareness; or because these spaces do not cater for the specific needs of different people, whether they be children and young people, minority ethnic groups, disabled users or older people³¹. Influencing perceptions and attitudes may be as important as changing the places themselves.

³⁰The Council's IPSOS MORI data shows a significant improvement in satisfaction with parks and open spaces in recent years with satisfaction of 76% 2008. Source: Stockton-on-Tees Borough Council (2009), Community Cohesion Strategy for Stockton-on-Tees, 2009-2012:

http://www.stockton.gov.uk/resources/council/communitycohesion resources/comcost ratact 2009 20. doc.

³¹In Stockton-on-Tees the population of those aged 85 years and over is projected to increase by 187.9% from 2008 to 2033. This is a projected increase of 6,200 people aged 85 and over by 2033. Source: Office for National Statistics.

What we need to do

- Design and manage greenspaces to meet the current and future needs of all users, including children and young people, minority ethnic groups, disabled users and the growing proportion of older adults in our communities. Ideally it should be possible to use spaces flexibly to serve many individual needs.
- Improve safety and security, and help to minimise conflict, through good design and appropriate management of green infrastructure.
- Create and maintain local networks of high quality green infrastructure or 'green grids', incorporating parks, green spaces, street trees and other types of urban greening.







Chapter 4: Developing Stockton Borough's green infrastructure

- 4.1 This chapter sets out a vision for a Borough-wide green infrastructure network, which through effective planning and management can address the 10 Strategic Objectives outlined in **Chapter 3**. The network comprises a tiered hierarchy of green corridors and river corridors:
 - Primary green infrastructure network based on the sub-regional network of 17 green corridors identified in the Tees Valley Green Infrastructure Strategy 2008. The Borough's primary green infrastructure network comprises those 9 corridors which are located entirely or partially within the Borough of Stockton-on-Tees³².
 - Secondary' green infrastructure network 15 smaller green corridors, identified through an analysis of the Borough's existing green infrastructure resource.
 - **Urban and rural 'green grids'** including small-scale features such as tree avenues, hedgerows, footpaths and small open spaces. These networks are significant in a particular locality or neighbourhood, and collectively represent an important element of the Borough's green infrastructure resource.
- 4.2 The primary and secondary network is shown in **Map 10**. It can be thought of as the Borough's strategic green infrastructure network, with the corridors having been identified on account of their scale; their

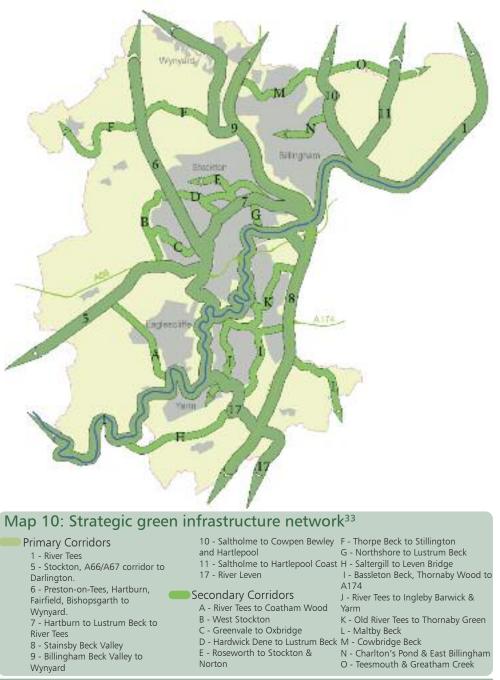
³²For further details of the Tees Valley strategic green infrastructure network see pages 51-55 of the *Tees Valley Green Infrastructure Strategy 2008*, available at: http://www.stockton.gov.uk/greeninfrastructure

current (and potential) importance for public access and outdoor recreation; or their significance in terms landscape, heritage, hydrology or ecology. They incorporate the Borough's major regeneration sites (identified in Map 1) and key green infrastructure components and assets (identified in Maps 4, 5, 6, 7 & 8). This includes 'destination sites' such as major parks, nature reserves and other large green spaces (Map 4). These can be seen as the 'hubs', linked by the wider network of green/wildlife corridors, watercourses, cycleways, footpaths and bridleways.

- 4.3 In the future both the strategic green infrastructure network and local urban and rural green grids should be protected, enhanced and extended by:
 - Safeguarding existing green infrastructure components/assets
 - Improving the quality and, where appropriate, increasing the multifunctionality of existing green infrastructure
 - Creating new high-quality green infrastructure delivering benefits in itself and helping to create a more integrated, well-connected green infrastructure network

This will involve planning and management at different spatial scales; from the strategic Tees Valley and Borough-wide level, through to the local, neighbourhood scale.

4.4 The following sections provide a brief description of each primary and secondary corridor. It should be noted that these corridors include a mosaic of land uses, usually comprising both private and publicly owned land. The inclusion of any land within these corridors does not necessarily imply there is currently public access or that such access would be sought in the future.



³³Noted that the numbering of the primary corridors is not sequential since they are derived from a total of 17 corridors identified across the Tees Valley in the Tees Valley Green Infrastructure Strategy 2008.

Primary green infrastructure network³⁴

Corridor 1 River Tees



Corridor 5 Stockton, A66/A67 corridor to Darlington



Incorporates rural landscapes in the west, urban and urban fringe areas around Stockton and Thornaby, and industrial landscapes around the Tees Estuary.

Major regeneration initiatives planned around Bowesfield, central Stockton, Northshore and the Green Blue Heart.

The area between Yarm and Stockton has been designated as the Tees Heritage Park.

The river is popular for watersports and other recreational activities. Riverside routes include the Teesdale Way and Eight Bridges Way, although there is restricted access in some areas. Some areas at risk of flooding.

³⁴Numbering is consistent with that used in the Tees Valley Green Infrastructure Strategy 2008

rail routes and Durham Tees Valley Airport.

Incorporates the recently established Coatham Wood, National Cycle Network Route 14 and sections of the former Stockton-Darlington Railway.

Includes the villages of Long Newton and Elton.

Corridor 6Preston-on-Tees, Hartburn, Fairfield, Bishopsgarth to Wynyard

Corridor 7
Hartburn to Lustrum Beck to River Tees



Corridor based largely on the existing Castle Eden Walkway (part of National Cycle Network route 1). Incorporates Wynyard Woodland Park and links this to Thorpe Thewles and the residential areas of west Stockton.

Corridor also includes other important destination sites: Ropner Park, the Six Fields & Brick Ponds and Preston Park.

Urban river corridor centred on Lustrum Beck, which flows from Hartburn and through Grangefield, Newtown, Primrose Hill, Tilery and Portrack, where it joins the River Tees

Incorporates some important local greenspaces and the Northern Gateway area – a focus for a number of regeneration initiatives to the north of central Stockton.

