

South Tyneside Green and Blue Infrastructure (GBI) Strategy

South Tyneside Council

Final report

Prepared by LUC March 2023



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South Tyneside Green and Blue Infrastructure (GBI) Strategy

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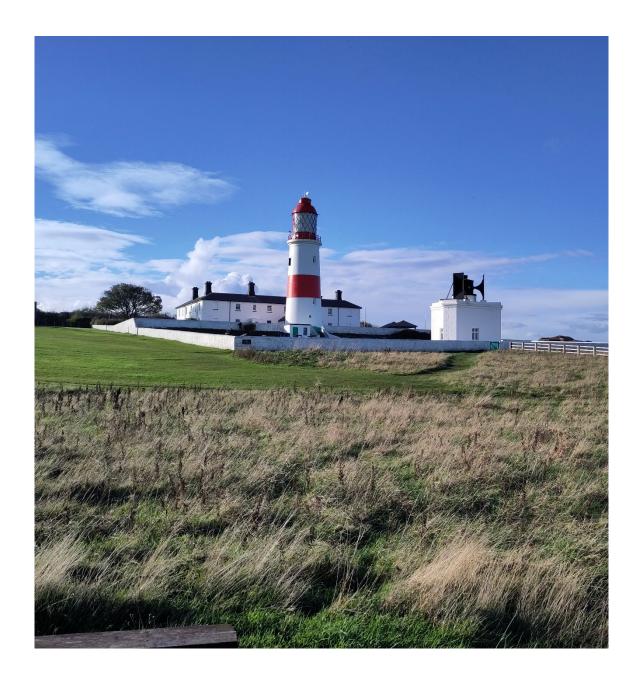
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Chapter 1

Introduction



What is Green and Blue Infrastructure?

- **1.1** Green and blue infrastructure (GBI) refers to the network of green and blue spaces that surround and run through our towns and cities. GBI helps connect people, wildlife and nature. GBI can include large green spaces like National Parks, Country Parks, farmed landscapes or river corridors. It can also include private gardens, allotments, hedges, street trees, roadside green verges, or footpaths. However, GBI is not about individual assets more important are the connections between those assets and the functions they provide.
- **1.2** Crucially, GBI should form a strategic network of high-quality green spaces and other natural features, which offers quality of life benefits for communities. It should thread through and around the built environment and connect the urban area to its wider rural hinterland.
- **1.3** Unlike grey infrastructure, such as drainage pipes which have a single function, GBI can provide many functions. These include recreation, removing water pollution, reducing flood risk, providing homes for wildlife, providing flowers for bees and other pollinators and helping to keep urban areas cool.

A summary of the benefits of GBI



How does GBI add value?

- **1.4** Historically, green and blue infrastructure has been treated within the planning system as a cost. However new approaches such as the 'natural capital' approach have helped to better understand the tangible value delivered by investment in GBI.
- **1.5** A natural capital approach considers the value of the natural environment for people and the economy. It is an important part of a wider move to better understand 'inclusive wealth' as set out in the Dasgupta Review commissioned by the government in 2019.

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1.6 The UK's Planning Practice Guidance (PPG) states that:

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

- **1.7** This value is largely made up of:
 - **Provisioning services** products from nature such as food, water, energy and materials. This includes agriculture, water extraction, renewable energy and mineral extraction.
 - Regulating services services helping to maintain the quality of our environment, such as carbon sequestration to remove greenhouse gases, parks and blue spaces to cool, and vegetation to remove air pollutants.
 - Cultural services these are non-material benefits people obtain from natural capital, such as tourism, recreation and aesthetic experience.
- **1.8** In fact, the Office For National Statistics now produces a set of Natural Capital accounts. These estimate the financial and societal value of natural resources in the UK. In 2019, they estimated that the stock of the UK's natural capital is worth £1.2 trillion.
- **1.9** Natural England's Natural Capital Atlas (Atlas 26 the North East and Tees Valley Edition) highlights the natural capital value and ecosystem services of natural assets in the wider region surrounding South Tyneside. **[See reference 1]**

1.10 This strategy seeks to dig deeper, exploring what ecosystem services or benefits respond to specific local needs across South Tyneside and how GBI investment can address these needs.

Why does South Tyneside need a GBI Strategy?

- **1.11** The South Tyneside Local Development Framework (LDF) is the current Development Plan document for the borough. It was adopted in 2007. However, at the time of publishing this Strategy, the borough is in the process of producing a new Local Plan, which will guide growth from 2021-2039.
- **1.12** In 2013, South Tyneside published a Green Infrastructure Strategy (SPD3) as a supplementary planning document which expanded on Core Strategy Policy SC6 "Providing for Recreational Open Space, Sport and Leisure."
- **1.13** However, the new Local Plan is being prepared against the backdrop of a rapidly changing national context including a response to the climate emergency and a renewed focus on biodiversity and nature networks. It is important that the new Local Plan reflects this new reality. It is equally important that it reflects the latest available data on GBI networks and associated needs and challenges.
- **1.14** The spatial vision in the emerging Local Plan includes a strong focus on:
 - Protecting and enhancing the Borough's stunning coastline, natural green spaces, watercourses, countryside and biodiversity and geodiversity designations.
 - Building resilience to the impacts of climate change and moving toward zero carbon by 2050.

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- Protecting and enhancing the unique identity of the Borough landscape and heritage and cultural assets – to safeguard them for future generations.
- Creating and strengthening sustainable and inclusive communities.
- Ensuring exceptional design quality of new development, well-integrated into the townscape and landscape.
- Providing access to a range of educational and training facilities.
- Allowing residents to easily make healthy lifestyle choices.
- Creating a flourishing and growing economic that makes a vital contribution to the regional and national economy.
- Creating attractive and vibrant town, district and local centres.
- Creating an integrated transport network and physical and digital infrastructure to support a prosperous economy.
- **1.15** Against this background, the objectives of this Green and Blue Infrastructure (GBI) Strategy are to:
 - Update our understanding of the green infrastructure networks within South Tyneside including any "blue" infrastructure networks.
 - Provide a robust and up-to-date evidence base to support the South Tyneside Local Plan. This should both inform land allocations and planning policies, and assist in the determination of planning applications.
 - Provide evidence to inform investment and funding decisions by the Council.

How was the Strategy developed?

1.16 The process for developing the Strategy was split into the following three broad stages, with different tasks within each:

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1. Baseline analysis: the network today

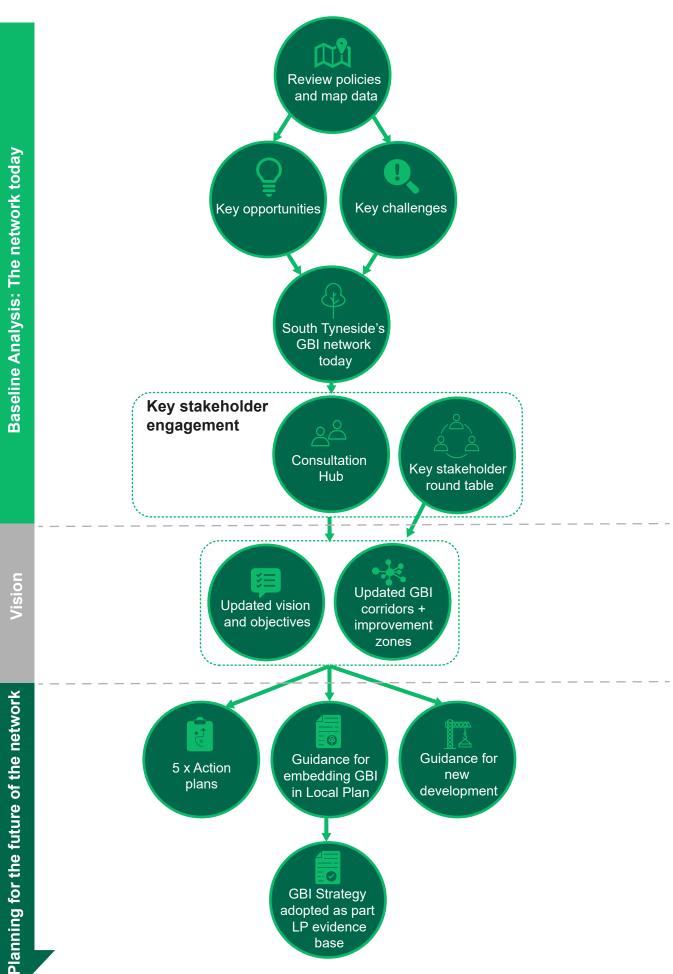
- Analysing spatial data on the existing network of GBI assets.
- Reviewing existing relevant plans, policies and strategies.
- Highlighting key opportunities and challenges for each overarching theme of People, Nature, Place and Climate Change.
- Engaging closely with key national and local stakeholders (through a digital Consultation Hub and Key Stakeholder Round Table see
 Appendix B for further detail).

2. Establishing a vision

- Updating the Vision and Strategic Objectives for the Strategy.
- Mapping of an updated network of "GBI Corridors" and "GBI Improvement Zones" (see Chapter 4 and the accompanying interactive map)

3. Planning for the Future of the Network

- Using the Vision, Strategic Objectives and mapping work to produce:
 - Five Action Plans covering the whole of the Borough, each identifying 2-4 priority Strategic Projects (see **Chapter 4**).
 - Guidance for new development (see **Chapter 5**).
- High level guidance for how GBI (and the findings and recommendations of this Strategy) can be embedded in the Borough's emerging Local Plan (see **Chapter 6**).
- **1.17** Because GBI does not respect administrative boundaries, it was important that this Strategy took account of GBI corridors which extend beyond the local authority boundaries of South Tyneside itself to take a wider, more strategic view.



What happens next?

- **1.18** This Strategy will form part of the evidence base for South Tyneside's emerging Local Plan. Its contents will be used by both the Local Plan team and Development Management teams as an evidence base to support the development of GBI policies in the new Local Plan and decision-making on planning applications. The priorities it puts forward should also inform the next update to the South Tyneside Infrastructure Delivery Plan (IDP) and be treated as an important component of infrastructure planning.
- **1.19** The Strategic Projects identified in the five Action Plans will also form an important foundation for multi-partner work beyond the planning system, helping to deliver prioritised projects across the Borough which deliver multiple GBI functions in the areas of greatest deficit. The National GI Standards launched by Natural England in early 2023 highlight the importance of establishing a lasting partnership approach with a diverse and inclusive set of stakeholders when planning for GBI. For more information on this, please follow this link: GI Process Journeys (naturalengland.org.uk).
- **1.20** That means embedding awareness of the multiple benefits of GBI across local authority departments and seeking to form robust delivery partnerships with external organisations and community groups such as Durham Wildlife Trust, Temple Park Friends Group, South Tyneside Tree Action Group and East Boldon and Whitburn Neighbourhood Forums.
- **1.21** The Strategy has taken a strategic look at GBI needs and opportunities across South Tyneside and identified clear priorities including strategic projects. It does not set out the detailed contents or design of each of these projects for this to happen, further feasibility and design work will be required to enable these projects to be delivered on the ground.
- **1.22** The National GI Standards set out a series of key steps for "integrating a GBI Strategy" into the local plan and wider strategies. These steps are set out

Chapter 1 Introduction

below with further details for South Tyneside set out in Chapters 5 and 6 of this strategy:

- Ensure join up between Local Nature Recovery Strategies, GBI Strategies and GBI Delivery Plans.
- Use the evidence on local character to design good GI as part of Local Design Guides/Codes.
- Include GI Standards in Local Design Codes.
- Embed GI in all relevant chapters/policies in Local Plans, including site allocations.
- Set requirements for GBI information within planning validation checklists.
- Ensure GBI is included across local government and stakeholder policies and strategies.

Chapter 2

A Portrait of South Tyneside's GBI Network Today



- **2.1** South Tyneside is a distinctive coastal community with a wealth of historic, natural and cultural assets. The Borough's history has been closely linked with its major green and blue corridors particularly the River Tyne to the north. South Shields began as a fishing port, salt panning later became important along the Tyne, and in the 19th century a coal boom and the growing shipbuilding industry were also focussed along the Tyne.
- **2.2** However, as industry declined through the 20th century, South Tyneside has turned back to its blue corridors particularly along the coast as tourism has become an important part of the local economy.

- **2.3** As a Borough, South Tyneside is heavily urbanised. The majority of people live in the three main urban areas of South Shields, Jarrow and Hebburn. Today, these areas contain pockets of high socio-economic deprivation, often overlapping with inadequate access to green space and nature.
- **2.4** The south of the Borough is dominated by a significant area of rural land designated as Green Belt, which is largely used for agricultural purposes. There are also areas of high landscape value such as Cleadon Hills and Boldon Downhill. Several parts of the Green Belt include blue corridors related to the River Don, scheduled monuments and scattered tree groups although woodland and tree cover in general is limited.
- **2.5** The highest concentration of assets designated for their nature value is found along the coastal fringe where overlapping SAC and SSSI designations protect the land for its magnesian limestone vegetation. The SPA designation along parts of the coast acknowledges important coastal bird populations.

The following sections provide a summary of how South Tyneside's GBI network is performing in terms of the Strategy's key GBI themes of:

- People
- Nature
- Place
- Climate Change
- **2.6 Appendix A** provides the full baseline analysis and policy context review which led to these conclusions.

People

Why is GBI important for people in South Tyneside?

- **2.8** Access to green and blue spaces on your doorstep has long been known to benefit physical health. It is increasingly linked to positive mental health whether it is a footpath for a morning dog walk, leafy trees on the local high street, or a local area to play. The experience of the Covid-19 pandemic from 2020 onwards only heightened awareness of these benefits.
- **2.9** For young people, opportunities to play outside, particularly in natural surroundings, are found to significantly reduce mental ill health. [See reference 2] However, a significantly ageing population also means that our open spaces need to cater for an intergenerational community and the distinct needs of each group.
- **2.10** GBI networks are increasingly recognised as part of preventative health care. 'Green social prescribing', for example, works by linking people with local 'green' activities, such as walking groups, community gardens and food-growing projects.
- **2.11** There is a strong crossover between the planning of walking, cycling and wheeling infrastructure and the planning of the GBI network. The GBI network can contribute to the 'greening' of walking and cycling infrastructure to encourage use. It can also help to provide 'softer' greenways and active travel routes as part of the wider network.
- **2.12** Natural spaces are not only a forum for exercise. They also provide opportunities to come together and socialise. This might happen at the scale of a 'pocket park' or a larger community garden where people can connect through volunteering.

2.13 The Institute for Public Policy Research's (IPPR) Commission on Health and Prosperity links this health agenda to the wider economic agenda – asserting that a fairer country is a healthier country, and that a healthier country is a more prosperous country. [See reference 3]

What does local and national policy say?

- 2.14 In recent years, GBI has risen to the forefront of the UK's political agenda. The 2018, 25 year Environment Plan [See reference 4], the 2023 Environmental Improvement Plan [See reference 5], the 2021 National Planning Policy Framework [See reference 6] and Defra's Green Infrastructure Framework Principles and Standards for England (launched in 2023) [See reference 7] have all highlighted the importance of GBI and natural spaces for health and wellbeing, local communities and inclusive spaces. Whilst these documents emphasise the importance of GBI for people, they can also be used as a guidance to help local planning authorities and developers to meet GBI requirements through the planning system and outside it.
- 2.15 Local policy continues to focus on providing outcomes that support health and wellbeing across South Tyneside. Key areas of focus include improving air quality, delivering a vision for all to be 'healthy and well' (see South Tyneside Vision 2023-43 for more information), addressing the key health issues, including mental health (see Our Better Health and Wellbeing Strategy 2017-2021 for more information) and transforming active travel infrastructure in order to make it accessible for all.
- **2.16** See **Appendix A** for a full summary of the policy context for each theme.

What are the challenges and pressures in South Tyneside?

- **2.17** Ill health is a significant concern in South Tyneside. ONS data from 2017-19 shows that males born in the Borough have a life expectancy of 77 years (compared to 80 nationally) and women 82 years (compared to 83 nationally). **[See reference 8]** In December 2022 report from IPPR (please see <u>report from IPPR</u>) found that in the wider North East region, sickness is twice as likely to force people out of the work than in London and the South East with a knock-on effect for attempts to boost economic productivity in the region.
- **2.18** Data from Sport England's annual Active Lives survey shows that people in South Tyneside are also less physically active than the national average. **[See reference** 9] The data highlights that over 31% of South Tyneside residents are inactive (less than 30 minutes activity per week), compared to an England average of 27.2%. The data also indicates higher levels of loneliness than the national average, with 7.8% of people reporting they often/always feel lonely, and 17% saying they feel lonely some of the time.
- **2.19** According to the 2019 Index of Multiple Deprivation (IMD), South Tyneside is also home to a significant concentration of socio-economic deprivation (see accompanying <u>interactive map</u>). There is a significant divide between northern and southern parts of the Borough with pockets of deprivation focussed in the north along the River Tyne. It will be important to focus GBI benefits on these areas, in order to maximise health and wellbeing benefits.
- **2.20** Additional mapping of GBI assets from Natural England overlays socioeconomic deprivation statistics with access to publicly accessible green space. [See reference 10] It highlights particular areas of need in the urbanised areas of Jarrow and South Shields, as well as in built-up areas around Biddick Hall, Whiteleas and Boldon Colliery (see accompanying interactive map).
- **2.21** The Natural England mapping also highlights deficits of publicly accessible GBI in the south of the Borough, including West Boldon and Whitburn. Whilst

there is open countryside nearby, access to this is restricted to public rights of way (PROW) and other linear routes.