Some areas adjacent to the river are at risk of flooding.

Corridor 8 Stainsby Beck Valley

A19 road corridor.

Corridor 9 Billingham Beck Valley to Wynyard



Urban fringe river corridor running along the Stockton-Middlesbrough boundary and incorporating part of the

Includes woodlands and other greenspaces alongside Stainsby beck and important inter-tidal habitats along the Old River Tees near Teesside Retail Park, including mudflats and salt marsh.

Corridor linking the River Tees to the countryside to the west and north-west of Billingham and incorporating part of the A19 road corridor.

Includes Billingham Beck Valley Country and Gravel Hole Nature Reserve and other Local Wildlife sites. Extends into the historic parkland at Wynyard. Incorporates part of the National Cycle Network and an extensive network of public rights of way.

Corridor 10 Corridor 11 Corridor 17 Saltholme to Cowpen Bewley and Hartlepool Saltholme to Hartlepool Coast River Leven Corridor 103 An urban fringe corridor linking Cowpen Bewley and A strategic wildlife corridor incorporating RSPB Steep sided river valley running from the Borough east Billingham with the Clarences and the River Tees. Saltholme, Teesmouth National Nature Reserve and a boundary near Crathorne and Hilton, to join the River number of nationally and internationally important Tees near Yarm and Ingleby Barwick. Incorporates Cowpen Bewley Woodland Park and the habitats. Includes important woodland and grassland habitats western fringes of RSPB Saltholme. Includes A178 road corridor and extends northwards recorded as Local Wildlife Sites. beyond the Borough boundary to the Hartlepool coast Limited public access in some sections. at Seaton Carew.

Secondary green infrastructure network



Corridor D **Corridor E Corridor F** Hardwick Dene to Lustrum Beck Roseworth to Stockton and Norton Thorpe Beck to Stillington Network of green urban green corridors, including the Corridor centred broadly on Thorpe, Whitton and Urban corridor incorporating Hardwick Dene & Elmtree Wood Local Nature Reserve, Newham Grange Great North Park and Norton Grange Marsh Local Bishopton Becks and public rights of way. Park and Durham Road Cemetery, and network of Nature Reserve. Also includes part of National Cycle Incorporates the villages of Thorpe Thewles, Whitton footpaths and cycleways. Network Route 1. and Stillington, and countryside destination sites: Stillington Forest Park, Honey Pot Wood and part of Wynyard Woodland Park.

Corridor G **Corridor H** Corridor I Northshore to Lustrum Beck Saltergill to Leven Bridge Bassleton Beck, Thornaby Wood to A174 Corridor comprising the valleys of Saltergill Beck and Includes the green corridor between Thornaby and Potential green corridor through the Greater Ingleby Barwick - incorporating Thornaby Woods and Northshore area connecting Lustrum Beck to the River West Gill/East Gill, including valuable woodland and grassland habitats and rights of way network. an extensive network of rights of way and other paths. Tees.

Area includes the woodland blocks and belts and

Hall.

other parkland feature associated with Kirklevington

53

Also includes the countryside to the west of Ingleby

Barwick – an agricultural landscape with limited

public access.



Corridor N Corridor O Corridor M Cowbridge Beck Charlton's Pond and East Billingham Teesmouth and Greatham Creek Stream corridor running through the countryside to Urban fringe corridor including Charlton's Pond, Includes Teesmouth National Nature Reserve and other Belasis Hall Technology Park and Belasis Beck. the west and south of Wolviston, through north important wildlife sites along Greatham Creek, Billingham, Daffodil Park and extending to Cowpen including Cowpen Marsh SSSI. Bewley Woodland Park.

Urban and rural 'green grids'

- In addition to strategic network of Primary and Secondary green infrastructure corridors identified above it is possible to identify local green networks which are of significance at the neighbourhood scale. These can be thought of as **Urban and rural 'green grids'** and comprise small-scale features such as street trees, hedgerows, streams, ponds, local wildlife areas, footpaths, bridleways, cycleways, local parks, recreation grounds, allotments and other areas of public open space. Importantly it includes private gardens and other privately owned land in the Borough's towns, villages and countryside. These features will be highly important in each rural and urban community, and collectively these components represent a significant element of the Borough's total green infrastructure resource.
- 4.6 This third tier of green infrastructure has not been mapped as part of this Strategy but it is possible to plan and manage this network in any local area of the Borough, for example, as part of a neighbourhood or village plan or a new development proposal. Local 'green grids' should be planned in the context of the wider network of Primary and Secondary corridors, with local improvements complementing investment in larger scale green infrastructure projects.
- 4.7 Many of the green infrastructure components which form these local green grids are recorded on Stockton Council's corporate GIS system, and can be accessed via the website:

 www.stockton.gov.uk/greeninfrastructure. This on-line mapping provides a valuable tool to support the planning and management of green grid networks.

Addressing strategic objectives

- 4.8 The green infrastructure network outlined in the previous sections should be developed and managed in ways which address the 10 Strategic Objectives identified in **Chapter 3**. More specifically, the priorities for each Primary or Secondary corridor or local 'green grid' should reflect the particular issues and opportunities in that area, and this will in turn inform the development of the Strategy Action Plan (see 5.10 to 5.13). Many of those issues and opportunities are already incorporated into the other plans and strategies identified in Chapter 2. In addition a wide range of detailed social, economic and environmental information can be used to help determine the strategic objectives for different parts of the Borough's Green Infrastructure network, including:
 - The Borough's open space audit and needs assessment and the analysis of this data undertaken as part of the Planning Policy Guidance 17 Assessment³⁵.
 - Stockton-on-Tees Landscape Character Assessment.
 - Biodiversity data including Local Wildlife Sites and species/habitat information from the Tees Valley Biodiversity Action Plan.
 - Strategic Flood Risk Assessment and Environment Agency Flood Maps.
 - Stockton-on-Tees Joint Strategic Needs Assessment (JSNA) highlights the health and wellbeing priorities for the Borough's residents, taking account of data and information on inequalities within and between communities.
 - Index of Multiple Deprivation and other local socio-economic data.

³⁵The PPG17 Assessment also provides the evidence base for the Borough's *Open Space, Sport and Landscaping Supplementary Planning Document (2009)*, information on which is provided in paragraph 5.15 of this Strategy. Full details of the PPG17 Assessment can be found at: http://www.stockton.gov.uk/citizenservices/planningdepartment/dev_plans/ldfhome/spdpage/openspacespd/.