- **2.22** South Tyneside's Joint Strategic Needs Assessment (JSNA) highlights a dramatic increase in the ageing population locally, which will need to be catered for in the future development of the Borough's GBI network, including the increasing prevalence of dementia in people aged 75+. [See reference 11]
- **2.23** There is a significant need for new opportunities to grow food, with demand for allotments across South Tyneside dramatically outweighing the number of plots available. Council records show increasing levels of demand, with only a small proportion of applicants getting access to an allotment.

People: Summary of key challenges

- Deficits in access to green space, which overlaps with areas of wider deprivation particularly in parts of South Shields and Jarrow.
- Relatively poor levels of health and lower than average life expectancy.
- Significant health inequalities between communities. Long term ill health challenges are significant obstacles to productivity in the region.
- Lower levels of participation in physical activity compared to the national average.
- Shortage of allotments to meet demand.

People: Summary of key opportunities

Additional areas of green and natural space of all scales and types, targeted at areas of existing deficiency.

- Enhancing the GBI network to encourage movement by walking and cycling through the Borough.
- Identification of land for use as community growing space.

Nature

Why is GBI important for nature in South Tyneside?

- **2.24** The UK government's landmark Dasgupta Review_highlights that our economies, livelihoods and wellbeing all depend on natural assets. It goes on to explain how biodiversity enables nature to be productive, resilient and adaptable [See reference 12].
- **2.25** Just as diversity within a portfolio of financial assets reduces risk and uncertainty, so diversity within a portfolio of natural assets increases nature's resilience to shocks.
- **2.26** Globally, biodiversity is declining faster than at any time in human history. Indeed, the 2019 State of Nature report for the UK highlighted dramatic losses of biodiversity noting a decline in 'species abundances' of 13% since 1970, a trend which appears to be accelerating. Please follow the link for more information: 2019 State of Nature report This is being driven by issues including agricultural management, climate change, urbanisation, pollution, hydrological change, invasive species and a lack of woodland management.
- **2.27** Bees and other pollinators in particular are declining. According to nature conservation organisation Buglife, over 97% of all flower-rich grasslands have been lost in England since the 1930s, reducing pollen and nectar sources and leading to a serious decline in bees, butterflies and hoverflies (please follow the link for more information: https://www.buglife.org.uk/our-work/b-lines/). This has

led to concerns in the long term over the UK's ability to grow food crops, which rely on pollination as an 'ecosystem service'.

2.28 Climate change is also likely to have a range of impacts on habitats and species as conditions become unsuitable for them to thrive. Without good green and blue infrastructure alongside increasingly urban and managed landscapes, we undermine nature's ability to be productive, resilient and adapt to a changing climate.

What does local and national policy say?

- **2.29** The UK has set a series of targets to prioritise the health of land, water, sea, plants and wildlife including the restoration of 75% of protected terrestrial sites (as outlined in the 25 Year Environment Plan (25YEP). The Environment Act (2021) sets out targets for the provision of <u>Biodiversity Net Gain (BNG)</u>, the mapping and maintenance of a <u>national Nature Recovery Network (NRN)</u>, the development of <u>Local Nature Recovery Strategies (LNRS)</u>, and the protection of 30% of land for nature conservation by 2030. Other targets include one to increase woodland cover to 12% by 2050 (see the <u>England Trees Action Plan 2021-2024</u>).
- **2.30** The National Planning Policy Framework (2021) emphasises the importance of maintaining the conservation and enhancement of GBI and wildlife-rich areas through local plans. Please follow the link for more information https://www.gov.uk/government/publications/national-planning-policy-framework--2)
- **2.31** The Marine Strategy (2019) provides momentum to tackle health and integrity challenges in the UK's marine environment. **[See reference** 13] In the case of agricultural land, Environmental Land Management Schemes (ELMS) have been set up in order to support the 25 Year Environment Plan.
- **2.32** Locally, there are a number of polices highlighted in the emerging Local Plan 2021 2039 and Local Development Framework (2007) relating to the

protection and enhancement of local biodiversity, conserving the natural qualities and local character of the landscape and coastline. South Tyneside's 2020 Wildlife Corridor Review provides an up-to-date record of the wildlife corridor network across the Borough.

2.33 See **Appendix A** for a full summary of the policy context for each theme.

What are the challenges and pressures in South Tyneside?

- **2.34** South Tyneside supports a range of habitats and species due to the geographical location of the Borough on the Northumbrian coast with underlying rocks of the Middle Coal Measures, as highlighted in the Landscape Character Study.
- **2.35** The River Tyne to the north and its tributary the River Don both form important ecological corridors supporting several rare and threatened species including otter, water vole, eel and brown trout.
- **2.36** However the heavily urbanised setting of the north of the Borough means that often space for nature gets "squeezed", leaving fragmented wildlife corridors.
- **2.37** Overlapping international designations span the coastline of South Tyneside, as highlighted on the accompanying interactive map.
- **2.38** There are five SSSIs within the Borough, also shown on the <u>interactive</u> map. Of these, three have units which are in "favourable" condition:
 - Harton Downhill SSSI
 - Cleadon Hills SSSI
 - Durham Coast SSSI

- 2.39 A further three SSSIs have units which are in "unfavourable" condition:
 - Boldon Pastures SSSI is in "unfavourable no change" condition due to under grazing.
 - West Farm Meadow SSSI which is in "unfavourable declining" condition due to fertiliser enrichment.
- 2.40 SSSIs in the Borough were most recently assessed for their condition in 2009 and 2013. As a result, there may have since been some changes in the condition of the sites.
- **2.41** Several of the Local Wildlife Sites (LWS) in South Tyneside are under council monitoring and management and are in good condition. However, there are many in private ownership that are suffering from a lack of management this has resulted in declining condition, according to the Borough's Wildlife Corridors Network Review (2020).
- **2.42** Finally, there are water quality issues affecting the Tyne catchment. The River Don is classified as being in moderate ecological condition. [See reference 14] The river is affected by physical modifications and pollution by heavy metals; measures have been implemented to prevent future pollution.

Nature: Summary of key challenges

- Water quality concerns within the Tyne catchment with the River Don classified as being in only moderate ecological condition.
- Urban squeeze in the north and agricultural management practices in the Green Belt to the south resulting in fragmentation of wildlife corridors.
- A number of SSSIs are in unfavourable or declining condition due to historic land uses such as mining and intensive agriculture, lack of scrub management, and human disturbance.

■ Lack of management of Local Wildlife Sites which are under private ownership and therefore in a poor condition.

Nature: Summary of key opportunities

- Joining up fragmented nature networks across the Borough to aid nature recovery and better protect designated sites.
- Landscape-scale river corridor restoration to tackle poor water quality.
- Creating wildlife corridors through urban areas.
- Improve the biodiversity value of land through appropriate management as part of the Biodiversity Net Gain (BNG) requirement.

Place

Why is GBI important for quality of place in South Tyneside?

- **2.43** GBI can make an important contribution to improving the quality and sense of place sometimes called 'placemaking'. This includes both regeneration initiatives and the contributions GBI can make to the local economy, such as tourism activities. Placemaking is about improving the public space in a settlement through an understanding of what makes a local community unique. It should take into account how people use their existing public spaces and what improvements the community would most benefit from.
- **2.44** Planning for GBI plays an important part in the placemaking process and in achieving a higher and more consistent quality of place. In South Tyneside in particular, a high quality GBI network has a central role to play in supporting wider ongoing regeneration and economic renewal ambitions.
- **2.45** Access to nature, green space and nature-rich spaces plays an important part in creating neighbourhoods which attract and retain a highly skilled workforce to meet employer needs particularly in light of wider economy ambitions for South Tyneside to become the "battery of the country" through renewable energy development. It will also boost the existing visitor economy, another important driver of local economic ambitions.
- **2.46** Town centre renewal plays an important part in these wider regeneration plans. The Covid-19 pandemic from 2020 onwards accelerated historic trends in the decline of the traditional high street and town centres generally. There has been substantial growth in online shopping and home working patterns leading to the closure of shops and re-purposing of office space. Against this backdrop, a GBI-led approach to placemaking is becoming an increasingly attractive option when reconsidering the changing role and function of urban areas —

away from a pure retail focus to one which is more led by leisure opportunities and more diverse uses.

- **2.47** Heritage features are also a key part of any GBI network (see accompanying <u>interactive map</u>) and make important contributions to sense of place. GBI should respond to an area's character so that it contributes to the conservation, enhancement and/or restoration of landscapes. It can also create new high-quality landscapes to which local people feel connected.
- **2.48** Finally, investing in nature recovery and in particular in "nature-based solutions" can also help to boost local and regional economies. It can create more jobs and economic value than alternatives, while also enhancing long-term resilience to the inevitable impacts of climate change, including flooding and heatwayes.

What does local and national policy say?

- **2.49** The 2020 report of the UK's Building Better, Building Beautiful Commission outlined the importance of greening towns and cities. **[See reference** 15] GBI has been recognised as a key ingredient of a well-designed place, as outlined in the UK's National Design Guide.
- **2.50** The ambitions of the South Tyneside Vision 2023-43 are focussed on securing positive economic, social and environmental wellbeing. [See reference 16] The South Tyneside Economic Recovery Plan (2020) also presents both challenges and opportunities, highlighting the key drivers for the Borough's recovery and future growth as a place. [See reference 17]
- **2.51** See **Appendix A** for a full summary of the policy context for each theme.

What are the challenges and pressures in South Tyneside?

- 2.52 There is currently relatively poor provision of GBI within urban areas of South Tyneside. This causes a further obstacle for the Borough in attracting and retaining high skilled workers due to quality of place and public realm. There is also a high level of commuting by car and high levels of congestion in the Borough - leaving less open space available for nature-based solutions, nature recovery and nature-rich public realm.
- 2.53 There is a tangible sense of disconnection from many of the Borough's natural corridors, particularly the River Tyne – which is a missed opportunity to use landscape features to help repair and build a sense of place. Emerging developments such as Holborn Riverside seek to create a step change in the quality of neighbourhoods and connection to the waterside areas.
- **2.54** South Tyneside's town centres are struggling, in line with wider trends. However, the ongoing regeneration initiatives in the Borough's urban areas offer a valuable opportunity to ensure that GBI functions are embedded into wider regeneration initiatives – interventions such as pocket parks, green corridors, tree cover and rain gardens can support this ambition.
- **2.55** The Borough's coastline is absolutely central to the Borough's sense of place and its own sense of identity. There is a need to help nature recover in coastal areas, as part of wider ambitions to grow a "blue economy" - one which uses ocean resources sustainably or even regeneratively whilst improving community wellbeing and social equity, as set out in the Council's Ocean Recovery Declaration.
- **2.56** Finally, South Tyneside benefits from a rich network of heritage assets including listed buildings, conservation areas and scheduled monuments. However, the interactive map that accompanies this report highlights a number of heritage assets which are 'at risk' within the Borough, including a number of Conservation Areas in the south of the Borough.

Place: Summary of key challenges

- Currently poor quality of GBI and public realm in many of the Borough's town centres.
- Sense of disconnection from natural features and river corridors particularly the River Tyne.
- A number of valued heritage assets are at risk.

Place: Summary of key opportunities

- Need for GBI to be a central part of wider town centre regeneration initiatives.
- An improved and accessible GBI network to provide a high quality of life across the Borough that can attract people to remain in the area or to come and live and work in the Borough.
- Enhanced GBI offers the opportunity to improve the setting of heritage assets (particularly those at risk), add value and better connect them together.
- Need to capitalise on and better protect the flagship asset of the Borough's extensive coastline as part of building a resilient "blue economy".

Climate Change

Why is GBI important for climate change in South Tyneside?

- **2.57** South Tyneside's emerging Local Plan can make a major contribution to mitigating and adapting to climate change, in the way it stewards the borough's assets and shapes new development to both reduce emissions and build resilience.
- **2.58** GBI plays a dual role in relation to climate change. Firstly, GBI can help to reduce the carbon emissions that contribute to climate change through multiple routes, including:

- Providing greenways and spaces that encourage walking and cycling as an alternative car use, reducing emissions from transport.
- By capturing carbon from the atmosphere and locking it way (peatlands, trees and seagrass are particularly effective at doing this).
- **2.59** Secondly, GBI can play a key role in adapting to climate change. This can include:
 - Helping to soak up rainfall and reduce flood risk.
 - Providing shade from hot summer sun and reducing peak summertime temperatures through evapotranspiration.
- **2.60** Where such needs are identified, GBI can be designed to maximise these benefits. Examples include incorporating sustainable drainage features such as swales and rain gardens, or avenues of street trees as noted in the Guidance for New Development set out in **Chapter 5**.

What does local and national policy say?

- **2.61** The 25 Year Environment Plan and the UK's Climate Change Act 2008 (as amended in 2019) outline targets to reduce greenhouse gas emissions by 2050. Additionally, increasing woodland cover in the UK from 13% to a minimum of 17% by 2050 [See reference 18] has been given a priority. The National Planning Policy Framework (2021) and Nature Positive 2030 report seeks to use nature-based solutions to combat the impacts of climate change. The Nature Positive 2030 report can be found at: Nature Positive 2030.
- **2.62** The Sustainable South Tyneside Strategy (2020-2025) recognises that Climate Change is the most important issues to tackle in our lifetime and the Climate Change Action Plan identifies the aim to increase tree cover (by a minimum of 3,000 trees per year) in order to tackle the impacts of Climate Change. [See reference 19] The Council's January 2022 declaration requires ocean recovery to be considered in all strategic decisions, plans, budgets and approaches to decisions by the Council. [See reference 20]

2.63 See **Appendix A** for a full summary of the policy context for each theme.

What are the challenges and pressures in South Tyneside?

- **2.64** The Council's declaration on the need for Ocean Recovery notes that residents of the Borough are on the "frontline" of climate change and are being disproportionately affected relative to inland communities. Potential impacts include rising water temperatures and changes in ocean chemistry, to sea level rise and increased "storminess". This is changing what seafood is caught locally, accelerating the erosion of the coastline and increasing risk to infrastructure and properties, and increasing the risk of flooding and storm damage.
- **2.65** The coastal edge of South Tyneside is also significantly affected by coastal erosion as a result of a changing climate. This is part of the focus of the ongoing Stronger Shores [See reference 21] campaign to boost coastal resilience through nature-based solutions see **Action Plan 1 (Chapter 4)** for further detail.
- **2.66** Large areas of the Borough are subject to flood risk as shown on the accompanying <u>interactive map</u>. Fluvial flood risk is concentrated along the Tyne corridor and along the River Don corridor. The coastal edge is at risk from tidal flooding as a result of storm surges during high astronomical tides. The extent of impermeable surfaces in urban areas in the north also means that surface water (pluvial) flooding is a concern in a number of areas. The Strategic Flood Risk Assessment brings together an assessment of the different types of flood risk in South Tyneside. [See reference 22]
- **2.67** There is also fairly low tree cover across South Tyneside the 'Sustainable South Tyneside 2020-2025' Strategy highlights that tree canopy cover stands at 10%. **[See reference** 23**]** Additionally, mapping from the National Forest Inventory shows that woodland areas cover just 3% of the

Borough. There is no evidence of ancient woodland (irreplaceable, complex ecosystems which have a significant role in storing carbon) within the Borough as part of spatial data sets.

Climate change: Summary of key challenges

- Risks from increased extreme weather as a result of the impacts of climate change.
- Flood risk and recent regular flood events due to the location of the borough within the floodplains of the River Don and River Tyne. Risk of surface water flooding within urban areas due to high levels of impermeable surfaces.
- Coastal erosion.
- Woodland cover below local and national targets.

Climate change: Summary of key opportunities

- Using nature-based solutions to boost coastal resilience to climate change.
- Using nature-based solutions to flooding, inside and outside urban areas, to increase resilience to increasing flood risk.
- Expanding tree cover in both rural and urbanised areas of the Borough.

Chapter 3

Vision and Strategic Objectives for the Future of the Network

3.1 The following vision, developed based on the baseline analysis of issues/challenges and opportunities, informs everything which is proposed in this GBI Strategy:

As South Tyneside undergoes significant wider change and regeneration in coming years, these changes will be accompanied by provision of high quality GBI that is attractive, well managed, resilient and multifunctional. Areas and corridors of existing GBI value will be protected and enhanced as part of a wider nature recovery network, while new GBI will be delivered in areas where there are deficits - including throughout urban areas. This will allow GBI to contribute to tackling the generational challenges the Borough is facing around climate change, biodiversity decline and physical and mental health.

An improved GBI network will allow South Tyneside's greatest assets - its coastline and significant natural heritage features - to shape a **distinctive place** with vibrant and attractive town, district and local centres. These centres will offer a **high quality of life**, help to attract investment and contribute to the local and regional economy. **Nature-based solutions** will be prioritised wherever possible to adapt to the inevitable impacts of climate change.

Ownership over GBI assets of all scales will be broad-based, with **local** communities, individuals and businesses playing an active role in their

long-term stewardship. The role of the Council will be to act as a strong and supportive facilitator of this collaborative process.

3.2 This Vision is given further definition by a series of nine Strategic Objectives (SOs), which in turn inform the Strategic Projects identified within the Action Plans (see **Chapter 4**). These SOs are structured by the Strategy's themes of People, Nature, Place and Climate Change.

People

SO1: To ensure that every community has access to high quality, accessible open space, including food growing opportunities and nature-rich spaces, within an easy 15-minute walk.

SO2: To focus urban greening interventions on the most deprived areas of the Borough (such as parts of Jarrow and South Shields) where there are existing deficits in access to green space and it will encourage walking and cycling.

Nature

SO3: To work with natural processes to improve river water quality in the Borough.