- 4.9 Data and other information to inform green infrastructure planning within the Borough is available via the following websites:
 - Stockton Council Green Infrastructure web pages: http://www.stockton.gov.uk/greeninfrastructure
 - The Stockton-on-Tees Data Warehouse a 'one-stop shop' for data and information about living and working in, and visiting the Borough: http://www.stockton.gov.uk/datawarehouse
 - Tees Valley Unlimited Central Information Hub: http://www.teesvalleyunlimited.gov.uk/
 - The MAGIC website an interactive map service managed by Defra which brings together environmental information from across government: http://magic.defra.gov.uk
- 4.10 However, it should be emphasised that while this Strategy recommends a strategic, evidence-based approach to green infrastructure planning it is also important to retain a degree of flexibility. In delivering this Strategy partners should remain responsive to new opportunities and changing local priorities.

Green infrastructure guidelines

- 4.11 Finally, in planning and managing the Borough's green infrastructure network we should adhere to the general guidelines for green infrastructure planning which have been agreed as part of the Tees Valley Green Infrastructure Strategy. These cover the following themes:
 - Planning and development
 - Accessibility
 - Landscape & historic environment
 - Biodiversity
 - Climate Change
 - Leisure & recreation

More information is available at: http://www.stockton.gov.uk/greeninfrastructure







Chapter 5: Delivery

- This Strategy sets out an ambitious vision for the future. It aims to address the wide range of Strategic Objectives set out in Chapter 3 through the development and sustainable management of the GI Network outlined in Chapter 4. This will only be delivered through coordinated action at many different levels and by drawing on a wide range of resources. This chapter focuses on the practical measures needed to achieve this. These measures are very much inter-related and can be summarised as follows:
 - Working in partnership across the public, private and third sectors
 - Promoting community participation
 - Developing and delivering a robust Action Plan which evolves over time to reflect emerging priorities and opportunities
 - Delivery through other plans and strategies
 - Utilising a wide variety of funding opportunities and delivery mechanisms both to develop green infrastructure and to deliver long-term sustainable management

Working in partnership

- 5.2 A very wide range of private, public and third sector partners will help to deliver this strategy including:
 - Farmers and other landowners
 - Private developers involved in new housing and commercial developments within the Borough
 - Other private businesses

- Residents
- Public sector bodies, including Stockton Borough Council and statutory agencies
- Town and parish councils
- Local resident and community groups
- Other voluntary and community organisations
- Social enterprises
- 5.3 To be most effective we need to work together: to plan, develop and manage the Borough's green infrastructure in an integrated way at different spatial scales; to share advice and information; and provide funding and practical support. To achieve this we may need to establish new ways of working, as well as making full use of existing partnership arrangements:
 - a) Stockton-on-Tees Green Infrastructure Steering Group
- The Steering Group, with input from a wider network of partners, has contributed to the development of the Strategy and will play a key role in its delivery. The Group's membership will evolve over time to reflect emerging priorities and changing responsibilities, but its functions are likely to remain as follows:
 - Providing the strategic overview and direction for green infrastructure planning and management in Stockton-on-Tees
 - Overseeing development of the Strategy Action Plan and monitoring its implementation
 - Evaluating overall delivery the Strategy and review and update it in the future

- Adding value to project delivery by aligning organisation/service delivery with green infrastructure objectives & through partnership working
- Influencing other strategies, policies and plans to help achieve successful implementation of the Strategy
- Ensuring effective communications with all partners and stakeholders
- Acting as local advocates and champions of green infrastructure

Stockton-on-Tees Borough Council will play a leading role in supporting the work of the Steering Group and undertaking the tasks outlined above.

- b) 'Stockton Renaissance' Stockton Borough's Local Strategic Partnership (LSP)
- 5.5 The Thematic and Area Partnership Boards under Stockton Renaissance will play a vital role in helping to deliver the strategy. Bringing together many key private, public and third sector partners, these Partnership Boards can contribute to green infrastructure planning and management by focusing on specific themes or issues, and addressing issues on an area-by-area basis.
 - c) Other public/private/third sector partnerships
- 5.6 A number of established partnerships are already helping to deliver new and improved green infrastructure and are likely to continue to play an important role in the future; e.g. the North Tees Natural Network, the Industry Nature Conservation Association (INCA), and the Stockton River Corridors Partnership. More generally town and parish councils, Stockton Residents and Community Groups Association (SRCGA), Catalyst, Stockton Council and other organisations like Groundwork will play an important role in supporting and facilitating such partnership working.

5.7 Through the action planning process new partnerships will evolve in the future; for example, with organisations working in collaboration to plan green infrastructure at the local level (e.g. through neighbourhood and parish plans), develop and deliver projects, and manage green infrastructure.

Promoting community participation

- 5.8 The sustainable development and management of the Borough's green infrastructure is dependent on the active involvement of our communities. People across the Borough already make a vital contribution, but we need to empower communities to be able to play an even greater role in shaping and caring for their local green infrastructure. This means providing the necessary support and help to overcome those barriers which discourage active participation³⁶. It also means developing the specific skills and knowledge people need to be able to play an active role in their local environment. For some people this will have the added benefit of improving their employment prospects³⁷.
- 5.9 Opportunities should be made available for organisations and individuals of all ages and backgrounds to participate:
 - By giving their views on project proposals, or on how existing green infrastructure is managed and maintained
 - By getting actively involved in the planning and delivery of projects to enhance the local environment or promote greater use
 - By taking on direct responsibility for the development or on-going management of green infrastructure, such as the local park, allotment or nature reserve.





³⁶See Stockton Borough Council's Community Engagement Strategy 2010-13: http://www.stockton.gov.uk/resources/consultation/commengagement/commengagementstrat.pdf and associated website: www.stockton.gov.uk/mycommunity

³⁷Sustainable Development Commission (2010), *Improving Young People's Lives: The role of the environment in building resilience, responsibility and employment chances* - reports that green exercise, outdoor activity and environmental volunteering can maximise young people's employment chances, as well as improving their well-being and personal responsibility: http://www.sd-commission.org.uk/presslist.php/116/preparing-young-people-for-employment-in-green-economy-vital-to-tacking-youth-unemployment

- By managing private gardens or premises in ways which contribute to the overall environmental quality of an area.
- 5.10 Local community organisations such as residents groups, allotment associations, park 'friends' groups all have an important role to play, as do those agencies who provide volunteering opportunities and engage local communities through other activities. Businesses also play a part, by initiating local action and supporting corporate volunteering.
- 5.11 Through active community participation we will help to improve the quality of our local environments. In addition community participation helps to build stronger communities; it encourages people to work together to achieve shared goals and fosters a greater sense of ownership and pride in the local area³⁸. Raising levels of community participation will maximise these benefits and over time increase community capacity to develop and manage green infrastructure.