SO4: To protect the Borough's vulnerable coastal habitats and create widely held understanding of the marine environment and the pressures on it.

SO5: To catalyse the recovery of the Borough's nationally and locally designated sites, supported by a strategically planned and stewarded Nature Recovery Network to underpin their health.

Place

SO6: To use GBI features as a core component of wider regeneration initiatives, including heritage-led regeneration, town centre regeneration and making the most of the Borough's coastline - so that GBI can contribute to the Borough's wider economic recovery.

SO7: To set higher standards for new development – which should be designed around a 'green-blue' framework and provide multiple GBI functions within the land available.

Climate Change

SO8: To prioritise nature-based solutions to flooding and coastal resilience wherever possible.

SO9: To increase tree cover and other GBI features in urban areas to provide shade and cooling to tackle hotter summers and reduce flood risk from more intense rainfall events - while ensuring this GBI assets are designed to be resilient to climate change.

What is the purpose of the GBI Corridors and Improvement Zones?

- **3.3** This Strategy has taken a data-led, evidence-based approach to updating the GBI corridors which were presented in the 2013 Green Infrastructure Strategy. In addition to considering changes which have taken place over the last decade, the update proposes to more explicitly include blue assets in the assessment of GBI networks. The design of the mapping started with the question "what is the purpose of the corridors?".
- **3.4** The mapping process also acknowledged that the largely urbanised north of the Borough is generally affected by deficits in GBI (absence) rather than GBI assets to protect but should not be overlooked in the process of enhancing and strengthening the Borough-wide network in line with the Vision and Strategic Objectives set out in **Chapter 3.**
- **3.5** It became clear that two different types of areas need to be highlighted in order to guide future enhancements to South Tyneside's GBI network:
- 1."**GBI corridors**" which join up those existing GBI assets which needed to be *protected and enhanced*.
- 2."**GBI Improvement zones (IZs)**" which are focused more on areas of deficit or "*hotspots*" *of need*. That is, locations where we find a clustering of many of the diverse issues GBI can help to address. The methodology for identifying these GBI Corridors and Improvement Zones is described below.

How were the corridors and IZs developed?

- **3.6** Baseline spatial data was gathered from a wide range of sources and collated using Geographical Information Systems (GIS). Spatial socio-economic data and environmental data (e.g. reflecting flooding / air quality) was then used to understand how GBI assets and needs are distributed spatially across the Borough.
- 3.7 GIS data sets were sorted to highlight data which identify either:
 - GBI assets where there is already provision of features which provide
 GBI functionality, including benefits such as biodiversity value, accessible open space or heritage significance.
 - Data sets which highlight where there is a *greater need for GBI* for example where there are barriers to accessing green space, high level of flood risk etc.

Mapping the corridors

3.8 In order to map the corridors, spatial data was collated on networks of existing GBI assets that need to be protected and enhanced. (See **Appendix D** for full details of data sets used) and then we combined these assets to form multifunctional GBI corridor mapping. The choice of data sets was led by the function/benefits they provide for the overarching strategy themes of People, Nature, Place and Climate Change.

Mapping the Improvement Zones (IZs)

3.9 Data which highlighted deficiencies in GBI, or a particular need for GBI, was used to define the emerging "Improvement Zones (IZs)". These focused on

hotspots of need – including data on open space deficits, socioeconomic deprivation and flood risk.

3.10 These datasets were overlaid to highlight spatial patterns where several hotspots of need overlap in one location. These locations are important as GBI interventions here would have the potential to meet multiple needs simultaneously.

Testing with key stakeholders

- **3.11** The draft method for mapping GBI Corridors and Improvement Zones was presented at an informal stakeholder workshop session for review and feedback (see **Appendix B**). Additional datasets were identified at this session and subsequently shared and incorporated in the final mapping e.g. data on Conservation Areas at Risk.
- 3.12 Following this testing process, the method was finalised (see Appendix
 D), the corridors and IZs were mapped and all were loaded onto the interactive map accompanying the Strategy. This mapped data was used as the foundation for identifying the Strategic Projects outlined in the Action Plans in Chapter 4.

Chapter 4

Action Plans

Introduction to the Action Plans

- **4.1** The five Action Plans presented in this Chapter follow directly on from the Vision and Strategic Objectives and are also closely informed by the GBI Corridors and Improvement Zones, both identified in Chapter 3. However, they are delivery-focussed and start to identify the kind of on-the-ground projects which might help deliver on the Strategic Objectives.
- 4.2 To create the Action Plans, the Borough was split into five broad areas based on the differing GBI character of each:
 - The Coastal Edge.
 - The South Tyneside Urban Area.
 - The River Don Corridor.
 - The Hebburn Urban Area.
 - The Southern Edge Green Belt.
- **4.3** The illustration below highlights how the Borough has been divided up for the purposes of the 5 Action Plans as part of this Strategy. Please note that the boundaries drawn here are indicative and do not represent 'hard boundaries'. They are simply a way of organising the Strategic Projects across the different part of South Tyneside.



- **4.4** Each area has a unique set of GBI assets and challenges which the Action Plans address.
- **4.5** Each Action Plan contains a series of identified Strategic Projects. These are projects identified and prioritised at the strategic scale, which can guide GBI improvements within each Action Plan area. These Strategic Projects are by no means an exhaustive list of all actions to be taken forward to enhance GBI across the Borough however they identify interventions which should be prioritised for delivery and act as a strategic catalyst for a range of work in this area. In this way, they act as a 'starting point', rather than an 'end point'.
- **4.6** The Strategic Projects were identified through a desk-based analysis which took into account:
 - Any existing/ongoing projects.
 - Existing GBI assets and the mapped GBI corridors.
 - The mapped Improvement Zones (IZs).

- Input from key stakeholders.
- An assessment of how far the proposed projects align with the Strategy's Vision and Strategic Objectives (SOs).
- **4.7 Table 5.1** maps each of the 17 Strategic Projects against the SOs it delivers against. Where appropriate, the projects identified builds on existing work ongoing that aligns with the Strategy's Vision and Strategic Objectives.

Table 4.1: Summary of Strategic Projects against Strategic Objectives

Action Plan	Strategic Project	SO 1	SO 2	SO 3	SO 4	SO 5	SO 6	SO 7	SO 8	SO 9
Action Plan 1: Coastal Edge	1.1 South Tyneside Seascapes				✓		✓			
	1.2 Stronger Shores				✓	✓			✓	
	1.3 NCN1 Green Corridor						✓			
	1.4 Greening Sandhaven						✓		✓	
Action Plan 2: South Shields Urban Area	2.1 South Shields Town centre blue-green corridors		✓				✓		✓	
	2.2 Repurposing existing open spaces – including backland sites	√								
	2.3 Tyneside green corridor (Arbeia – Port of Tyne)							✓		✓
	2.4 "Grey to green" Port of Tyne						✓		✓	
Action Plan 3: River Don Corridor	3.1 River Don Linear Park	✓		✓					✓	
	3.2 Sustainable Simonside	✓	✓						✓	
	4.1 Greening Hebburn- supporting town centre regeneration	✓					✓			
	4.3 Monkton Burn green loop		✓							

Action Plan	Strategic Project	SO 1	SO 2	SO 3	SO 4	SO 5	SO 6	SO 7	SO 8	SO 9
Action Plan 4: Hebburn Urban Area	4.2 Tyneside green corridor (Port of Tyne – Riverside Park – neighbouring authorities)							✓		
	4.4 Greener neighbourhoods pilot (around Keelman's school)	✓	✓						✓	
Action Plan 5: Southern Green Belt Edge	5.1 Southern edge connectivity	√				✓				
	5.2 Wetland creation			✓		✓			✓	
	5.3 Cleadon Heritage Trail	√				✓				
	5.4 Greening the southern villages	✓			·					✓

- **4.8** The projects identified are designed as 'place based interventions', as referenced in the National GI standards launched in January 2023. Please follow this link for more information: National GI standards. They emerged from mapped data on assets and deficiencies. However, it should be noted that in practical terms, opportunities to enhance the GBI network may not always be straightforwardly data-led. They may also be funding-led or created through identification of need by the local community or an interest group. Delivery partners should be open to, and supportive of, additional projects which emerge in this way provided they align with the Vision and Strategic Objective set out in **Chapter 3**.
- **4.9** For each strategic project, we have outlined:
 - An indicative cost:
 - High (<£200,000)
 - Medium (£50-200,000)
 - Low (<£50,000)
 - An indicative timeline:
 - Long term (10+ years)
 - Medium term (1-10 years)
 - Quick win (< 1 year)
- **4.10** Each Strategic Project also includes an outline of Delivery Guidance and Potential Funding mechanisms. However, further feasibility work would be required to identify specific funding sources particularly as grant and other sources are constantly evolving.
- **4.11** As set out in the National GI standards, the multifunctional nature of GBI means that it can be implemented and funded in a number of ways. The challenge is to identify the opportunities to draw together differing delivery mechanisms and funding sources particularly given the focus of this Strategy

on projects which deliver a wide range of benefits and GBI functions.

Developing a strong partnership approach and collaborative projects will also be important - partnerships need to be cross-sectoral to bring together various sources of funding (public, private, philanthropic or third sector).

4.12 Case study examples of successful similar projects have been identified to provide helpful precedent of where similar initiatives have been taken forward elsewhere – providing valuable lessons learned and inspiration.

Action Plan 1: The Coastal Edge

4.13 The Coastal Edge incorporates the shoreline, cliffs and open spaces between South Shields and Whitburn and the North Sea. The strategic projects outlined in this action plan are: South Tyneside Seascapes; Stronger Shores; NCN1 Green Corridor; and Greening Coastal Defences.

- **4.14** The Strategic Projects proposed in this Action Plan are the following:
 - South Tyneside Seascapes (SP1.1)
 - Stronger Shores (SP1.2)
 - NCN1 Green Corridor (SP1.3)
 - Greening Sandhaven (SP1.4)

Summary of assets

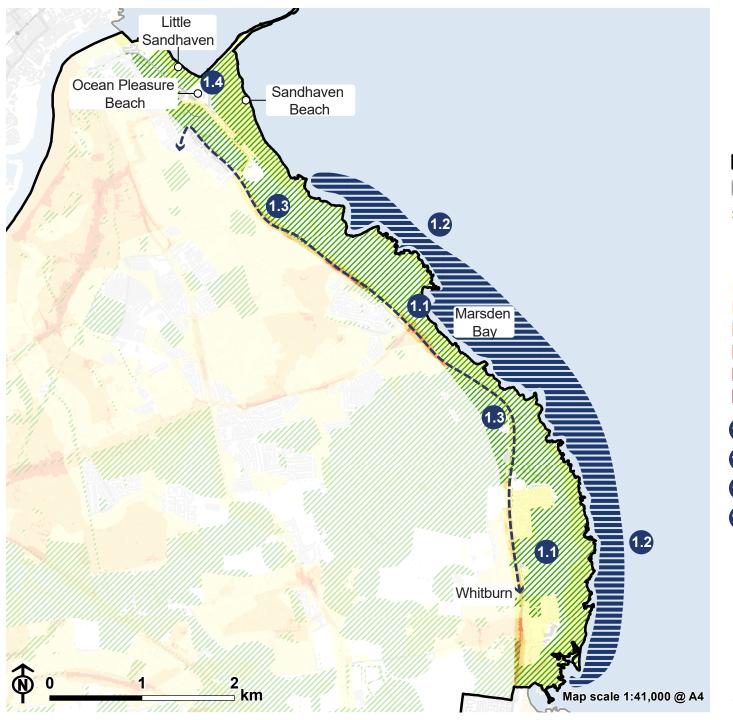
- Coastal habitats: South Tyneside's coastline includes areas of significant value for nature, with overlapping designations. The entire shoreline south of South Shields Pier is part of the Durham Coast SSSI – made up of littoral rock (bedrock, boulders and cobbles in the intertidal zone) and neutral grassland habitats - all of these are in favourable condition. Parts of the coast also lie within the Northumbria Coast Special Protection Area (providing habitat for the purple sandpiper, ruddy turnstone and little tern), the Durham Coast Special Area of Conservation (including coastal sand dunes, sand beaches, shingle, sea cliffs and islets), and designated as Ramsar Sites (indicating wetlands of international importance).
- Open space: Open space data shows that the coastal edge hosts a significant portion of the "Natural and Semi-Natural Open Space" typology in South Tyneside. This includes large areas of grassland and beaches and is a flagship recreational asset for the Borough. In the north, more formal open space provision is provided at South Marine Park, North Marine Park and Bents Park.

- Recreational assets: North of Trow Point, sandy beaches and an abundance of recreational features dominate. These include Ocean Beach Pleasure Park and South Shields Surf School. The sea around Marsden Sands and Sandhaven Beach are both identified bathing waters, highlighting the importance of these beaches for recreation.
- England costal path: The Coastal Path runs along the coastal edge, offering access from nearby settlements to the coast. Route 1 of the National Cycle Network (NCN) runs just inland from the coast and is an important active travel route.
- Landscape: The coastal strip is identified as an Area of High Landscape Value due to its limestone outcrops, importance for recreational value and high level of "naturalness". [See reference 24]

See accompanying interactive map to explore these assets in full.

Summary of challenges

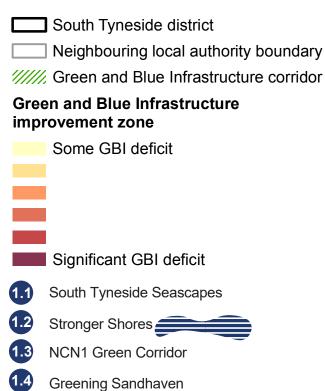
- Coastal erosion: Coastal erosion is becoming an increasing challenge in South Tyneside. This has led to the realignment of part of the A183 and costal path inland. [See reference 25] Local newspapers also report on the dangers associated with cliff falls linked to this erosion. [See reference 26]
- **Flooding:** Coastal flooding is a risk the entire coastal length lies within Flood Zone 3 (see interactive map).
- Road noise: Road noise along the A138 is above the recommended levels.
- Recreational pressure: There is a need to balance the protection of nature, particularly the qualifying features of the European designated sites, with the recreational value of the coastal edge and increasing visitor numbers.



South Tyneside Green Infrastructure Strategy South Tyneside Council



Figure 5.1: Coastal edge





Source: LUC, OS.

OS 10019570

Strategic Projects

4.15 There is a significant amount of ongoing work along South Tyneside's coast – particularly related to challenges of coastal erosion and the marine environment. The Strategic Projects outlined here largely build on existing work, where it aligns with the Strategic Objectives guiding this Strategy.

Strategic project 1.1: South Tyneside **Seascapes**

Project Purpose

- **4.16** The existing Seascapes project, funded by the Heritage Fund, aims to promote and enhance the heritage of seascapes on the shores between the Tyne and Tees. Please follow this link for more information: https://exploreseascapes.co.uk/.
- **4.17** It is supported by a wide range of partners who provide a breadth of experience. These include Durham, Newcastle and Sunderland universities, Hartlepool Borough, South Tyneside, Durham County and Sunderland City Councils, Heritage Coast (Sunderland – Durham – Hartlepool), Durham Wildlife Trust, Northumbrian Water, Tees Archaeology, Living History Northeast, Heugh Battery Museum, Marine Management Organisation, the Environment Agency, the National Trust, Groundwork Natural England and Association of IFCA.
- **4.18** The work of Seascapes aligns significantly with the vision and strategic objectives of this GBI strategy – particularly Strategic Objective 4. The project aims to strengthen the relationship between communities and the natural world. In particular, it seeks to promote access to coastal environments to boost health and wellbeing.

Key interventions

Seascapes will deliver 23 projects under 4 key themes:

- Blue Future: Combat negative perceptions of the local environment as a result of industrial heritage. This includes improving beach and marine litter and water quality with Northumbrian Water; organise events to reconnect people to the local heritage; and organise community grants to support community projects.
- Accessing the Sea: Improve routes to the coast and beaches. This includes funding new routes, surfacing and signage, introducing new timber steps to access Marsden Bay and creating a common brand for the England Coastal Path through the area. Other proposals include a new Whitburn Coastal Centre to showcase the cultural and natural heritage of the area, a programme of activities to promote coastal and marine recreational opportunities and promote viewpoints of large landscapes.
- Revealing Hidden Heritage: Promote and record heritage in along the coast with a wider range of audiences. This includes enhancing coastal habitats such as maritime grasslands and the intertidal zone, better understanding maritime and marine heritage, and promote historic food practices.
- Seascapes Over Time: Promote the historical events and stories that have shaped the coast, including conserving the built heritage, reconnect local communities. Projects focus on the war-time heritage, using sound recordings to celebrate individual connections to the sea, and promoting the Permian geology of the area.

Key delivery partners

- Newcastle University
- Durham Wildlife
- Living History North East

- Marine Management Organisation
- Association of IFA
- Groundwork
- Northumbrian Water
- The Environment Agency
- Natural England
- The National Trust

Delivery guidance

- **4.19** Ongoing maintenance and upkeep of the GBI outputs associated with the Seascapes project should be planned for to ensure the longevity of these interventions.
- **4.20** Funding from developer contributions close to the coast has been identified for recreation mitigation in the Interim SPD Mitigation Strategy for European Sites. [See reference 27] These opportunities, including raising awareness on the issue of dogs, new interpretation and signage and review of carparking should be aligned to complement the Seascapes projects.

Indicative cost

N/A (funded by Heritage Fund)

Indicative timeline

Medium term (1-10 years)

Inspiration from elsewhere

4.21 In Ireland, the Yeats Trail helps to reconnect communities and visitors to the local heritage and wider landscape of Sligo. Please follow this link for further detail: https://www.yeatstrail.ie/.