Development and delivery of an action plan

5.12 A detailed Action Plan accompanies this Strategy and is available at www.stockton.gov.uk/greeninfrastructure. To be revised annually, it sets out in detail how all partners will work to address the issues



- outlined in Chapter 3 through the delivery of an enhanced green infrastructure network as outlined in Chapter 4.
- 5.13 The Action Plan sets out priorities for action under three broad headings:

Borough-wide Projects/Actions: Focusing on individual green infrastructure components (such as trees and woodlands) or functions (such as flood risk management).

Area & Site-Specific Projects: Aimed at achieving an integrated approach to green infrastructure planning and delivery in a given geographical area. For example, this includes project proposals for individual greenspaces, major regeneration sites, or green corridors.

Supporting Actions/Partnership Working: Providing the organisational and operational framework for the successful delivery of the strategy. This will include the development of complementary activities to maximise the social and economic benefits of green infrastructure, build capacity to deliver, and ensure effective communication and liaison between partners.

- 5.14 Importantly the Action Plan will identify which of the Strategy's 10 Strategic Objectives are to be addressed through each project/action.
- 5.15 It will also:
 - Set out timescales for development and delivery of projects
 - Identify lead partners and other delivery partners
 - Highlight links to other strategies, plans and programmes
 - Identify sources of funding and whether these are secured, pending or require applications
 - Provide a framework for monitoring project delivery

³⁸The Community Cohesion Strategy for Stockton-on-Tees 2009-2012 sets out the priorities for developing strong, cohesive communities. It recognises that the Borough has a rich diversity of areas from busy town centres, urban residential areas and rural villages and that every area is unique and will face different challenges: http://www.stockton.gov.uk/yourcouncil/egualityanddiversity/communitycohesion/comcostrat/



Delivery through other local strategies and plans

- 5.16 Chapter 2 outlines the policy and strategic context for the Green Infrastructure Strategy. Delivery of associated strategies and plans will play an important role in achieving our green infrastructure vision, and work needs to continue to embed strategy objectives into new documents and proposals. In turn this Strategy will support delivery of the overarching objectives for the Borough set out in the Sustainable Community Strategy.
- 5.17 Importantly, the Local Development Framework will provide the planning policies and guidance to support development and sustainable management of the Borough's green infrastructure, particularly through the following documents:
 - Core Strategy Development Plan Document (adopted March 2010): sets out a number of strategic objectives and policies which

- will guide the preparation of more detailed policies in subsequent plans³⁹.
- Environment Development Plan Document (due to be adopted 2014): will deal principally with the protection and enhancement of the natural, built and historic environment and the delivery of green infrastructure within the Borough.
- Regeneration Development Plan Document (due to be adopted 2014): will allocate sites for development and contain related policies to deliver the vision contained in the Core Strategy.
- Planning Obligations Supplementary Planning Document (adopted May 2008) outlines "the Council's approach to securing planning obligations associated with development within the Borough"⁴⁰. Planning obligations can be used to support delivery of new and improved green infrastructure including improved provision of open space, public realm, cycle/footpath routes and recreation facilities, as well as measures which conserve and enhance landscape, biodiversity and geodiversity.
- Open Space, Recreation and Landscaping Supplementary Planning Document (adopted Jan 2010) sets local standards "for the quantity, quality and proximity of open space and built sports and recreation provision". It also "aims to provide clarity and certainty to developers about the level of Planning Obligation contribution required for new development and the circumstances in which open space will be required on site", and provides guidance on the design of landscaping schemes in new developments⁴¹. The Planning Policy Guidance 17 Assessment which forms the evidence base for the Supplementary Planning Document also provides valuable information to inform development of the Borough's green infrastructure networks (see section 4.17).

³⁹http://www.stockton.gov.uk/resources/planning/CoreStrategy/CoreStrategyDPD2050133.pdf

⁴⁰http://www.stockton.gov.uk/resources/planning/planningobs/plannobs.pdf

⁴¹http://www.stockton.gov.uk/resources/planning/openspacedocs/OpenSpaceSPD.pdf

- Sustainable Design Guide Supplementary Planning Document (due to be adopted late 2011) will assist the Council in the determination of planning applications and provide guidance to the public and developers on improving the design standards and sustainability of new developments. It will encourage attractive and inclusive residential neighbourhoods and promote high quality design, energy efficiency and environmental sustainability.
- 5.18 In the future any local neighbourhood plans or village plans will also provide opportunities to support delivery of the Borough's strategic green infrastructure network and enhancement of local 'green grids'.

Funding and delivery mechanisms

- 5.19 A wide range of funding sources and delivery mechanisms can be used to deliver new and improved green infrastructure and support its sustainable long-term management.
- 5.20 Project funding will be identified in the Strategy Action Plan. Sources of funding will include:
 - Local Authority funds
 - Funds from charitable and voluntary organisations
 - Public and private sector funding for regeneration projects
 - Programmes funded by central government
 - Rural Development Programme for England, including Environmental Stewardship & English Woodland Grant Scheme
 - Planning conditions, planning obligations (Section 106 agreements) and the new Community Infrastructure Levy
 - Lottery funding
 - Landfill Communities Fund
 - Government Agencies, e.g. Natural England, Environment Agency, Forestry Commission

- · Private sector funding, including sponsorship and donations
- 5.21 In addition to the above a number of alternative funding and management models may be utilised in the future:
 - Establishment of new Charitable Trusts to manage individual projects or a range of facilities. They can be funded through a variety of sources, e.g. Section 106 monies, bequests or charitable giving. This model has been used successfully in Milton Keynes, where an independent Parks Trust was set up with a one-off payment to cover the management of its land and holdings in perpetuity. This money was invested and the income generated is used alongside income from other assets (e.g. agricultural licences and rental income) and grant aid to enable the Trust to manage over 4,500 acres of greenspace equating to 20% of the total city area.
 - Endowments provision of an income generating fund or asset to assist with on-going operating costs. For example, this has been achieved in Peterborough, with the Development Corporation earmarking the rental income from an office building to fund recurring costs at the Nene Country Park. Alternatively an initial lump sum can be paid and invested to generate annual interest. That income can be used to meet on-going revenue costs.
 - Roof Tax/household levy where a charge for each new dwelling helps to pay for essential infrastructure to support residential development. An approach pioneered in Milton Keynes, the household levy has also been used in Darlington to contribute to the revenue costs associated with the management of West Park.
 - Service charges more frequently applied to commercial developments and where a charge is levied on businesses and paid to a private management company to meet the costs of green infrastructure maintenance.
 - Income-generating opportunities for example, charges for car parking at parks, income from enterprises such as cafés and

restaurants, boating lakes, sports facilities, and the use of parks for events, weddings and private functions. Other opportunities include business sponsorship or 'adoption' of areas within parks, or other types of donations (e.g. contributions to tree planting to offset carbon emissions). Also where appropriate income can be derived from productive land uses such as generation of renewable energy (e.g. wind turbines or growing of biomass), forestry and food production.