4.22 The project incorporates a touring route promoting the significant locations in County Sligo which are associated with the poet W.B. Yeats. New sculptures and engravings at seating have been installed at each of the locations.



Ben Bulben along the Yeats Trail (Source Yeats Trail)

This project enhances GBI within existing GBI corridors (see <u>interactive</u> <u>map</u>)

Strategic project 1.2: Stronger Shores

Project Purpose

- **4.23** Stronger Shores is a £6.4 million pilot scheme, funded as one of 25 projects under the Governments Flood and Coastal Innovation Resilience Programme. Please follow this link for more information: Stronger Shores marine habitats protecting coastal communities | Engage Environment Agency (engagementhq.com).
- **4.24** The project is led by South Tyneside Council. Stronger Shores will test the effectiveness of marine habitats (including sea grass, kelp forests and oyster reefs) in reducing coastal erosion in the North East.
- **4.25** The Stronger Shores initiative aligns significantly with the Vision and Strategic Objectives of this Strategy (notably Strategic Objectives 4 and 8) and should be supported as part of the strengthening of the GBI network.

Key interventions

- **Trial and evidence gathering:** The Stronger Shores initiative will trial the value-for-money of different sub-tidal habitats, and monitor the different benefits provided by each.
- Sub-tidal habitat restoration: According to the evidence gathered within this project, invest in appropriate sub-tidal habitats along the coast in South Tyneside. Where possible, this should include engaging with local communities and

Key delivery partners

South Tyneside Council

- Neighbouring local authorities (Northumberland County Council, North Tyneside Borough Council, Sunderland City Council, Hartlepool Borough Council, Redcar and Cleveland Council, Durham County Council)
- North East Combined Authority
- Groundwork North East & Cumbria
- Newcastle University
- Local Government Association Coastal Special Interest Group
- Environment Agency
- North Eastern IFCA
- Northumbrian Water
- National Oceanography Centre
- British Geological Survey
- Seascapes Partnership
- Zoological Society of London
- University of Plymouth
- Tees Rivers Trust
- Northumbria Regional Flood and Coastal Committee

Delivery guidance

- The Stronger Shores project will produce a practitioner's toolkit for marine habitat restoration. This should be used to guide ongoing investment in natural coastal flood defences.
- CaBA (Catchment Based Approach) have produced a Seagrass Restoration Handbook [See reference 28] and a European Native Oyster Habitat Restoration Handbook [See reference 29]. These include practical guidance on different approaches to restoring these habitats, as

well as on how to monitor impacts of restoration and communicate findings.

The Kelp Restoration Guidebook, produced by the Nature Conservancy summarises the lessons learned from global kelp restoration projects. [See reference 30] This includes the practical restoration methods used, monitoring approaches, and ongoing actions to ensure kelp forests are resilient to future climate change.

Indicative cost

N/A (initially funded through Governments Flood and Coastal Innovation Resilience Programme)

Indicative timeline

Long term (10+ years)

Inspiration from elsewhere

- **4.26** The Rye Harbour Farm Regulated Tidal Exchange flood management project in the Rother Estuary in Easy Sussex including working with natural processes and habitat creation. Please follow this link for further detail: Rye Harbour Farm Regulated Tidal Exchange | The RRC.
- **4.27** The project created a tidal creek, with areas of saltmarsh and intertidal mud, saline lagoons, vegetated shingle, coastal grazing marsh and ponds. This allowed flood defences to be restored within a Special Area of Conservation (SAC).

Strategic Project 1.3: NCN1 Green Corridor

Project Purpose

4.28 To "green" the Sustrans Nation Cycle Network Route (NCN) 1This will further encourage active travel along the coast, including between South Shields, Whitburn and Sunderland.



Existing NCN1 route along the A183

Key interventions

- Widening route: Where space allows, explore opportunities to widen this path, or add an additional path allowing cycle traffic going in the opposite direction to pass more easily. This would reduce conflict with pedestrians. Any exploration of route widening will require surveys of the impact on neighbouring habitats, which includes priority habitat for lowland calcareous grassland and lowland meadows.
- Segregation of cycle route: Explore opportunities to introduce planters or wildflower verges to separate the cycle lane which forms NCN route 1 from vehicular traffic along the A183.. This will enhance the perception of safety and encourage use of this route, as well as reduce air pollution and noise pollution along the A183.
- Multifunctional value: As part of the relocation of the A183 and coastal path, upgrade the off-road cycle route to create a more multifunctional green corridor. [See reference 31] Where possible, permeable surfaces and vegetation with high biodiversity value should be included within this design (see "Inspiration from elsewhere" below).
- Creating links to local neighbourhoods: In collaboration with local transport planning, links between the NCN1, other cycle paths and the coastal path should be promoted and strengthened. This would help to promote these routes for active travel and to connect more local residents to the coast.

Key delivery partners

- Highways Teams
- Sustrans
- Local cycling groups

Delivery guidance

- Sustrans provides a wealth of guidance on the design of Traffic free routes and greenways. This includes specific guidance on the space requirements needed, wayfinding and on path sharing between users.
- The Royal Horticultural Society offers guidance on plant and tree species which can tolerate exposed coastal environments. Please follow the link for more information: Plants for coastal areas / RHS Gardening. This includes native trees such as hawthorn, alder and oak. Scots pine and rowan are suitable further back from the sea.

Indicative cost

Medium (£50,000 -200,000)

Indicative timeline

Medium term (2-10 years)

Inspiration from elsewhere

- 4.29 In Ireland, there are a number of established greenways which provide cycling and walking infrastructure and form a key tourism attraction. Please follow this link for further detail: https://greenwaysireland.org/.
- 4.30 These are dedicated routes free from motorised transport which can be enjoyed safely by most members of society. The Great Western Greenway along the coast of Clew Bay was completed in 2011 and now hosts more than 250,000 users annually. Please follow this link for more information: Great Western Greenway, The Essential Greenway Guide. Click for More (greenwaysireland.org)





Strategic project 1.4: Greening Sandhaven

Project Purpose

4.31 To enhance coastal biodiversity within hard surfaces, piers and any coastal defences along the sea front. This will create an attractive sea front around Sandhaven Beach and Littlehaven and provide small scale wildlife habitats within the more developed parts of the seafront.

Key interventions

- Tree and flower planting: Retrofit hard surfaces such as car parks with street trees and planters. This should focus on species that are tolerant of salt-laden sea winds. Strips of coastal wildflower grassland should also be encouraged, along with bee posts to support pollinators.
- **Wildlife features:** Introduce features to support invertebrates and pollinators. This includes bee-posts and bug hotels.
- Seating: Where space allows, explore opportunities to enhance the public value of these spaces by introducing high quality social seating, offering views towards the coast. The option for hard-wearing timber or net hammocks should be explored to soften concrete where there are large areas of flood walls. This would offer spaces for socialising, quiet contemplation and relaxing. Public art can be included within this, offering opportunities for local artists and promoting connectivity with the coastal environment and local heritage.
- Wayfinding: Introduce wayfinding and education boards to communicate coastal issues, including the Stronger Shores work, and to help identify marine wildlife. This will help to reconnect people with the marine environment.

Key delivery partners

- Seascapes Partnership
- Environment Agency
- South Tyneside Council
- Durham Wildlife Trust
- RSPB
- Natural England

Delivery guidance

4.32 The Royal Horticultural Society offers guidance on plant and tree species which can tolerate exposed coastal environments. Please follow the link for more information: https://www.rhs.org.uk/plants/for-places/coastal-areas. This includes native trees such as hawthorn, alder and oak. Scots pine and rowan are suitable further back from the sea.

Indicative cost

Medium (£50 - £200,000)

Indicative timeline

Quick win (<1 year) (although establishment of trees and planting will take longer)

Inspiration from elsewhere

- 4.33 In Portsmouth, the North Portsea Island Coastal Defence Scheme incorporates natural habitats and public realm within the 'hard engineering' flood defence infrastructure. Please follow this link for more information: North Portsea Island Coastal Defence Scheme.
- 4.34 The project includes improved access, seating, art installations and glass flood walls. Improvements to the foreshore habit and promotion of wildflower areas, bee posts and native trees have also been included within the scheme.

Action Plan 2: South Shields urban area

4.35 South Shields, historically a fishing village, is South Tyneside's largest town. The wider urban area here sits between the River Don corridor and the coastal edge of the North Sea. The area is largely residential with South Tyneside District Hospital to the south and the Port of Tyne industrial area to the west.

4.36 The Strategic Projects proposed in this Action Plan are the following:

- South Shields town centre blue-green corridors (SP2.1)
- Repurposing existing open spaces in South Shields
 including backland sites (SP2.2)
- Tyneside green corridor (Arbeia Port of Tyne) (SP2.3)
- "Grey to Green" Port of Tyne (SP2.4)

Summary of Assets

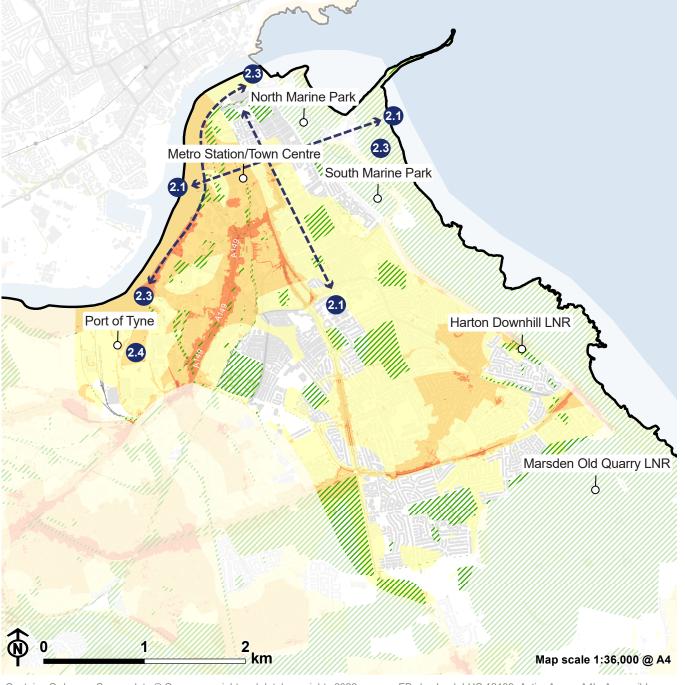
- **Major hub:** South Shields is the major town in the Borough and remains an active market town on a Friday and Saturday.
- Walking and cycling routes: Active travel is being strongly promoted in South Shields. There are a number of National Cycle Network routes that pass through the town including coastal routes and routes along the River Tyne. The North East England Coastal Path_[See reference 32] runs along South Tyneside's North Sea coast, as part of a wider flagship asset with significant value for the visitor economy. See interactive map for more information on these.

- Green space and access to nature: There are seven parks within South Shields see the interactive map to see their distribution. Despite the built up nature of the area, there are two Local Nature Reserves (LNRs) towards the coastal edge of the area including a restored quarry at Marsden and the Harton Downhill Nature Reserve (known locally as Blackberry Hills). See the Coastal Edge Action Plan for more discussion on these.
- Wider regeneration agenda: There has been significant focus on South Shields as part of the government's wider Levelling Up agenda, including a town centre regeneration scheme which will see enhancements to the riverside, new college facilities, a redeveloped Customs House and a cultural quarter. It also includes the building of a new £21 million Transport Interchange as a gateway for the town centre.
- See accompanying interactive map to explore these assets in full.

Summary of challenges

- Flood risk from coast/rivers: Parts of the wider South Shields area are at risk of fluvial, pluvial and tidal flooding (see interactive map). See the Coastal Edge Action Plan for more details on the challenges being faced along the coast.
- Surface water flood risk: Areas where there is localised surface water flood risk include the ASDA car park on Coronation Street, South Marine Park, Mowbray Road, West Park road, along the metro line and around the Port of Tyne and Simonside Industrial Estate.
- **Deprivation:** The Index of Multiple Deprivation (IMD) 2019 highlights pockets of significant deprivation within the South Shields urban area. Particular concentrations of deprivation exist in the north of the Borough along the Tyne River, the North Sea coast and in the town centre.
- **Deficits in access to green space:** Despite the valuable access to the coastal edge from some parts of South Shields, green space accessibility mapping shows that there are significant deficits in access to green space

- undermining Natural England's "green in 15" goal for everyone to live within 15 minutes' walk of a green space or water. Particular deficits exist in the north along the River Tyne. There are also limited active travel connections between these sites. Within the southwest, around Harton communities are outwith the 10-minute walk time buffer for amenity greenspace (as proposed in the emerging South Tyneside Open Space Strategy). In the southwest around Marsden communities are outwith the 15-minute walk time buffer for parks and gardens also proposed. In the north alongside the Tyne estuary communities are outwith the 20-minute walk time buffer for natural green space. Significant parts of this area are out with the buffers for provision for young people and allotments.
- **Disconnected active travel routes:** There needs to be more of an emphasis of securing and promoting active travel routes locally, this will include joining up walking and cycling routes and providing links to local destinations and to other towns within South Tyneside, as well as maintaining the existing national active travel routes.
- Tree cover: There is a commitment within South Tyneside to plant 3,000 trees per year. However, South Shields today has limited tree cover tree cover is particularly low around the town centre and surrounding residential neighbourhoods.
- **Air Quality:** Air quality in parts of South Tyneside is poor, largely concentrated around major road infrastructure as a result of transport emissions.



South Tyneside Green Infrastructure Strategy South Tyneside Council



Figure 5.2: South Shields urban area

South Tyneside district

Neighbouring local authority boundary

///// Green and Blue Infrastructure corridor

Green and Blue Infrastructure improvement zone

Some GBI deficit

Significant GBI deficit

Strategic Projects for South Shields Urban Area

2.1 Town centre blue - green corridors

Repurposing existing open spaces including backland regeneration

23 Tyneside green corridor

(Grey to Green' Port of Tyne



Source: LUC, OS.

Strategic projects

Strategic project 2.1: South Shields town centre blue-green corridors

Project Purpose

- **4.37** This project would create a high quality multifunctional GBI route connecting the coastal edge to the east of the town centre with the Tyne riverside in the west. The route would also help to connect South Shields metro station to both the seafront and the riverfront. This would encourage walking and cycling for residents and visitors to South Shields, boost town centre regeneration efforts through urban greening, and alleviate surface water flooding.
- **4.38** It will also build on ongoing efforts to transform the South Shields metro station into a high quality "gateway" into the town, by connecting it to key local destinations while providing important GBI benefits.

Key interventions

■ East-west green-blue spine: A 'green-blue spine' could be created through the heart of South Shields, from King street to Ocean road via the new Transport Interchange and east to connect with the riverside. This would involve installing a range of urban greening measures (see below). The route should also provide a strong link to South Tyneside College (once relocated), to the heritage asset of Customs House and an emerging high-quality walking and cycling route along the Tyne (see Strategic Project 2.3). High quality wayfinding will enable all to safely navigate across the town.

- North-south green-blue spine: A second 'spine' could reach south from the Metro station down Fowler Street to link up with key destinations including St Bede's school, the district shopping centre at Westoe and on to the attractive Westoe Conservation Area. Again, high quality wayfinding and a range of multifunctional features will be key to incorporate here. It should provide strong links to the National Cycle Route 14, which reaches west toward the Tyne corridor and east toward the coast, creating a joined-up network of green routes.
- Multifunctional urban greening along the spines: As well as walking and cycling connectivity, these routes should incorporate a range of GBI assets - including planters, rain gardens, high quality street trees, seating and pocket parks. Wildflower planting can be incorporated into amenity grass areas to provide colour and "pollinator corridors." SuDS features (such as rain gardens) should be targeted through a data-led process at areas at high risk of surface water flooding which is present across South Shields.
- A "sponge" metro line: Given the identified risk of surface water flooding around the metro line, permeable surfaces (e.g. grass, permeable paving) should be installed where appropriate to act like a "sponge" to soak up water and alleviate flood risk.

Key delivery partners

- South Tyneside Council (including regeneration and transport planning teams).
- Local businesses.
- Local schools and South Tyneside College.

Potential delivery mechanisms and guidance

■ These interventions are likely to come forward as an integrated part of regeneration initiatives and through infrastructural contributions as part of new development. Additional feasibility and design work would be needed

in each case to establish the details of how this kind of scheme might come forward.

- The Manual for Streets guidance identifies street trees and urban planting as having significant benefits to people and places and indicates how they might be incorporated. Please follow the link for further detail: https://tsrgd.co.uk/pdf/mfs/mfs2.pdf. It illustrates how integrating greenery into transport and street infrastructure can crate visual interest and "soften" an urban environment.
- The SUDS Manual (produced by CIRIA)_provides guidance specifically on the incorporation of SuDS into urban environments.
- Natural England's Green infrastructure planning and design guide (2023) includes guidance on how to design a wide range of 'building blocks' of GBI and how to improve GBI in order to gain the most benefits. Please follow the link for more information: Green infrastructure planning and design guide (2023)

Indicative cost

High (£200,000)

Indicative timeline

Medium-term (1 - 10 years)

Inspiration from elsewhere

■ The transformation of Sheaf Square in Sheffield saw the refurbishment of a traffic-dominated area of public realm outside the station into a high quality, walkable 'station gateway', providing active travel links into key adjacent parts of the city. Please follow this link for more information: https://www.academyofurbanism.org.uk/sheaf-square/. The redesigned

- square includes both green and blue features as integral parts of the design along with public art and high-quality public realm.
- Sheffield also later incorporated a 'grey to green' scheme that helped to link that used SuDS features to both address flood risk challenges and create a high-quality route linking key areas of the city. Please follow this link for further detail: Grey to Green Sheffield
- The transformation of Sauchiehall Street was one of the first of the "Glasgow Avenues" placemaking and economic regeneration project to be delivered in Glasgow city centre. It incorporates a spine of street trees separating new walking and cycling infrastructure from road traffic and providing shading for the route. The project was funded by the Glasgow City Region City Deal. Please follow this link for more detail: https://www.glasgow.gov.uk/article/25020/Sauchiehall-Avenue-now-complete



Image: Sheffield's "Grey to Green" scheme

This project largely responds to areas of identified deficit within the mapped Improvement Zones – due to air quality, deprivation and the need for increased access to green space locally.

Strategic project 2.2: Repurposing existing open spaces – including backland sites

Project Purpose

This Strategic Project seeks to repurpose some of the mono-functional (in GBI terms) open and amenity spaces in South Shields to provide greater benefits for people, nature and place. This ranges from biodiversity enhancements to spaces for young people and community growing. These interventions are particularly important for their health and wellbeing benefits – which is highlighted as one of the foremost challenges in South Shields.

Key Interventions

- Identifying spaces for community growing and pocket parks: Asking community groups to come forward with ideas for amenity spaces which could accommodate community growing spaces with a focus on South Shield's distinctive 'backland' sites within residential areas. This would provide spaces for the community to come together, to learn new skills and to create more nature-rich, productive landscapes within our urban areas. This could begin with a Council-led audit of backland sites or Council-managed green space, identifying those spaces which might be suitable for repurposing in collaboration with the local community.
- Wildflower road verges: Many areas of South Shields are home to relatively large expanses of amenity grass areas or large verges notably in the north of the urban area around the Arbeia Roman Fort and

alongside key road corridors including the A194 and Western Approach. These spaces can be used to support the National Pollinator Strategy by seeding them with wildflower and relaxing mowing regimes to allow wildflower species to emerge and thrive. Further guidance on key actions is provided as part of the government's Bees' Needs campaign launched in 2022. Please follow this link for more information: Bees' Needs campaign - GOV.UK (www.gov.uk).

■ **Greener schools**: Community growing spaces, SuDS features and wildflowers are often valuable features to incorporate into the often expansive green spaces around local schools and colleges. These features can then form valuable assets as 'outdoor classrooms' enabling students to learn about the natural environment and climate resilience. In particular, SuDS features (such as wetlands) might be appropriate where schools and colleges coincide with surface water flood risk – including St Wilfred's College, Mortimer Community College, St Bede's Primary School, Holy Trinity Primary School and Monkton Infants School.

Key Delivery Partners

- Local businesses
- Local community groups
- North East community forest
- Local schools and colleges
- Water companies
- Groundwork North East
- Plantlife / Buglife

Potential delivery mechanisms and guidance

■ The incorporation of wildflower verges into urban areas will not require large amounts of capital but will need a change in "business as usual" for

- green space management teams. In the medium to long term, this approach can be cost-negative due to more relaxed maintenance regimes.
- Small grants schemes may be a powerful way to enable active local community groups and schools to repurpose green spaces for GBI benefits. The Council can also act as a facilitator (rather than deliverer) by supporting communities to access funds, including Corporate Social and Environmental Responsibility (CSER) funding from local businesses.
- Various types of grant funding may be available to support pollinator recovery – including the Bees' Needs campaign and funding.
- The Edible Neighbourhoods_guide explains how to incorporate community growing sites into your neighbourhood. Please follow this link for further detail: 10 Steps Toward an Incredible Edible Town: Charter for Compassion
- The Designing Out Crime guide uses the perspective of the 'user' and 'abuser' to inform what design interventions can be put in place in order to eliminate different types of crime [See reference 33]. However, establishing a sense of community ownership and stewardship over any new green spaces will be the most powerful tool in avoiding anti-social behaviour.

Indicative Cost

4.39 Costs will be variable (grass verges likely can even be cost-negative, while other interventions may require more investment).

Indicative Timeline

4.40 Variable (grass verges are likely to be valuable 'quick wins', while other projects will need longer time frames).

Inspiration from elsewhere

- **4.41** Platt Fields Market Garden is a community garden established in 2017. It makes use of a disused bowling green in Manchester. The project acts as a strong community hub, runs a vegetable box scheme, employs hundreds of volunteers and sells fresh produce on Saturday mornings. Please follow the link for further detail: Platt Fields Market Garden
- **4.42** In 2021 Oxford City Council reviewed its existing grass verges to determine if the number of long grass verges could be increased in an effort to increase their biodiversity value providing nectar resources for pollinators. Please follow the link for more information: Long grass verges review | Long grass verges review | Oxford City Council.
- **4.43** Prior to 2021, most verges in Oxford City were mown every 15 working days between March and October (the growing season). Following the review, verges in 26 locations were selected and allowed to grow longer, with a single cut in late summer 2021. Cuttings were also removed to reduce the nutrients in the grassland and further encourage greater species diversity. Where there are highway junctions, a section of grass was maintained at a lower height for motorist, cyclist and pedestrian sight lines.
- **4.44** The SuDS for Schools initiative created SuDS installations in ten schools within North London that were at risk of surface water flooding. Follow the link for more information: SuDS (Sustainable Drainage Systems) for schools | WWT. They led to reduced pollution from roads and car parks, reduced risk of localised surface water flooding and increased biodiversity within all school grounds. Students also benefitted from new opportunities for outdoor learning and play.
- **4.45** The Alleyways Project in Moss Side was developed in an area known for anti-social behaviour and fly tipping. Please follow the link for further information: The Alleyways Project in Moss Side. A group of local volunteers decided to change their houses back alleys into vibrant corridors full of planters and seating Groundwork assisted the groups in transforming their spaces.



Entrance to Platt Fields Market Garden

This project seeks to both enhance existing GBI assets (within the mapped GBI corridors) and create more useful green space in areas of existing deficits (within the Improvement Zones).

Strategic project 2.3: Tyneside green corridor (Arbeia – Port of Tyne)

Project Purpose

4.46 The River Tyne corridor runs along the north of the South Shields urban area and is an area of focus for future regeneration initiatives in – including a planned mixed-use development at Holborn Riverside. This project seeks to create a re-branded, upgraded and better-connected walking and cycling route along the riverside which transforms the public realm, provides biodiversity benefits and reduces flood risk. It should link up smoothly with the Coastal Path in the east, to ensure a resilient network of waterfront routes.

Key Interventions

- Tyneside Trail: National Cycle Route Network route 72 already runs along this stretch of the river (from the Port of Tyne in the west to the coast in the east). However, this project would focus on filling any "gaps" in walking and cycling provision and providing high quality wayfinding that draws people along the route and boosts the visitor economy. A further priority should be providing tree cover along the route in viable locations to help provide shading and a windbreak along the route. As this corridor evolves and land uses change, any new development should seek opportunities to open up public access to the riverside, given that access is currently significantly fragmented. In the west it should link successfully to the wider neighbourhood around the Port of Tyne (see Strategic Project 2.4).
- Upgraded public and green spaces along the route: This trail should link together existing GBI assets and public realm schemes currently ongoing along the Tyne including at Customs House, the Ferry Landing Hub and the Holborn Riverside development.

■ Public art and historic interpretation: Interpretation features and public art features should be provided along the route, starting at the Roman Fort – finding creative ways to tell the story of the neighbourhood as well as educating visitors and residents about the wildlife value of the Tyne corridor.

Key Delivery Partners

- South Tyneside Council.
- Developers and masterplanners.
- Sustrans.
- Ramblers and other community groups.

Potential delivery mechanisms and guidance

- It is crucial that the aspirations set out here are integrated fully into emerging development areas along the Tyne corridor including at Holborn Riverside. Masterplanning of all riverside or adjacent developments should take full account of GBI needs and opportunities and the need to contribute to GBI corridors mapped by this Strategy. See Chapter 5 for more guidance on GBI standards for new development.
- Upgrades to the walking and cycle route may benefit from national or local active travel funding – in collaboration with local transport plans and Sustrans.

Indicative Cost

High (£200,000)

Indicative Timeline

Long term (10+ Years)

Inspiration from elsewhere

- 4.47 Within this Action Plan area, the public realm enhancements around Customs House already set a benchmark for greener public realm along this corridor, which in the long term should be maintained along the entire corridor.
- 4.48 The River Irwell Sculpture Trail is the largest sculpture route in the UK and features 70 art pieces by local, national and international artists across 33 miles through Salford, Bury and Rossendale. The trail has been split into 'bite sized' sections, allowing users to take shorter or longer walks or cycles. Please follow the link for more information: River Irwell Sculpture Trail.

Public art feature along the Irwell sculpture trail



Strategic Project 2.4: "Grey to green" Port of Tyne

Project Purpose

4.49 The Port of Tyne is set to play a central role in the regeneration of the wider neighbourhood. This is set out in the Tyne 2050 strategic plan [See reference 34], which outlines a plan for the Port to be one of the most innovative, progressive and efficient deep-sea ports in the UK, linking the north with the rest of the world. However, the Port has also been at the heart of recent flooding events due to high risk of surface water flooding in the area (including significant damage in 2021). This project proposes using nature-based solutions

to incorporate a network of SuDS features into this area, aligning with key active travel routes in and out of the port.

Key Interventions

- NCN Route 14: Upgrading of the National Cycle Network route 14 to provide a much greener, higher quality flagship route lined with SuDS features (e.g. rain gardens, swales) and areas of wildflower planting. This should provide a high-quality link from the Port (as a key employment centre) and residential areas to the east. It should include high quality raised crossings and tree canopy cover where appropriate. SuDS features can also be incorporated into the centre of roundabouts and other areas of open space where there are impermeable surfaces as a resilience measure against the high risk of flooding in this area.
- Neighbourhood-scale greening around Temple Town Road: A pioneering pilot of neighbourhood-scale greening (taking inspiration from the 'Greener Grangetown' project in Cardiff see case study below) to incorporate SuDS features in the residential area surrounding Temple Town road. This intervention is targeted at an area where flood risk coincides with pockets of socio-economic deprivation. Interventions could combine active travel measures (including safer junctions and a consideration of filtered 'active neighbourhoods' [See reference 35] where appropriate) with rain gardens, street furniture, street trees and permeable paving.
- GBI incorporated into Port of Tyne masterplan: Incorporating SuDS features into the emerging Port of Tyne masterplan and into ongoing development within the wider area. Green roofs, green bus stops and other GBI features should be incorporated into future industrial development within Port of Tyne providing both flood risk alleviation benefits and a boost to local biodiversity. This would form part of a wider strategy in becoming an exemplar of incorporating nature-rich areas into industrial zones as a nature-based solution to climate risk.

Key Delivery Partners

- Port of Tyne (who pledge in their 2050 Strategy to put 'positive environmental choices at the forefront of our decision making').
- South Tyneside Council
- Environment Agency
- Water companies
- Sustrans

Potential delivery mechanisms and guidance

- Rather than a standalone project, any plans to upgrade NCN route 14 should be incorporated into any ongoing plans by Sustrans or as part of local transport planning drawing on active travel funding as necessary and bringing multifunctional benefits to any projects delivered.
- The delivery of the Port of Tyne project is likely to be a partnership-based approach with the involvement of the Council as a facilitator but including close collaboration in particular between the water companies, the Port of Tyne and local communities.
- The Port of Tyne is intending to publish a Port masterplan in 2023, which will explore how the port connects and integrates with its hinterland and the communities it services. It is important that GBI and "grey to green" opportunities sit at the heart of this masterplanning work. Natural England's Green Infrastructure Planning and Design Guide (2023) provides guidance on how GBI features can be incorporated into the design process.
- Any neighbourhood-scale interventions should begin with a discussion of aspirations together with the local community, rather than a design solution being imposed upon them. Ideally, co-design processes should be maximised in order to respond meaningfully to community needs and create a sense of community ownership. As a pilot project, the results of this intervention should be carefully analysed to assess benefits and identify lessons learned the approach should then be rolled out across

other neighbourhoods facing similar challenges, particular where communities themselves come forward with a desire to repurpose their streets.

■ The detailed design of SuDS interventions would need to be data-led and based on hydrological expertise and an understanding of the detailed nature of local flood risk vulnerability. The SUDS Manual (produced by CIRIA)_provides guidance specifically on the incorporation of SuDS into urban environments.

Indicative Cost

High (£200,000)

Indicative Timeline

Medium - long term (some interventions delivered within 1 - 10 years)

Inspiration from elsewhere

- **4.50** The **Baglan Energy Park** in the Swansea city region is significantly affected by areas of flood risk due to its location in the floodplain. Please follow this link for more information: Baglan Energy Park.
- **4.51** The Development Framework guiding the site sets out that, where practicable, site-wide water management should be through the use of sustainable drainage systems (SuDS), generally involving the reduction in area of hard surfaces surrounding buildings and including measures such as permeable paving, filter strips, swales and green roofs.
- **4.52 Greener Grangetown (in Cardiff)** is an example of a residential neighbourhood that has successfully "depayed" and saw the installation of

attractive rain gardens, kerbside greenery and tree planting. Please follow this link for further detail: <u>Greener Grangetown (in Cardiff).</u>

4.53 The project was led by a partnership between Cardiff Council, Welsh Water and Natural Resources Wales. The project site covers 12 Victorian streets and 550 properties and on completion the project managed to create 108 rain gardens and remove 4.4 hectares of surface water removal from combined sewers. The estimated value of the wider benefits of the project have been assessed as over £8.4 million.

Action Plan 3: River Don Corridor

4.54 The River Don is a major river corridor and floodplain which enters South Tyneside to the south, flows through open Green Belt land (passing the towns of Cleadon and Boldon) and then through the heavily urbanised areas to the north before meeting the Tyne.

4.55 The Strategic Projects proposed in this Action Plan are the following:

- The River Don Linear Park (SP3.1)
- Sustainable Simonside (SP3.2)

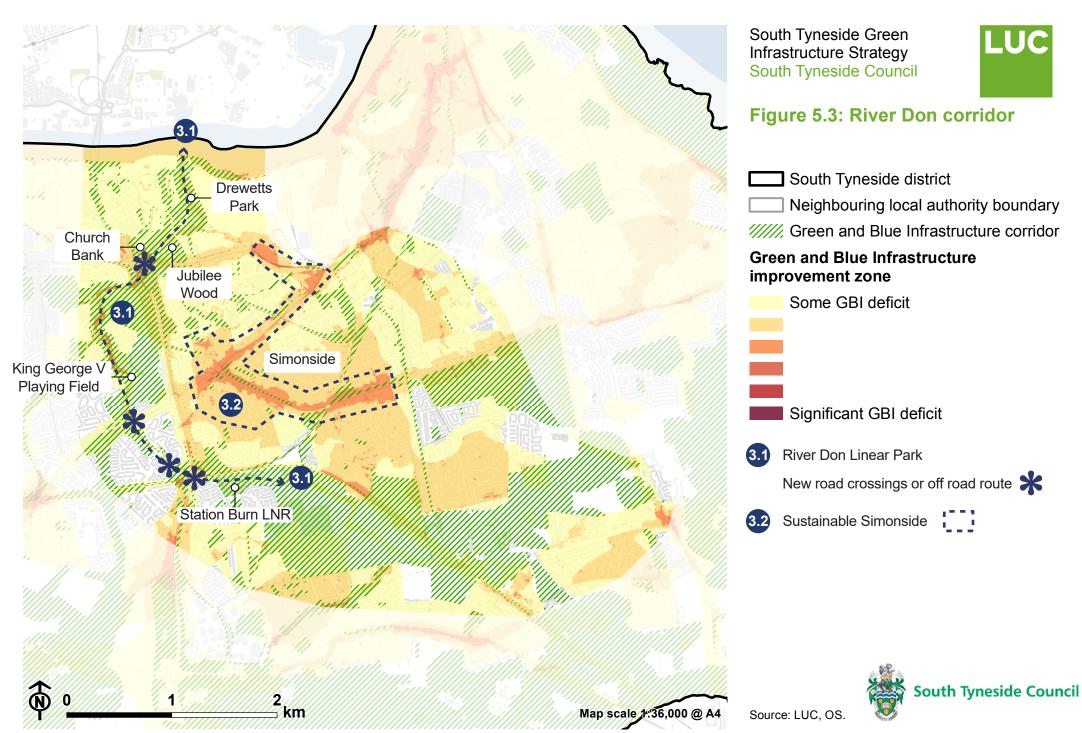
Summary of assets

- The river corridor is lined with a series of open spaces with high recreational value. These include Drewetts Park, Jubilee Wood, Church Bank, King George Playing Fields and Station Burn Nature Reserve. Temple Memorial Park provides open space in the east.
- Most of the length of the River Don is identified as a Local Wildlife Site and plays an important role in the wider emerging Nature Recovery Network. In the south, the Station Burn and Tilesheds Local Nature Reserves (LNRs) are made up of post-industrial river valley, woodland and meadow habitats. Station Burn LNR in particular hosts a population of water voles. West Farm Meadow SSSI provides important (and threatened) neutral grassland habitat.
- The St Paul's Conservation Area is an integral part of the northern part of the River Don corridor, where it meets the River Tyne. It hosts several heritage assets – including St Pauls monastery, the historic Jarrow Hall and the Jarrow Bridge across the river itself.

See accompanying interactive map to explore these assets in full.