• Asset transfer - where appropriate consideration might be given to transferring ownership and management of public open space to voluntary organisations, social enterprises or other organisations⁴². There are several potential benefits to this approach. For example, third sector organisations may be able to access funding streams not available to public or private sector landowners, and they can also be very effective at generating other types of income, through sponsorship, private donations and other fundraising activities.

Timescales

5.22 Some of the aims and ambitions set out in this plan can be achieved in the short term, while others will only be realised over a much longer timeframe. It is suggested that implementation of the Strategy is considered over three broad time horizons:

Time Horizon:	Years:	Rationale:
Short	0 – 5 years	Realistic timescale for delivery of action plans linked to this first version of the Strategy
Medium	0 – 10 years	Timeframe for the existing Sustainable Community Strategy
Long		Time-horizon to address major impacts including climate change adaptation





⁴²Commission for Architecture and the Built Environment and the Asset Transfer Unit (2010), *Community led spaces: a guide for local authorities and community groups* – provides guidance on transferring ownership and management of public space from local authorities to community groups: www.cabe.org.uk/files/community-led-spaces.pdf





Chapter 6: Monitoring, evaluation and review

- 6.1 It is important for the success of the Strategy that measures are put in place to:
 - Monitor delivery of the Strategy Action Plan;
 - Evaluate the way the Strategy is being delivered and the impact it is having;
 - Use this information to review both the Strategy and Action Plan.

Monitoring

- 6.2 Wherever possible milestones and targets will be set against projects and activities within the Action Plan which will form the basis of subsequent monitoring. Given that delivery of the Green Infrastructure Strategy is through a partnership approach the information needed for effective programme monitoring will need to come from a wide range of partner organisations.
- 6.3 Monitoring will also enable the Council and other partners to report against other performance targets. These include the current, or any future, national indicator framework adopted by government.
- 6.4 Resident's surveys or other measures may also be used to help assess the overall impact of the Strategy; for example, on people's quality of life and their perception of the local area.

Evaluation

- 6.5 It will important to evaluate both whether the approach to Strategy delivery is working effectively ('process evaluation') and whether the overall Strategy is having an effect on environmental sustainability across the Borough ('impact evaluation'). In addition individual schemes should be subject to evaluation and any lessons learned used to inform development of other projects.
- 6.6 Based on monitoring and evaluation it will be possible to determine and share good practice; for example, through the publication of guidance notes, case studies and through conferences and seminars.

Review

6.7 Information collected through monitoring and evaluation will be used to review and revise the Action Plan (on an annual basis) and the Strategy as a whole (likely to be within a 5-year time horizon).









Glossary

Activity-based tourism (and recreation)

Overnight stay visits (and day visits or activities) that are focused wholly or partly on active pursuits such as cycling, walking or watersports.

Active Travel

Walking, running or cycling as a means of transport

Amenity space/ greenspace Open space which provides opportunities for informal activities close to, or within, residential areas and improves the visual appearance of residential or other areas. Can also form part of a commercial site or

business park.

Biodiversity

Variety of life including the different plants, animals and micro-organisms, their genes and the ecosystems

of which they are a part.

Biomass

The total mass of living matter within a given unit of environmental area; for example, plant material, vegetation, or agricultural waste used as a fuel or

energy source.

Brownfield site

Previously developed land which is or was occupied by a permanent structure (excluding agricultural or forestry buildings), and associated fixed surface

infrastructure.

Climate change adaptation

Modifying natural or human systems to respond to

actual or expected global warming.

Climate change mitigation

Refers to reducing greenhouse gas emissions and concentrations in order to limit the severity of

future climate change.

Conservation Area	An area of special architectural or historic interest, the character, appearance or setting of which it is desirable to preserve or enhance.	Geodiversity	The range of rocks, fossils, minerals, landforms and soils that occur on our planet, along with the natural processes that shape the landscape	
Core Strategy	A Development Plan Document setting out the spatial vision and objectives of the planning framework for an area, having regard to the Community Strategy	Green corridor	Strip of green space or river/stream corridor that runs through a town or local area, which might be made up of different types of spaces such as parks, recreation grounds, amenity grassland, woodlands or habitats. These corridors provide attractive settings for housing and commercial development, act a green 'buffers', and often incorporate routes for walking or cycling, Most green corridors also provide important habitats for wildlife (see also 'wildlife corridor')	
Destination sites	Outdoor locations for leisure and recreation which may be used by local people and visitors to the Borough, such as urban parks, country parks, nature reserves and larger areas of public open space.			
Development Plan Documents (DPDs)	Local Development Documents having development plan status. Once adopted, development control decisions must be made in accordance with them unless material considerations indicate otherwise.	Green grid	A concept that has been applied to green infrastructure planning through the East London Green Grid Framework. In the context of this strategy the term is used to describe local networks of multifunctional open spaces (such as parks, natural habitats, play spaces and allotments) and linkages (such as footpaths, bridleways, cycleways, tree avenues, hedgerows, green corridors, rivers	
Ecosystem services	The wide range of valuable benefits that a healthy natural environment provides for people, either directly or indirectly.			
Food miles	Refers to the distance food is transported from the time of its production until it reaches the consumer.		and streams)	
Flood plain	Generally flat-lying areas adjacent to a watercourse, tidal lengths of a river or the sea where water flows in times of flood or would flow but for the presence of flood defences.	Green wedge	An open area around or between parts of settlements, which helps to maintain the distinction between the countryside and built up areas, prevents the coalescence of adjacent places and can also provide recreational opportunities.	
Flood zones	Areas mapped by the Environment Agency which provide an indication of the likelihood of flooding from rivers and the sea, assuming there are no flood defences.	Health inequalities	Differences in health status between population groups. Health inequalities arise because of the differing circumstances in which people grow, live, work and age, and because of the systems put in place to deal with illness.	