Summary of challenges

- The River Don has been identified as suffering from poor water quality, principally due to high ammonia and phosphate levels from intensive agricultural management in the south of the Borough.
- There are some parts of the corridor which lie within Flood Zones 2 and 3, highlighting risk of fluvial flooding. There are also pockets of high and medium risk for surface water (pluvial) flooding. See accompanying interactive map for patterns of flood risk.
- Most of the neighbourhoods within the River Don Corridor area are within the most deprived 10% within the health domain of the Indices of Multiple Deprivation (IMD). These include Whiteleas, Biddick Hall and eastern Simonside (see interactive map for further detail).
- There are significant areas which Natural England's Access to Natural Greenspace standards (ANGSt) buffers highlight as having poor access to publicly accessible green space. In addition, many of the communities, including Simonside, Biddick Gall Hedworth and Fellgate fall outside the 15-minute walking buffer applied to parks and green spaces within the emerging South Tyneside Open Space strategy.
- In the north of the Borough there are clear concentrations of poor air quality. This is largely driven by transport infrastructure including at Lindisfarne Roundabout, where levels of PM10, PM25, NOX and NO₂ are high compared to other parts of the borough. This junction was previously designated as an AQMA but the designation has since been withdrawn.
- The West Farm Meadow SSSI has been identified as being in an unfavourable/declining condition, due to high levels of fertiliser use.



Strategic projects

Strategic project 3.1: River Don Linear Park

Project Purpose

4.56 To create an accessible, multi-functional open space along the route of the River Don - stretching from Drewetts Park in the north to Station Burn Local Nature Reserve in the south. This will act as a flagship, landscape-scale GBI asset which will provide space for recreation, create wildlife habitat and restore hydrological processes to improve water quality and reduce flooding. This project echoes the values of the Don Catchment vision. Please follow the link for more information: Don Catchment vision.

Key interventions

■ Walking and cycling links (and access for all): Provide continuous pedestrian and cycle routes through open spaces along the River Don by upgrading surfaces where needed and filling in 'gaps' within the existing Public Right of Way (PROW) network (see interactive map). This should link open spaces along the route of the corridor, including Drewetts Park, Jubilee Wood, Church Bank, King George Playing Field and Station Burn Nature Reserve. Additional off-road connections should be explored where necessary – including in collaboration with local landowners where appropriate. In particular, new links are likely to be required over the A194, alongside the River Don where it flows between Hawthorn Drive and Ullswater Avenue, and across the A19. As a secondary priority, there are opportunities to improve road crossings and pedestrian routes across Cemetery Road and under the Metro Lane in the north. Narrow gates and

- stairs should be re-designed to improve accessibility for cyclists (including non-standard bikes), wheelchair users and pushchairs.
- Wayfinding: Introduce high quality, consistent wayfinding signage to promote this route and improve access into the linear park from all neighbouring communities. This will support the branding of the Linear Park and encourage its use by local residents and external visitors. A dedicated events space within the park should be explored. Local community groups should be involved as co-designers as part of the process wherever possible and a programme of community events should be established.
- Wetlands within the floodplain: In consultation with local communities, identify areas within existing open spaces along the river Don which could be identified for wetland expansion, riparian planting and flood storage. Opportunities for Natural Flood Management (NFM) techniques should be explored including leaky dams and re-naturalising river channels. This can include removing or re-working the existing modifications which have contributed to the poor ecological status of the River Don. In addition, explore the potential to introduce filtering reedbed wetlands to improve water quality. Where possible these should seek to enhance habitat for water voles, particularly around Station Burn LNR.
- Educational opportunities and enabling access to nature: Explore the opportunity for stretches of raised boardwalk and platforms overlooking the River Don, within more natural areas to connect local people with the river environment. Natural play areas and bird hides could also be introduced into these areas to improve the recreational offer, as well as public art installations by local artists which tell the story of the river corridor and local historical events.
- Engage the whole community: Engage with local businesses to explore opportunities and start-up funding for cafés, food / drink stalls and other business opportunities within the park. This will help create informal oversight within the linear park and reduce the risk of antisocial behaviour. Where possible, CCTV, lighting and funding for park wardens should also be considered along parts of the linear park.

Formal greenspace opportunities: Explore opportunities to design more formalised recreational greenspace within the linear park to provide provision of parks and gardens open space typology which is currently inaccessible from the surrounding communities at Hedworth and Biddick Hall. This should include provision for children and young people, including opportunities for natural play and social seating.

Key delivery partners

- Tyne Rivers Trust
- Durham Wildlife Trust
- Local businesses
- South Tyneside Council
- Environment Agency
- Local community groups and artists
- Don Catchment Partnership

Delivery guidance

- This flagship project lends itself to a strategic, multi-partner approach to delivery. This could draw on grant funding as part of the broader Levelling Up agenda but could also collate funding sources from new development along the corridor (Infrastructure levies and Biodiversity Net Gain receipts), among other sources of funding.
- The Urban Wetland Design Guidance both promotes benefits of wetlands and provides guidance for constructing urban wetlands. Please follow the link for further information: <u>Urban Wetland Design Guidance</u>. It includes guidance on hydrological features including the size, location and inflow drainage associated with the wetlands, as well as planting guidance. Guidance is also provided for ensuring multifunctional benefits are achieved for wildlife and people.

- The Sensory Trust provide guidance on designing paths and routes to promote accessibility for more users. Please follow the link for more information: Sensory Trust paths and routes guidance. There is also wealth of guidance within the traffic-free routes and greenways design guide produced by Sustrans on off-road paths more generally. This can be found via the following link: Sustrans traffic-free routes and greenways design guide Sustrans.org.uk
- Guidance on managing habitat for water voles should be consulted to promote water voles along the River Don, particularly at Station Burn LNR. For further detail, please follow the link: <u>Water Vole Habitat Management - Water Vole</u>

Indicative cost

High (>£200,000)

Indicative timeline

Medium - long term (some interventions delivered within 1-10 years)

Inspiration from elsewhere

- **4.57** The Torrs Riverside Park and Millennium Walkway in Derbyshire was designed to boost the recreational value of a river corridor. This 160m walkway connects visitors with the industrial heritage and geology of the Goyt river valley. Please follow the link for more information: <u>Torrs Riverside Park and Millennium Walkway.</u>
- **4.58** The emerging Super Slow Way linear park, which stretches along the Leeds & Liverpool Canal Corridor, aims to enhance social spaces along the water corridor and offer opportunities to celebrate cultural identity and everyday

achievements. This work will now go further with the Pennine Lancashire Linear Park pilot project, funded by the UK Community Renewal fund. Please follow the link for further detail: Pennine Lancashire Linear Park.



Illustration of the Super Slow Way linear park plans. Image source: Super Slow Way.

Strategic project 3.2: Sustainable Simonside

Project Purpose

4.59 To establish a programme of greening in Simonside through the use of Sustainable Urban Drainage (SuDS) interventions. The project is focused around Leam Lane, the A194 and A1300, where there is evidence of medium to high risks of surface water flooding. There are also identified gaps in the provision of "doorstep" and "local" greenspace (according to Natural England)

overlapping with concentrations of socio-economic deprivation. This makes it a priority for intervention as part of the GBI strategy.

Key interventions

- SuDS (swales and rain gardens): Where areas are at a medium or high risk of surface water flooding, amenity green spaces (including road verges) should be transformed into swales and raingardens. Surface water from nearby roads should be directed into these features to reduce water running into combined overflow sewers. These areas include Auckland Terrace, Lulworth Avenue, Lynton Avenue, Glasgow Road, Aberdeen Drive, Hobart Avenue, Bainbridge Avenue and Richardson Avenue. Design details and selection of priority locations should be informed by GIS data, including the incidence of sewer overflows and risk of surface water flooding.
- Multifunctional greening features: Where swales or rain gardens are not practical, or where there is lower risk of surface water flooding, alternative interventions should be explored. This includes enhancing the recreational value of "ad hoc" green spaces through the introduction of benches or improving access to nature by encouraging wildflowers and tree planting. Opportunities for doorstep natural play provision or community food growing should be explored, as should "pocket parks". Wherever possible, these interventions should be co-designed and co-created by local communities.
- **Green roofs on bus stops:** Along the major roads in Simonside (the A194, A193 and A1300), this project should explore opportunities for introducing green roofs on bus stops. This would provide "stepping-stone" habitats for pollinators and expand the level of permeable surfaces. Trees with sustainable drainage pits should be incorporated where there is space along these routes and areas of wildflower should be targeted within the centres of roundabouts.
- Engagement with local businesses for green roofs and walls: This might include collaboration with the Tesco Superstore and businesses within the industrial estate off Shaftesbury Avenue to trial extensive large

scale green roofs and walls within this target area. During the drier summer months, additional water collected in rain gardens and on green roofs can be used to irrigate these and make the industrial large-scale environments more attractive. Opportunities to monitor how such features insulate buildings and the impact this has on the need for heating and cooling could also be explored, working with Newcastle University and Northumbria University.

Key delivery partners

- Northumbrian Water
- Natural England
- Local Businesses
- Durham Wildlife Trust
- South Tyneside Council
- Newcastle University
- Northumbria University

Delivery guidance

- The GRO Green Roof Code sets out best practice for green roof design and implementation in the UK. This can be seen via the following link: <u>GRO Green Roof Code.</u> The code offers guidance on substrate depth, soil type, planting types and ensuring waterproofing and fire resistance. Construction and ongoing maintenance guidance is also provided.
- The UK Rain Garden guide provides guidance on the planning, design, construction, planting and maintenance of rain gardens. Please follow the link for more information: <u>UK Rain Garden guide</u>
- The SuDS Design Manual produced by CIRIA provides updated guidance on delivering high quality SuDS.

- The Green Infrastructure Planning and Design Guide (Natural England) identifies guidance for ensuring GI delivers for the local character and provides a sense of place. Please follow the link for further detail: Green
 Infrastructure Planning and Design Guide
- Interventions which include encouraging water infiltration will require surveys to ensure that there are no ground contamination issues.

Indicative cost

High (>£200,000)

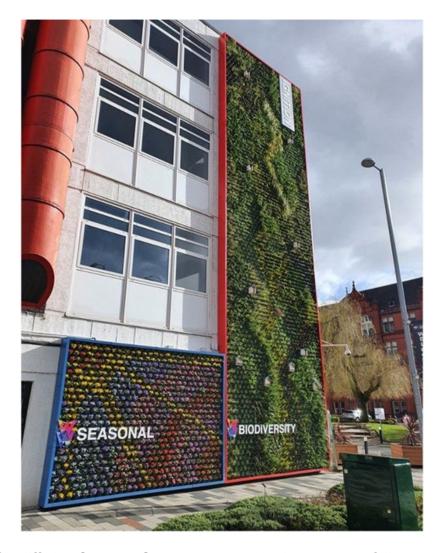
Indicative timeline

Medium-term (1 - 10 years)

Inspiration from elsewhere

■ The IGNITION Living Lab at Salford University incorporates rain gardens, green/blue roofs, green walls and SuDS trees. The project aims to showcase the economic benefits of SuDS features. Please follow the link for more information: IGNITION.

Green wall at Salford University (Source <u>IGNITION Living Lab</u> <u>@Salford</u> - photo credit Nourhan Heysham)



■ In Cardiff, the Greener Grangetown project has successfully transformed a residential neighbourhood through planting trees and installing rain gardens and kerbside vegetation. See Strategic Project 2.4 for further detail.

Action Plan 4: The Hebburn Urban area

4.60 Hebburn is an industrial town in South Tyneside lying on the south bank of the River Tyne, sandwiched between Pelaw and Jarrow. It has a history of coal mining going back to the 17th century but began as a small fishing hamlet. It lies along the metro line between Newcastle and South Shields.

4.61 The Strategic Projects proposed in this Action Plan are the following:

- Greening Hebburn supporting town centre regeneration (SP4.1)
- Monkton Burn Green Loop (SP4.2)
- Tyneside green corridor (Port of Tyne Riverside Park neighbouring authorities) (SP4.3)
- Greener neighbourhoods pilot (around Keelman's Way school) (SP4.4)

Summary of assets

- There are a number of nearby local walking routes, including the <u>Hebburn Riverside walk</u>, the <u>Hebburn to Millennium Bridge walk</u> and regional <u>cycle routes</u> (<u>see interactive map</u>). There are also several popular open spaces within Hebburn, including the <u>Riverside Park</u>, <u>Monkton Fell</u> and <u>Primrose Nature Reserve</u>.
- Monkton Burn (a tributary of the River Don) runs through the southern part of this area, just south of Monkton Village. It forms a green corridor and wildlife corridor linking green spaces including Monkton Dene Park.
- Route 14 of the National Cycle Network passes through the area as a key active travel 'spine' for building the rest of the network.
- There is significant ongoing regeneration activity in Hebburn town centre including plans for 'Hebburn Central' (a multi-used hub for the town centre and surrounding public realm), a new Aldi supermarket, improvements to the Mountbatten shopping centre, a new renewable heat scheme, new areas of public space and housing delivery.

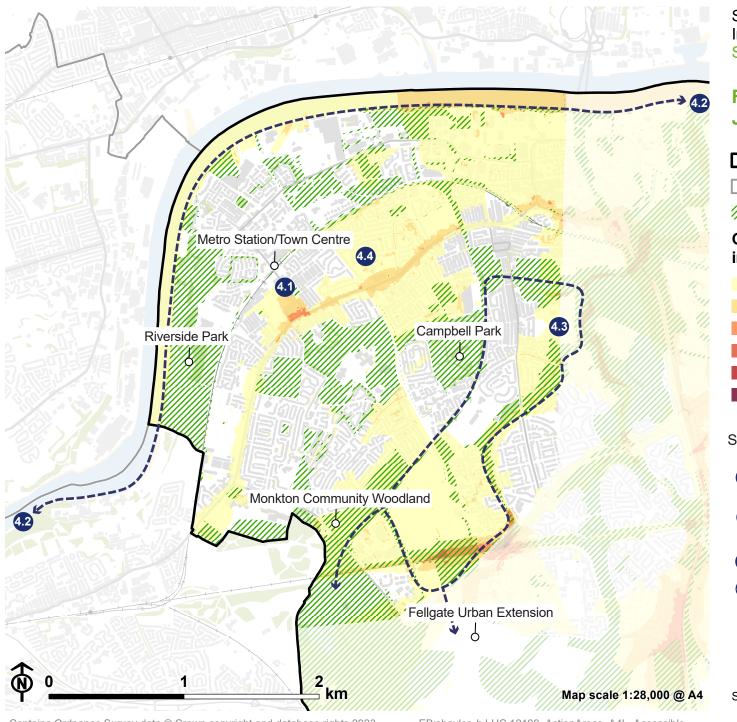
■ The Monkton Community Woodland (formerly a cokeworks) provides a vital link between communities and an asset for wildlife. Please follow the link for further detail: Monkton Community Woodland - The Land Trust. Its northern section forms part of the Great North Forest and it links with long distance cycle routes.

See accompanying interactive map to explore these assets in full.

Summary of challenges

- Parts of Hebburn are at risk from minor flooding from the River Tyne and River Don. There is also heightened risk of surface water flooding in parts of the area with particular risk areas of localised risk along the Metro line above Bellona Close, on Byron Avenue, Bedewell Industrial Estate, Campbell Park, Hebburn Primary and Comprehensive Schools, Grasmere Road, the Monkton Community Woodland, the Victoria Industrial Estate, Canning Street and the Carr-Ellison Park.
- The northern parts of Hebburn are significantly disconnected from the River Tyne corridor, with few walking and cycling routes along the riverside other than the stretch of National Cycle Network route 14 through Hebburn Riverside Park. This is a legacy of historical industrial development along the Tyne.
- Mapping work (see Chapter 3) highlights a significant need for GBI in particular through the town centre. This is notable in particular along the A185, along the Tyne corridor and in parts of the south of the Borough (see interactive map for more detail).
- Hebburn's town centre is currently perceived as being 'run down' and in need of reinvigoration. Ongoing regeneration efforts are designed to recreate a thriving local thriving hub. However, currently large areas of the town centre remain dominated by poor quality, car-dominated public realm with few GBI features.

■ IMD data (see <u>interactive map</u>) highlights significant levels of socioeconomic deprivation in Hebburn compared to national averages – with the highest levels recorded in the town centre, around the Viking Industrial Estate in the north and within an area south of Monkton Village.



South Tyneside Green Infrastructure Strategy South Tyneside Council



Figure 5.4: Jarrow/Hebburn/Tyneside

☐ South Tyneside district

Neighbouring local authority boundary

//////, Green and Blue Infrastructure corridor

Green and Blue Infrastructure improvement zone

Some GBI deficit

Significant GBI deficit

Strategic Projects for South Shields Urban Area

- Greening the Grey Supporting town centre regeneration
- Tyneside Green Corridor (Port of Tyne Riverside Park Neighbouring Authorities
- 4.3 Monkton Burn Loop
- Greener Neighbourhoods Pilot (around Keelman's school)



Source: LUC, OS.

Strategic Projects

Strategic project 4.1: Greening Hebburn – supporting town centre regeneration

Project Purpose

4.62 To support Hebburn's wider regeneration plans by delivering urban greening features within the town centre. This will help to create walkable, healthier places at the heart of the town within a central green hub. Importantly these greening features must be multifunctional (delivering for people, nature and place) rather than purely ornamental. This will also support local businesses and help to attract investment.

Key interventions

- Delivering a wider range of GBI benefits within existing green spaces in the town centre, including significant areas of close-mown amenity grassland. The most cost-effective way of doing so would be wildflower planting, as a resource for pollinators. However street trees should also be incorporated where practicable (e.g. taking into space available above and below ground) to provide shade and to expand urban canopy cover in line with wider Council objectives.
- Evaluate opportunities to repurpose parts of existing green spaces for community growing spaces, seeking enthusiasm among local community members to take ownership of spaces.
- Lining key walking and cycling routes with street trees, rain gardens or areas of wildflower – as an integral part of new walking and cycling infrastructure alongside busier roads.