	Historic environment Index of Multiple	All aspects of the environment resulting from the interaction between people and places through time. A measure of deprivation across seven domains:	Local Strategic Partnership (LSP)	A non-statutory partnership that brings together public, private, voluntary and third sector partners with the aim of addressing local priorities, concerns and ambitions, as set out in an area's Sustainable	
	Deprivation (IMD)	income; employment; health & disability; education, skills & training; barriers to housing & services; crime; the living environment	Local Wildlife/ Geological Site	Community Strategy. A site designated locally for its wildlife or geological importance. The criteria for identifying sites has	
Interp	Interpretation	A communication process which aims to reveal meanings and relationships about a place or a topic through first hand involvement with objects, artefacts, landscapes or sites. Put simply,		been determined locally by the Tees Valley Biodiversity Partnership, in accordance with national guidance. Many of these areas were formerly designated as Sites of Nature Conservation Interest.	
			Multi-functionality	Many functions performed by a single green space or other environmental asset such as a river or tree .	
	Landscape Character	The distinct and recognisable pattern of elements that occurs consistently in a particular type of landscape. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement.	National Nature Reserve (NNR)	A site designated under the National Parks and Access to the Countryside Act 1949 or Wildlife and Countryside Act (1981). NNRs represent the best examples of a particular habitat types across the country and most are managed by Natural England.	
Fr Lc	Framework (LDF) Courrecton future of la to go Strat Local Nature Reserve (LNR) A sit geological	A collection of documents that sets out the Council's policies for meeting the community's economic, environmental and social aims for the future, where this affects the development and use of land. The overarching strategy and core policies to guide future development are set out in the Core Strategy Development Plan Document. A site designated by a local authority in agreement with Natural England. LNRs include wildlife or geological features that are of special interest locally, and offer people special opportunities to study or learn about nature or simply to enjoy it.	Nature-based tourism (and recreation)	Overnight stay visits (and day visits or activities) that are related wholly or partly to an area's natural heritage	
			PPG17 Assessment	A local assessment of need and audit of open space, sport and recreation provision, carried out in accordance with Planning Policy Guidance note 17. The PPG17 assessment is used as a basis for setting local standards of provision set in the Sport Open Space and Borough's	
			Public realm	Comprises streets, squares, interchanges, hard and soft landscaped areas, alleys and yards where there is free public access.	

Public Right of Way	A path or way, as distinct from an adopted pavement or road, over which the public have the right to 'pass and re-pass'. Public rights of way are recorded on a definitive map and statement and comprise: Public Footpaths (which can only be used for walking), Public Bridleways (may be used by horse riders and cyclists as well as walkers) and Byways (for walkers, horse riders, cyclists and vehicular traffic).	Site of Special Scientific Interest (SSSI)	Areas of national importance for wildlife, geology or geomorphology designated and protected under the Wildlife and Countryside Act 1981 and the Countryside and Rights of Way Act 2000.
		Special Protection Area (SPA)	An area designated under the European Union Directive on the Conservation of Wild Birds in order to maintain habitats and thereby to conserve populations of certain species of birds.
Ramsar Site	A site designated under the European Ramsar Convention to protect wetlands that are of international importance, particularly as waterfowl habitats.	Sustainable Community Strategy	Prepared and implemented by a Local Strategic Partnership, a Sustainable Community Strategy sets out the future prioities for an area and provides a framework for how public agencies and the private and third sectors will work together to address
Registered Historic Parks and Gardens	Sites listed on the English Heritage Register of Historic Parks and Gardens of special historic	Stockton Renaissance	those priorities.
Renewable energy	interest in England. A term used to describe the inexhaustible energy flows that occur naturally and continuously in the environment, such as energy from crops, the sun, wind, waves or the fall of water. Using renewable energy sources instead of fossil fuels has a number	Stockton Renaissance	The Local Strategic Partnership for Stockton Borough, comprising a wide range of private, public and third sector partners. Responsible for production, delivery and review of the Borough's Sustainable Community Strategy. A series of 'thematic' and 'area' partnerships operate within the Stockton Renaissance Partnership structure.
	of environmental benefits including decreasing greenhouse gas emissions and air pollution.	Supplementary Planning Document (SPD)	SPDs are a Local Development Documents may cover a range of issues, both thematic and site specific and provide further detail of policies and proposals in a 'parent' DPD.
River restoration	pre-disturbed state and to encourage natural		
Scheduled Ancient Monument	processes. Nationally important monuments that enjoy greater protection against inappropriate development through the Ancient Monuments and Archaeological Areas Act 1979.	Sustainable developmen	t Enabling all people throughout the world to satisfy their basic needs and enjoy a better quality of life without compromising the quality of life of future generations.

Sustainable drainage systems (SUDS)

A range of techniques or systems used to control surface water run-off as close to its origin as possible before it enters a watercourse. Well designed and maintained SUDS are more sustainable than conventional drainage methods because they mitigate the adverse effects of urban stormwater runoff, can improve water quality, and provide biodiversity and social benefits.

Sustainable travel/ transport

Often meaning walking, cycling and public transport which is considered to be less damaging to the environment and contributes less to traffic congestion than travel by car.

Tees Valley Biodiversity Action Plan (BAP)

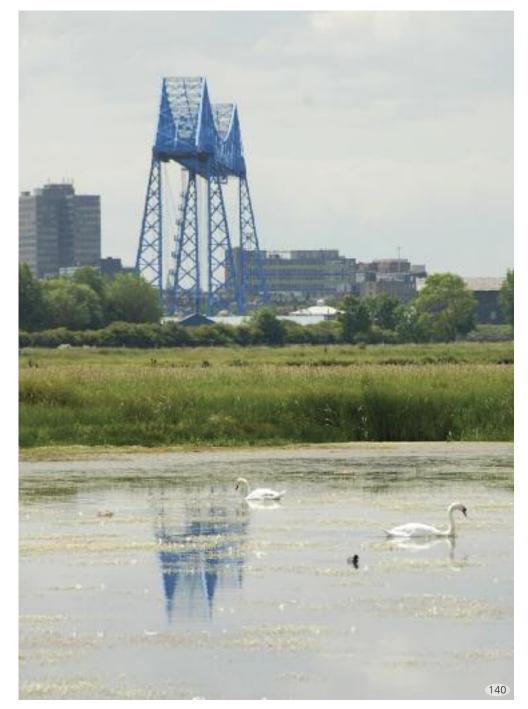
Comprises a series of Action Plans for threatened or characteristic habitats and species in our area. The Tees Valley Biodiversity Partnership is responsible for coordinating delivery of the BAP.

Tees Valley Geodiversity Action Plan (GAP)

Aims to document, conserve, manage and promote the geological heritage of the Tees Valley. Activity is coordinated by the Tees Valley RIGS Group (RIGS are Regionally Important Geologic and Geomorphologic Sites)

Wildlife corridor

A network of linked wildlife habitats in urban or rural areas, or connecting town and country. At the smallest scale these might be hedgerows or small stream corridors, but can also comprise large woodlands or other larges areas of habitat. These corridors provide vital linkages for wildlife dispersal and movement, but may also offer wider amenity benefits (see also 'green corridor').



Further reading

Community led spaces: a guide for local authorities and community group Commission for Architecture and the Built Environment and the Asset Transfer Unit (2010)

http://www.cabe.org.uk/files/community-led-spaces.pdf

Community green: Using local spaces to tackle inequality and improve health Commission for Architecture and the Built Environment (2010) http://www.cabe.org.uk/files/community-green.pdf

The countryside in and around towns: a vision for connecting town and country in the pursuit of sustainable development

Natural England (2005)

http://naturalengland.etraderstores.com/naturalenglandshop/product.aspx?ProductID=95e404a1-d9e6-44f3-9540-17508b8340c5

Biodiversity by design: a guide for sustainable communities
Town and Country Planning Association (2004)
http://www.tcpa.org.uk/pages/biodiversity-by-design.html

Climate Change and Biodiversity Adaptation: The Role of the Spatial Planning System

Natural England (2009)

http://naturalengland.etraderstores.com/NaturalEnglandShop/NECR004

Decent homes need decent spaces: An action plan to improve open spaces in social housing areas

Commission for Architecture and the Built Environment & the National Housing Federation (2010)

http://www.cabe.org.uk/files/decent-homes-need-decent-spaces.pdf

The economic value of green infrastructure Natural Economy Northwest (2008)

http://www.naturaleconomynorthwest.co.uk/resources+reports.php

The economic benefits of Green Infrastructure: The public and business case for investing in Green Infrastructure and a review of the underpinning evidence Natural Economy Northwest (2008)

http://www.naturaleconomynorthwest.co.uk/resources+reports.php

Grey to Green: How we shift funding and skills to green our cities Commission for Architecture and the Built Environment (2009) http://www.cabe.org.uk/files/grey-to-green.pdf

Green Infrastructure Guidance Natural England (2009)

http://naturalengland.etraderstores.com/NaturalEnglandShop/NE176

Helping community groups to improve public spaces

Commission for Architecture and the Built Environment (2009)

http://www.cabe.org.uk/files/helping-community-groups-to-improve-public-spaces.pdf

It's our space: a guide for community groups working to improve public space Commission for Architecture and the Built Environment (2007) http://www.cabe.org.uk/files/its-our-space.pdf

Making a Difference: How to Set Up and Maintain a Community Group for Parks and Green Space GreenSpace (2004)

http://www.green-space.org.uk/downloads/ArchivedPublications/Making% 20a%20Difference%20full.pdf

Managing green spaces: seven ingredients for success
Commission for Architecture and the Built Environment (2010)
http://www.cabe.org.uk/files/managing-green-spaces.pdf

Tees Valley Biodiversity Action Plan
Tees Valley Biodiversity Partnership
http://teesvalleybiodiversity.org.uk/tees-valley-biodiversity-action-plan/

Tees Valley Geodiversity Action Plan

Tees Valley RIGS Group (2011)

http://www.tvrigs.org.uk/geodiversity-action-plan

Tees Valley Green Infrastructure Strategy

Tees Valley Joint Strategy Unit (2008)

http://www.stockton.gov.uk/resources/leisure/14776/teesvalley/teesvalley.pdf

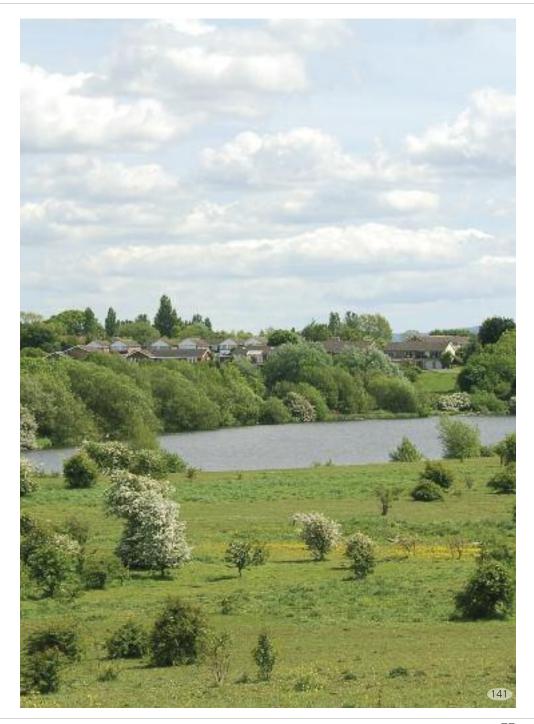
The Natural Choice: securing the value of nature

Defra (2011)

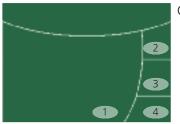
http://www.defra.gov.uk/environment/natural/whitepaper/

Acknowledgements

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Photographs



			23	Wynyard Woodland Park	
			24	Brick Ponds, Hartburn	
Ref	Details	Credits ⁴³	25	Harbour seals at Greatham Creek	John Bridges
1	View over Norton, A19 and Billingham		26	Ropner Park	
2	Wynyard Woodland Park	Peter Mernagh	27	Preston Park	
3	Kingfisher	Kenny Crooks	28	Romano Park	
4	Bowesfield Nature Reserve		29	Cyclist near River Tees	Sustrans
5	Preston Farm wetlands, looking towards		30	Hawthorn blossom	
	Ingleby Barwick		31	Teesdale	
6	Swans at Bowesfield Nature Reserve		32	St Mary's Churchyard, Long Newton	
7	"Playing Out" activity at John Whitehead	Gilmar Ribeiro	33	Near Roundhill, Ingleby Barwick	
	Park, Billingham		34	Canada goose, Saltholme	RSPB
8	Cherry tree at Surbiton Road, Stockton		35	National Cycle Network Millennium Milepost,	
9	Central Billingham			Long Newton	
10	Oak tree at Six Fields, Hartburn		36	John Whitehead Park, Billingham	Gilmar Ribeiro
11	Cyclists on Infinity Bridge	Sustrans	37	Bowesfield Nature Reserve	
12	Preston Park		38	Lustrum Beck at Newtown/Grangefield	
13	Common spotted orchid	Robert Woods	39	Wynyard Woodland Park	
14	River Tees and Victoria Bridge		40	Ropner Park	Peter Mernagh
15	Restored meander at Six Fields, Hartburn		41	National Cycle Network Route 14 near	
16	Pond excavation at Wynyard Woodland Park			Coatham Wood	
⁴³ All p	hotographs Stockton Borough Council unless stated otherwise				