- Retrofitting green roofs and living walls on existing buildings, or designing them into new developments, particularly within new regeneration schemes and flagship projects.
- Introducing appropriately placed raingardens and Sustainable Urban Drainage (SUDs) to alleviate localised flood risk.

Key delivery partners

- South Tyneside Council (including regeneration team).
- Local businesses.
- Local communities.
- Woodland trust.
- Groundwork Trust.
- Trees for Cities

Delivery guidance

- Linear features alongside cycle routes are likely to be delivered as part of wider transport projects particularly the provision of active travel routes through South Tyneside's LCWIP. Manual for Streets provides useful guidance on integrating GBI features into transport infrastructure. Please follow the link for more information: Manual for Streets.
- Further sources of guidance for detailed design of GBI features include the Green Infrastructure Planning and Design Guide (Natural England) and the SUDS Design Manual (CIRIA). Please follow the link for further detail:

 Green Infrastructure Planning and Design Guide
- Urban greening features, particularly street trees, can require careful planning for ongoing maintenance within an urban landscape. The urban greening feature should be selected to suit the budget and stewardship options.

- Trusting community groups with stewardship of small-scale greening features can create a valuable sense of ownership.
- The Trees and Design Action Group (TDAG) have developed a range of useful guides with evidence-based information, practical advice and case studies to inform decision-making on urban trees. Please follow the link for more information: https://www.tdag.org.uk/our-guides.html.

Indicative cost

High (>£200,000)

Indicative timeline

Medium – long term (some features to be delivered within 10 years)

Inspiration from elsewhere

4.63 The Orchard Project is a national charity focusses on creating and restoring community orchards to contribute towards a better food system, work together with people to develop skills to grow their own produce and harvest it whilst contributing to combatting the climate crisis. Their aim is to have every

home in England, Scotland and Wales within an easy reach of a community orchard. Please follow the link for more information: The Orchard Project.



The Orchard project. Image source: The Orchard Project

4.64 As part of its town centre regeneration scheme, Oldham Council is developing a new Town Centre Park on previously developed land within the town centre. The site will be brought back to life by an injection of green through a new linear park - promoting active travel and healthy lifestyles while boosting the town centre economy. For further detail, please follow the link: https://oldhammasterplan.commonplace.is/proposals/new-town-centre-park.

Strategic project 4.2: Monkton Burn green loop

Project purpose

4.65 Part of this proposed "green loop" would form an extension of the River Don Linear Park (Strategic project 3.1) - running along Monkton Burn (a tributary of the Don) as it runs through the south of this Action Plan area. However in addition, this Strategic Project seeks to expand green walking and cycling connections to connect with the Monkton Community Woodland, Campbell Park and the active travel route along the former Bowes railway line. This will also help to form the basis for further links into the Great North Forest and will link up to GBI enhancements delivered at the emerging Fellgate Urban Extension.

4.66 This green loop will give residents of this neighbourhood (some of the most deprived areas of the Borough) access to a joined-up network of high-quality, nature-rich green routes for exercise, wellbeing and travelling to key destinations. Beside the health and wellbeing benefits, these routes can also be used to establish and restore wildlife and pollinators within Hebburn.

Key Interventions

■ Enhancements along the Monkton Burn river corridor: In line with the proposals for the River Don Linear Park, restoration of the Monkton Burn part of this corridor should provide improved walking and cycling links, high quality wayfinding features, opportunities for wetlands within the floodplain (to increase resilience to flooding), educational opportunities and access to nature. It should also seek to engage the whole community. Branding of this route and wayfinding resources should be consistent with those used for the River Don Linear Park.

- Woodland connectivity: Wherever possible, enhancements to this green corridor should be used to connect gaps between existing areas of woodland (e.g. at Monkton Community Woodland, Campbell Park and riparian woodland along Monkton Burn). This should help improve connectivity also within the Green Belt in the south linking up to Strategic Project 5.1 in the Southern Green Belt Edge.
- Public art and education: Public art and interpretation features along the route will be key taking inspiration from the two award-winning sculptures ('The Swarm' and 'The Hive') by a local artist at the boundary of Monkton Community Woodland which provide links to the history of the Monkton Coke Works on the site. This approach can be extended along the corridor as part of a series of sculptures telling the story of the wider area.

Key Delivery Partners

- Groundwork Trust (Monkton Community Woodland).
- North East Community Forest Group.
- Environment Agency
- Sustrans
- South Tyneside Council.
- Woodland Trust

Delivery Guidance

- **4.67** See Strategic Project 3.1 (River Don Linear Park) for delivery guidance on river corridor restoration.
- **4.68** Delivery mechanisms for delivering these kinds of green corridors are likely to come from a combination of sources, including: developer contributions from

nearby development, grant funding sources (including the Woodland Trust for tree planting), and biodiversity net gain (BNG) receipts.

- **4.69** When it comes to woodland planting, see Delivery Guidance within Strategic Project 5.1 on how to plant and maintain woodland and hedgerows.
- **4.70** In the case of establishing successful off-road walking and cycling routes, Sustrans have produced a Traffic-free Routes and Greenways Design Guide, which can be found via the following link: <u>Traffic-free Routes and Greenways</u> Design Guide.

Strategic Project 4.3: Tyneside green corridor (Port of Tyne – Riverside Park – neighbouring authorities)

Project Purpose

- **4.71** This Strategic Project is a natural extension of Strategic Project 2.3 within the South Shields Urban Area Action Plan (Arbeia Port of Tyne). Similarly, interventions here should seek to create a re-branded, upgraded and better-connected walking and cycling route along the riverside which transforms the public realm, provides biodiversity benefits and reduces flood risk. Branding, wayfinding and information resources should be consistent along the whole route of the Tyne within South Tyneside.
- **4.72** However, in contrast to South Shields, this corridor is anchored by the existing flagship green space of Hebburn Riverside Park. This stretch of the route should also seek to extend high quality walking and cycling links to the west and into the neighbouring authority of Gateshead. This would create links to further green spaces at Bill Quay and beyond as part of a flagship recreational route

Key Interventions

- Tyneside trail and upgraded green spaces: As set out in Strategic Project 2.3 (Arberia to Port of Tyne), upgrades to this route (along NCN route 14) should seek to fill in any gaps in walking and cycling provision, provide tree cover for shading, upgrade public and green spaces along the route, provide public art and historic interpretation. Along this stretch in particular, any opportunities to repair connectivity of walking and cycling routes to the waterfront should be explored including where industrial uses including the Wagonway and Viking Industrial Estates disconnect the NCN route from the waterfront.
- Create links from riverside to town centre: In order to further strengthen Strategic Project 4.1 (focussed on town centre regeneration), interventions should also explore creating high quality green routes from the riverside route to Hebburn metro station and further on to Hebburn Central as the new hub of the town. Routes should be lined with greening features wherever viable and provide easy access by walking and cycling to all helping to further boost the town centre economy.

Key Delivery Partners

- South Tyneside Council.
- Gateshead Council.
- Sustrans
- Wildlife Trust.
- Groundwork Trust.
- Local communities.

Delivery Guidance

4.73 See Strategic Project 2.3: Tyneside green corridor (Arbeia – Port of Tyne).

Inspiration from Elsewhere

4.74 See Strategic Project 2.3: Tyneside green corridor (Arbeia – Port of Tyne).

Strategic project 4.4: Greener neighbourhoods pilot (around Keelman's Way school)

Project Purpose

4.75 This strategic project seeks to deliver a pilot neighbourhood-scale "grey to green" greening and flood resilience project within the Hebburn urban area. Data sets indicate that an appropriate location for a pilot project might be the neighbourhood surrounding Keelman's Way school on the edge of the town centre – given the overlap between open space deficits, socioeconomic deprivation and heightened surface water flood risk (see <u>interactive map</u>). However, the choice of location for a pilot should be collaboratively developed together with local communities to ensure community support. As with Strategic Project 2.4 (Grey to Green Port of Tyne), this project takes inspiration from the 'Greener Grangetown' project in Cardiff.

4.76 The greening project would be anchored by multifunctional interventions at the Keelmans' Way site – but extending to the wider residential neighbourhood between Campbell Park Road, Hedgeley Road, the A185 and Black Road.

Key Interventions

■ Urban greening interventions at the Keelman's Way: Keelman's Way is an educational and therapeutic community where the majority of pupils have severe learning difficulties. The delivery partners of this project

should engage with the school to explore how additional greening features including SuDS, sensory gardens, community growing spaces or other features at the school site could bring benefits for educational and therapeutic possibilities.

- SuDS features: Within the wider neighbourhood surrounding the school, surface water flood risk can be tackled through rain gardens, street trees with SuDS tree pits, permeable paving and other SuDS features to boost climate resilience while providing attractive, green streetscapes.
- Greener walking and cycling interventions: There have already been some interventions in this area, including raised crossings on side streets for pedestrians. These can form the foundation of further greening through rain gardens and other features. Other active travel measures which could be incorporated, where they align with community needs, could include a consideration of filtered 'active neighbourhoods'. [See reference 36]
- **Street furniture:** Street furniture can also be incorporated as part of the wider scheme to provide space for community members, particularly older members, to rest and come together.

Key Delivery Partners

- South Tyneside Council.
- Environment Agency
- Water Companies.
- Local schools.
- Local communities.

Delivery Guidance

- **4.77** Delivery of this type of project is likely to include partnership between the Council, water companies and local communities as part of wider holistic schemes to address flood risk and climate resilience across the Borough, as extreme weather patterns evolve with a changing climate.
- **4.78** In any given location, additional detailed work will be required to identify the specific locations where targeted rain gardens would provide best value. This process should be data-led. The process can draw on existing data from water companies, along with other data sets. This process should begin by identifying locations of sewer overflow, areas of impermeable land within subcatchments, and areas at risk of surface water flooding.
- **4.79** It should also be noted that "depaving" of surfaces will only work where the soil characteristics allow. Soil permeability and contamination issues may mean that it is necessary to use permeable pavement system or other solutions.
- **4.80** Once these features are installed, regular but low-level maintenance is required to ensure a rain garden is functioning effectively. This includes:
 - Ensuring water can flow freely into a rain garden and also from the outflow, without eroding the soil. Debris can be easily washed in and should be regularly 'litter' picked.
 - Trees and plants within a rain garden require checking to ensure the wet conditions are suitable, and regular weeding needs to be undertaken to prevent any invasives becoming established or other species dominating.

Inspiration from Elsewhere

4.81 See the Greener Grangetown case study included as part of Strategic Project 2.4 (Grey to Green Port of Tyne).

Action Plan 5: Southern Green Belt Edge

4.82 This area is made up of land designated as Green Belt in the south of the Borough, between the settlements of Whitburn, Cleadon, Boldon and Fellgate. The primary land use is arable farming, interspersed with several large golf courses.

4.83 The Strategic Projects proposed in this Action Plan are the following:

- Southern edge connectivity (SP5.1)
- Wetland creation (SP5.2)
- Cleadon Heritage Trail (SP5.3)
- Greening the southern villages (SP5.4)

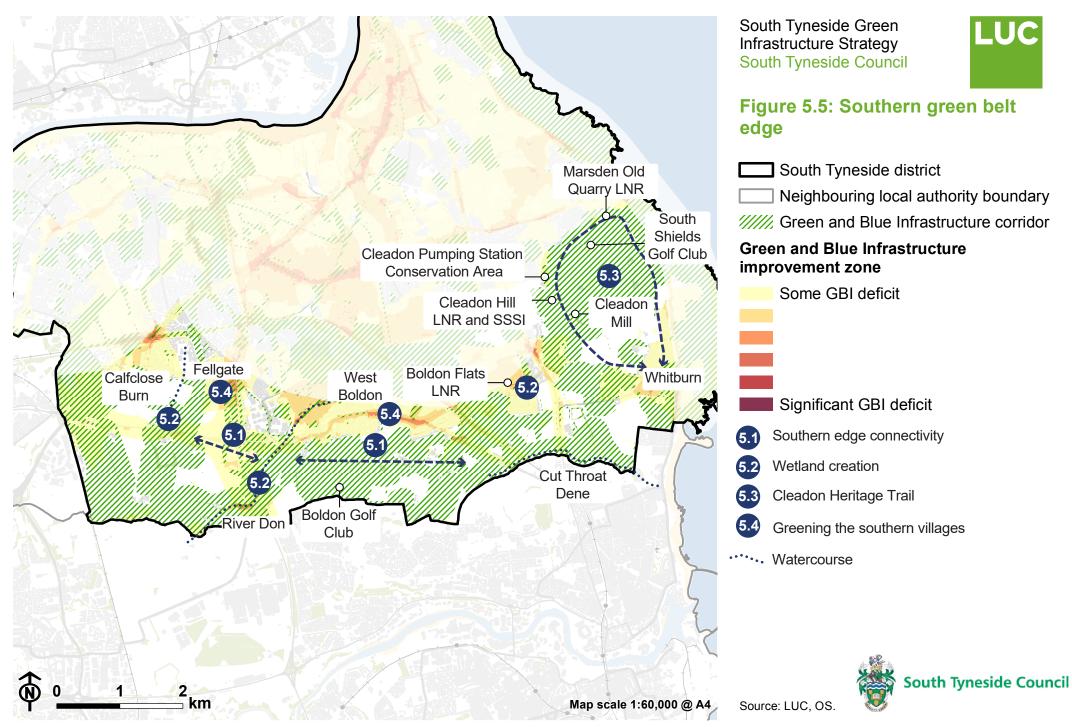
Summary of assets

- Much of this Action Plan area lies within the Wildlife Network (as mapped in 2020) which connects the areas of higher biodiversity value. This includes a number of SSSIs and Local Nature Reserves. There are also several Local Wildlife Sites, some of which overlap the SSSIs and LNRs (see interactive map).
- Cleadon Hills and Boldon Downhill are both identified as Areas of High Landscape Value. These areas include higher land (Boldon Downhill is the highest point in the Borough) and distinctive limestone outcrops and scarps.
- There are a number of designated Conservation areas within this Action Plan area. These largely incorporate the medieval settlement origins.

See accompanying interactive map to explore these assets in full.

Summary of challenges

- Intensive farming across much of this part of the Borough has resulted in habitat fragmentation, with small areas of deciduous woodland separated across the Southern Green Belt Edge. There is very little calcareous grassland left, despite limestone underlying the entire eastern half of the area.
- Potential expansion of development into the Green Belt through the Regulation 18 Local Plan published in June 2022 (including at Fellgate Sustainable Growth Area, as per Policy SP6) needs to be carefully designed to retain key GBI corridors and protect and where possible enhance wider nature networks in line with the guidance provided in Chapter 5.
- There is a deficit of accessible open space within the towns, and large areas of West Boldon and Whitburn do not comply with any of the Access to Natural Green Space standards (ANGSt). In addition, the emerging Open Space Strategy for South Tyneside highlights areas of East Boldon as being outside the relevant access buffers for allotments, amenity greenspace, provision for children and provision for young people. Although there are a number of PRoW within the Green Belt, these are generally poorly connected as a network and do not offer accessible circular routes.
- The Conservation Areas of Whitburn Village, Cleadon Village and East Boldon are identified as being at risk, due to the deterioration of the historic assets. GBI interventions can help to restore historic character where past streetscapes included street trees and/or hedgerows whilst also providing wider benefits (e.g. for biodiversity and air quality).
- Around Boldon Flats and along the River Don corridor, there are areas at heightened flood risk. These generally do not overlap with built-up areas but offer opportunities for climate resilience initiatives. There are also small areas of medium to high risk from surface water flooding, particularly around Boldon Colliery.



Strategic projects

Strategic project 5.1: Southern edge connectivity

Project Purpose

4.84 To enhance connectivity for pollinators and people through the south of the Borough by creating wildflower strip and mixed berry-bearing hedgerows along field margins, footpaths and roads.

Key interventions

- Enhance public access: Explore opportunities for creating permissive routes along field margins aligned east—west to join up north—south aligned PRoW which connect Boldon Colliery, West Boldon and East Boldon to the north-western edge of Sunderland. This would create options for circular routes through the southern green belt. The opportunity for wayfinding signage to promote these routes should be considered.
- Wildflower highways: Work with landowners to explore opportunities for creating wildflower strips along field margins and footpaths. There should be a focus on providing species with high value for pollinators, as well as flower mixes which offer an aesthetic value. This will create high quality "edge habitat" which supports a number of smaller mammal, bird and insect species. Grassland buffer strips at strategic locations (including along erosion / run-off pathways) are also highlighted in SEO 1 of the NCA profile for the Durham Magnesium Limestone Plateau. [See reference 37] These should be focussed particularly around Quarry Hill, where there is current habitat restoration as part of the Making a B Line for the North East project.

- Hedgerow highways: Explore opportunities for hedgerow creation and maintenance to enhance the provision of berry-bearing native hedgerow species which promote pollination. A mix of species including blackthorn, hawthorn, crab-apple, rowan and elder will ensure berries and flowers are present throughout March September increasing the value for pollinators. This is in line with SEO1 of the NCA profile for the Durham Magnesium Limestone Plateau, which highlights the importance of the historic hedgerow network for improving habitat connectivity and reducing soil erosion and surface water.
- Engagement with landowners: Engage with landowners and run sessions on benefits, funding opportunities and practical tips for managing hedgerows wildflowers and woodland. Within existing woodland blocks, landowners should be encouraged to adopt sustainable woodland management practices to maximise the carbon sequestration and habitat value benefits provided.
- **Golf course outreach:** Work with golf course owners and greenkeepers to produce strategic management plans for enhancing the habitat value on golf courses, inspired by best practice examples.
- Road verges: Explore opportunities for additional tree, hedgerow or wildflower planting along Newcastle Road (A184) and the A19. This would provide additional connectivity, as well as having the potential to act as a buffer to road noise and air pollution associated with vehicles.
- **Surveys** phase one and any further phase 2 e.g. protected species with particular consideration for water vole
- **Reduce grazing** grazed in a rotational manner, links for conservation grazing. Enhance marsh grassland habitats.