Details

Lapwing

Stockton

Redmarshall

Daffodil Park, Billingham

Painted lady butterfly

Ox-eye daisies at Preston Farm Industrial Estate

"Playing Out" activity at Blakeston School,

Ref

19

20

Credits

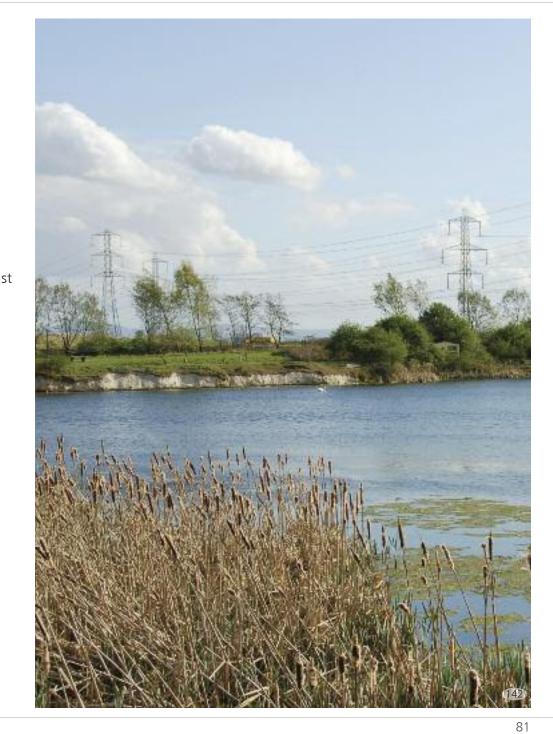
Carl Watts

Kenny Crooks Gilmar Ribeiro

Ref	Details	Credits	Ref	Details	Credits
42	Brown hare	Kenny Crooks	66	Guided cycle ride	
43	Trinity Green, Stockton		67	Harbour seal at Greatham Creek	John Bridges
44	Apples, Hartburn		68	Barn owl	Kenny Crooks
45	Hardwick Dene and Elm Tree Woods Local		69	Water vole	Kenny Crooks
	Nature Reserve		70	Gateway to Teesmouth National Nature Reserve)
46	Wynyard Woodland Park	Peter Mernagh	71	Ropner Park	
47	Teesside Park		72	Norton Green	
48	Stockton High Street - potential view towards	Stockton-on-Tees Town	73	St Peter's Church, Thornaby Green	
	Globe Theatre	Centre Prospectus - SBC	74	Preston Park and Hall	
49	Woodland planted adjacent to A19 near Hilton		75	Billingham Environmental Link Project -	Billingham
50	Belasis Business Park, Billingham			Primary Schools Vegetable Competition	Environmental Link
51	Stockton High Street - potential view across	Stockton-on-Tees Town			Project
	Central Square	Centre Prospectus - SBC	76	Willow short rotation coppice	National Non-Food
52	Horse chestnut tree on Thornaby Road, Thornaby				Crops Centre
53	Lustrum Beck at Newtown/Grangefield		77	Wind turbine at Cowpen Bewley Woodland Park	
54	Hardwick Dene sustainable drainage scheme		78	Farmland at Cowpen Bewley	
55	Preston Park	Peter Mernagh	79	Cowpen Lane Allotments	
56	Romano Park	reter iviernagn	80	Wynyard Woodland Park	Peter Mernagh
57	Ropner Park	Peter Mernagh	81	Footpath improvements in Thornaby - River	Groundwork North East
58	Climbing boulder at Stillington	Teter Merriagri	01	Routes in Stockton project	Groundwork North East
59	Portrack Marsh Nature Reserve		82	Great crested newt seat, Barwick Pond,	
60	Preston Hall and Park	Peter Mernagh		Ingleby Barwick	
61	Saltholme Wildlife Reserve and Discovery Park	reter Merriagri	83	Pond dipping at Saltholme Wildlife Reserve	RSPB
62	Seal watch	RSPB		and Discovery Park	
63	Wynyard Woodland Park	Peter Mernagh	84	Castle Eden Walkway	
		reter Memagn	85	John Whitehead Park, Billingham	Gilmar Ribeiro
64 65	Teesdale Way near Eaglescliffe		86	Romano Park	
65	Horse rider on bridleway near Norton		87	Ropner Park	Peter Mernagh

Ref	Details	Credits	Ref	Details	Credits
88	Preston Park	Peter Mernagh	112	Saltergill Beck valley, south of Yarm	
89	Tree planting and pond creation as part of the A66 Long Newton junction scheme		113	Bassleton Beck valley, between Thornaby and Ingleby Barwick	
90 91	Public realm on Church Road, Stockton Coatham Wood, near Long Newton		114	Pond adjacent near River Tees Jubilee Bridge, Ingleby Barwick	
92	Wynyard Woodland Park		115	Allison Trainer Park, Thornaby	
93	River Tees: Barrage and Infinity Bridge	Muse Developments	116	Countryside south of Maltby village	
94	River Tees near Barwick Farm	Muse Developments	117	Cowbridge Beck, north Billingham	
95	A66 near Hartburn and Elton		118	Charlton's Pond	
96	Six Fields and Castle Eden Walkway		119	Greatham Creek west of A178	
97	Castle Eden Walkway at Hartburn		120	Geese at Bowesfield Nature Reserve	Dan van den Toorn, Tees Valley Wildlife Trust
98	Lustrum Beck corridor - including Ropner Park and open spaces at Grangefield and Oxbridge		121	Planting bluebell bulbs at Charlton's Pond Local Nature Reserve	iees valley vylidille ilust
99	Old River Tees and A19 at Teesside Park		122		Dan van den Taans
100	Old River Tees at Teessdie Park		122	Tree planting at Preston Farm	Dan van den Toorn, Tees Valley Wildlife Trust
101	Billingham Beck Valley Country Park and A19		123	Stile construction at Cowpen Bewley	rees valley vollatile trast
102	Haverton Hill and the Clarences		123	Woodland Park	
103	A178 corridor near Saltholme		124	Wall construction at the Clarences - River	Groundwork North East
104	River Leven south of Ingleby Barwick			Routes in Stockton project	
105	Coatham Wood, near Long Newton		125	Installing new finger post at Cowpen	
106	Countryside to the west of Hartburn			Bewley Woodland Park	
107	Near Greens Lane, Hartburn		126	1 1 7	
108	Hardwick Dene near University Hospital of			Park, Ingleby Barwick	
	North Tees		127	Excavating new wetland habitats for wildlife	Tees Valley Wildlife Trust
109	Green corridor adjacent to A177, Eastbourne, Stockton		120	adjacent to the River Tees at Preston Farm	INICA
110	Whitton Beck at Whitton Bridge		128	Meadow creation on brownfield land at Lucite International, Billingham	IIVCA
	Tilery Park		129	Path to Bishopsgarth School, Stockton	Sustrans
1 1 1	THELY LAIK		5		

Ref	Details	Credits
130	Tree planing near Hilton	
131	Cyclists on Infinity Bridge	Sustrans
132	Teesdale Way at Portrack Marsh Nature Reserve	
133	Constructing a sand martin bank at BP CATS, Seal Sands	INCA
134	Walled wildlife garden, Saltholme Wildlife Reserve and Discovery Park	RSPB
135	Preston Park	
136	Teesmouth National Nature Reserve	
137	River Tees at Thornaby	
138	Pyramidal orchid	Tees Valley Wildlife Trust
139	Hawthorn and cycleway adjacent to Thornaby Road, Thornaby	
140	Transporter Bridge from Saltholme	
141	River Tees and Bassleton Wood	
142	Cowpen Bewley Woodland Park	



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