Key delivery partners

- Defra (ELMS schemes)
- Plantlife
- Buglife

- Local farmers and golf courses
- South Tyneside Council Highways Officers
- Durham Wildlife Trust
- RSPB

Delivery guidance

- **4.85** Improving management of agricultural land lies outside South Tyneside's planning system and enhancements will largely be delivered through ELMS schemes under Defra's national leadership. However any new development which encroaches on this area should seek to address the challenges highlighted here in line with the guidance provided in **Chapter 5**. The enhancements highlighted here will require a collaborative, multi-partner approach, with the Council acting as facilitator wherever possible.
 - Buglife provides a wealth of information and guidance on managing grasslands for pollinators, including the importance of transport corridors for pollinators_[See reference 38] and Plantlife have produced <u>The Good</u> <u>Verge guidance</u> [See reference 39], which highlights best practice for introducing wildflowers onto road verges.
 - Advice on managing grassland for wildflowers can is provided by Suffolk Wildlife Trust, including information on grazing and cutting (lease follow the link for more information:
 https://www.suffolkwildlifetrust.org/conservationadvice/meadows-and-grassland/grassland-management-wildflowers). This includes:
 - Avoid cutting during the peak bird nesting season between March and September.
 - Trimming hedgerows on a 2 -3 year cycle and avoid cutting the entire hedge length in a single year.
 - Creating new hedgerows with a mix of species (at least five different species), including native species such as hazel, hawthorn and blackthorn.

Indicative cost

Medium (£50 - 200,000)

Indicative timeline

Medium Term (1 - 10 years)

Inspiration from elsewhere

4.86 The Edinburgh Living Landscape partnership have created 5,500m² of mixed perennial and annual native wildflower meadow to provide connectivity along the Edinburgh coast. The project has included working with communities, partners and collected scientific data on biodiversity benefits of maritime meadows. Please follow the link for more information: Edinburgh Living Landscapes.



Strategic project 5.2: Wetland creation

Project Purpose

4.87 To expand wetland and riparian woodland cover throughout the south of the Borough alongside rivers, drainage ditches and at Boldon Flats. This will increase habitat, enhance carbon storage, and provide shading to rivers to aid improvements in aquatic ecosystems.

Key interventions

- Riparian woodland planting: Explore opportunities for restoring riparian woodland along river corridors and drainage ditches, including the River Don, Calfclose Burn and Cut Throat Dene, as well as at Boldon Flats Local Wildlife Site. The Working with Natural Processes (WWNP) evidence base, led by the Environment Agency, identifies these as areas with the potential for riparian and floodplain planting. Habitat planning will be required prior to woodland planting to ensure that shading does not reduce the suitability of the river course for water vole.
- Wet grassland: Along water courses and at Boldon Flats, explore opportunities for creating floodplain meadows within the flood zones and create wet grassland. At Boldon Flats there is the opportunity to enhance management of marsh grassland habitats. This includes encouraging rotational conservation grazing to reduce pressure on marsh grassland.
- Community enhancement: Explore opportunities for creating a community group to help manage and champion wetlands at Boldon Flats. This will support the community's appreciation of these habitats and provide opportunities for local residents to connect with their local heritage. The project could include the inclusion of interpretation boards within and around the site to highlight the natural heritage importance of the site. The community group could be engaged through fundraising events, creative arts projects and collaboration with local schools.

Key delivery partners

- Defra (ELMS schemes)
- Tyne Rivers Trust
- Woodland Trust
- Local farmers
- Durham Wildlife Trust
- RSPB
- East Boldon Neighbourhood Forum

Delivery guidance

- 4.88 Improving the management of agricultural land lies outside South Tyneside's planning system and enhancements will largely be delivered through ELMS schemes under Defra's national leadership. However any new development which encroaches on this area should seek to address the challenges highlighted here – in line with the guidance provided in **Chapter 5**. The enhancements highlighted here will require a collaborative, multi-partner approach, with the Council acting as facilitator wherever possible.
 - Specific advice relating to riparian woodland is available within the Working With Natural Processes evidence directory. More information is available vis the following link: Working With Natural Processes evidence directory.
 - The Floodplain Meadows Beauty and Utility Technical Handbook provides a comprehensive summary of the value of wet and marshy grassland, as well as guidance on management, creation, restoration and ongoing monitoring of these habitats. Please follow the link for more information: Floodplain Meadows - Beauty and Utility Technical Handbook.

■ In addition, the Royal Forestry Society provide a range of resources on woodland management on their 'So, you own a woodland?' page, which can be found via the following link:

https://rfs.org.uk/learning/newtoforestry/so-you-own-a-woodland/.

Indicative cost

Medium (£50 - 200,000)

Indicative timeline

Long Term (10+ years)

Inspiration from elsewhere

4.89 In Staffordshire, the Friends of Mottey Meadows group work with Natural England to manage Mottey Meadows National Nature Reserve. Please follow the link for further detail:

https://www.floodplainmeadows.org.uk/sites/www.floodplainmeadows.org.uk/files/Case%20Study%203.2%20Friends%20of%20Mottey.pdf. In addition, the group run fundraising events, butterfly surveys and public events, including an annual Hay Making Festival. The group has helped to provide notice boards, signs, banners, gates, bridges, fencing and machinery for the meadows.



Example of a floodplain meadow at Somerset Levels

Strategic project 5.3: Cleadon Heritage Trail

Project Purpose

4.90 To create an accessible, engaging circular route through open countryside with easy access for local communities. This would enhance access along the existing Marsden Circular Walk and link together the Cleadon Hill LNR and SSSI (including Cleadon Mill), the Cleadon Water Tower (part of Cleadon Hills Conservation Area) and the Marsden Old Quarry LNR. The project will combine recreational and access improvements with biodiversity enhancements.

Key interventions

- Engage local landowners: Liaise with landowners (including South Shields Golf Club) to explore the option of enhancing the accessibility of the PRoW network along Cleadon Hills (B07) and Sunniside Lane (B08) by replacing any stiles with gateways and enhancing wayfinding signage. This would support access for a wider range of users. Within South Shields Golf Course there may be the opportunity to re-route the path to the outskirts of the golf course to reduce conflicts between walkers and golfers. There may be the opportunity to explore re-routing the footpaths to avoid passing through the SSSI, offering the future potential to create a more accessible all-weather path along the Cleadon Trail as demand increases over the years, without undermining sensitive habitats. This would be a more long-term element of the project.
- Off-road route along Lizard Lane: Explore the opportunity of creating a new off-road route running alongside Lizard Lane, to offer a shorter circular route and reduce pressure on the coastal path.
- Branding, wayfinding and educational resources: Introduce additional educational signage highlighting the cultural and natural heritage features along the loop including Cleadon Mill, Cleadon Water Tower and the

calcareous grassland features. This would contribute to actions identified as part of SEO 4 within the NCA profile for the Durham Magnesium Limestone Plateau - to promote heritage and historic features. Signage should also highlight the biodiversity value of notable species associated with the grassland. It should also emphasise the fragility of these species and the importance of staying on footpaths and keeping dogs on a lead to limit disturbance to habitats. There may be the possibility to engage with nearby secondary schools (such as Harton Academy and the Whitburn Church of England Academy) to help co-design and research this signage. Enhancements should explore possibilities to enhance the recreational offer at these sites by introducing seating and areas of natural play in areas of lower ecological value. Any interventions such as this will need full feasibility assessments including Phase 1 and any necessary Phase 2 Habitat surveys.

Habitat improvements: Positive habitat management should be encouraged at the privately owned Cleadon Pumping Station Local Wildlife Site (LWS). This might include the removal of gorse where appropriate and enhancements to calcareous grassland areas. In agreement with landowners, any interventions should explore the opportunity to buffer the new surfaced footpath with wildflower or natural grassland strips.

Key delivery partners

- Local landowners
- South Shields Golf Course
- Natural England
- Local schools
- South Tyneside Council
- Community groups e.g. the Ramblers.
- Durham Wildlife Trust
- Historic England

Delivery guidance

- Any new development delivered in this part of the Borough should be expected to meet the objectives of the Heritage Trail and help to deliver elements of it. Grant funding – including streams for heritage-related enhancements – could be sought to help to catalyse the project.
- Sustrans provides a wealth of guidance on the design of traffic free routes and greenways. This includes specific guidance on wayfinding, signage and, access points. Further information is available via the following link: Traffic free routes and greenways.
- Forest Research provides best practice guidance on the creation and maintenance for lowland calcareous grassland. Please follow the link for more information: https://cdn.forestresearch.gov.uk/2022/02/bpg 18.pdf This includes:
 - Suggested seed mixes for limestone and calcareous grassland.
 - Advice for creating new grassland by using turf inoculants or green-hay strewing of grasslands as a faster alternative to natural recolonisation;
 - Guidance on the timings of cutting to avoid damage to ground-nesting birds and the amount of cutting or grazing needed as grassland mature; and
 - Grazing advice, with a suggested stocking rate of 0.5 cattle or 2.5 sheep per ha per year.

Indicative cost

High (<£200,000)

Indicative timeline

Medium term (1-10 years)

Inspiration from elsewhere

4.91 The Plymouth Mayflower Trail offers a route which allows visitors to discover the areas nautical heritage. Information boards and signage connect to a dedicated app which helps to provide further information on the route. Please follow the link for more information: https://www.visitplymouth.co.uk/things-to-do/mayflower-trail-p2881473.



Strategic project 5.4: Greening the southern villages

Project Purpose

4.92 To improve access to accessible nature within the southern villages by creating a number of doorstep green spaces or pocket parks on underutilised land.

Key interventions

- Wildflower verges: Relax mowing regimes on the large green verges and green islands within housing estates to promote wildflower growth. These areas currently provide limited multifunctional benefits for biodiversity and recreation. The opportunity to plant trees on such areas should be explored together with Highways officers, local communities and Council green space and maintenance teams. This will add colour to the public realm and increase the multifunctionality of green spaces around residential areas.
- Street furniture and pocket parks: Improve the recreational offer of open spaces by introducing benches and litter bins offering local places to connect with nature and opportunities for communities to come together. These opportunities should be prioritised close to residential areas that are outside of several or all ANGSt and local open space access buffers and where there is higher health deprivation such as West Boldon and Fellgate (see interactive map). Where space allows, explore opportunities to include provision of children's play, including natural play within these spaces.
- Community stewardship of spaces: Explore opportunities to encourage community ownership of local open spaces, allowing community groups to take over some of the maintenance tasks. Where there is interest, community groups can introduce planters and establish community

growing groups. This might be delivered through a small-scale local grant scheme to welcome grassroots suggestions for how to improve and maintain existing areas of open space.

Key delivery partners

- South Tyneside Council (including the Green Spaces team)
- Local community groups
- South Tyneside Council

Delivery guidance

- Community-led delivery will be crucial in the delivery of this project, which should invite and welcome ideas for enhancements from the local communities who know the area best. This might take the form of a small grants scheme, with the Council acting as a supportive facilitator in delivering improvements.
- Plantlife have produced The Good Verge guidance, which highlights best practice for introducing wildflowers onto road verges. Please follow the link for further detail: The Good Verge guidance
- Advice on the creation of pocket parks (including opportunities for funding) was produced from the Ministry of Housing, Communities and Local Government in 2019. It includes advice on engaging with local communities. Please follow the link for more information: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/852241/191025_PP_Prospectus.pdf.

Indicative cost

Low (\leq £50,000) to Medium (£50 – £200,000) - wildflower planting in particular can provide cost savings over the long term given a change in mowing regimes.

Indicative timeline

Medium (1 - 10 years)

Inspiration from elsewhere

4.93 In Dundee, the Naturalising Amenity Grassland project has seen wildflower and natural grassland promoted in parks and open spaces. This has included introducing yellow rattle and reducing mowing regimes. Please follow the link for further information: https://www.nature.scot/doc/wilding-our-parks-case-study-dundee-report.



Lochee Park, Dundee (Source NatureScot)

Chapter 5

Guidance for New Development

- **5.1** The guidance set out here is grouped around eight Key Principles for planning and designing good GBI in a new development.
- **5.2** The principles are divided into a list of questions and discussion points that should form the basis for early-stage discussions between Development Management teams and developer teams when planning new development in South Tyneside.
- **5.3** These key principles should also form part of the basis for any future Design Guidance or Design Coding work, alongside the Green Infrastructure Planning and Design Guide launched by Natural England in February 2023. **[See reference** 40**]** This forms part of the wider National Green Infrastructure Framework and complements the National Model Design Code and National Design Guide.
- **5.4** The GBI network should form a key part of masterplan refinement alongside streets and urban blocks. It will be particularly important to raise expectations on GBI at the pre-application stage and make requirements clear. The current National Planning Policy Framework (NPPF paragraph 39) states that:

"early engagement has significant potential to improve the efficiency and effectiveness of the planning application system for all parties. Good quality pre-application discussion enables better coordination between public and private resources and improved outcomes for the community."

5.5 It is important that developers review these principles alongside the Action Plan relevant to the area in question – which will help to draw out more location-specific considerations, challenges and GBI assets.

The role of GBI in good design

5.6 Integrating Green and Blue Infrastructure into new development is a central part of the broader push for high design quality. A national Housing Design Audit for England carried out by the Place Alliance looked into 142 large-scale, housing-led development projects across England and delivered a number of key messages and recommendations from the nationwide picture. The audit noted that green infrastructure is "fundamental to creating a pleasant and healthy external environment in which residents will wish to spend time", but that:

"the green landscape is often viewed as the forgotten dimension of urban design, applied after-the-face in an attempt to obscure ugly architecture or parking, or alternatively removed from masterplans prior to their development in an attempt to save on maintenance costs."

- **5.7** One of the headlines of the audit is that "too often green landscape and biodiversity was sacrificed for a hard and over-engineered environment". Development across the UK was overwhelmingly scored as 'mediocre' on this dimension with poorer scores outside the south east.
- **5.8** The key difference was between schemes that exploited the existing landscape as a biodiverse resource (including retaining existing mature trees, water features, hedgerows and so forth) and those which did not. Less successful sites delivered "leftover bits of green with no obvious function, either social or environmental".

- **5.9** This highlights the need for the design of new development to be considered in terms of functions delivered (for People, Nature, Place and Climate Change) rather than assets provided as set out within this Strategy.
- **5.10** The design of any new development in Whitburn and East Boldon must also be mindful of the design policies within the two Neighbourhood Plans covering those areas.

8 Key Principles for new development in South Tyneside

Principle 1: Multifunctional

- Does the development deliver multifunctional GBI design which effectively integrates benefits for People, Nature, Place and Climate Change?
- Does the development deliver tree planting as part of a quality landscape design which provides effective benefits for People, Nature and Place?
- Does the scheme ensure the provision of designated space to enable effective community growing with appropriate environmental conditions in terms of aspect, shelter, drainage and soil provision?
- Are the play areas multifunctional and nature-based effectively delivering benefits for People, Nature and Place?
- Have the best SuDS techniques been selected for the available site characteristics including topography, ground conditions, the surface water runoff destination and the character of the setting?
- Does the proposal maintain at least an 8-metre easement between any built development and the top of the bank of a watercourse and/or the toe of a flood defence? This is to allow for maintenance and inspection requirements developers should note that the Environment Agency strongly encourages greater buffers (20 metres) as standard to allow for access for larger maintenance works.

Are SuDS linked to water efficiency measures where possible, including rainwater harvesting?

Principle 2: Varied

- Does the selection of the trees take into account factors such as mature crown spread, highway visibility sight-lines, local services, and minimum off sets from intrusive elements?
- Where tree lined streets or avenues are planned, careful consideration must be afforded to species, species mix and space for growth.
- What is the percentage of native species within the proposed planting mix?

Principle 3: Connected

- Does the design of the scheme connect effectively beyond the 'red line boundary' of the site and take account of its wider environment?
- Are walking and cycling routes attractive and integrated with GBI assets of all scales?
- Does the proposal identify opportunities to better use areas of natural floodplain to store flood waters to reduce flood risk within this management catchment and further downstream?
- Are areas of wildflower and 'wilder' areas of grassland integrated into the public realm, as opposed to closely mown grass areas? Have any opportunities been missed and why?
- Does the site layout take opportunities to enhance the GBI value of those areas where the corridor mapping identifies strategic networks of GBI?

Principle 4: Accessible

Does the development start from a presumption that walking and cycling will be the primary mode of travel for short journeys?

- Does the scheme connect effectively into the wider walking and cycling networks and greenways, so that people of all ages and abilities can access important daily destinations (including schools, shops and leisure centres) without a private car?
- Are greenways wide, overlooked and run benefit the local community in addition to residents of a scheme by ensuring potential connections are utilised?
- Are play spaces provided inclusive where children of all abilities can play with a rich range of physical, sensory and social experiences? Do the play spaces need to be behind railings? Or can they be more closely integrated into the wider public realm?

Principle 5: Character and design

- Does the design seek to retain, protect and incorporate existing landscape and ecological features of suitable condition and quality as part of its layout?
- Are rivers considered as the centrepiece of the development proposal?

 Does the proposal take every opportunity to be orientated to encourage access and enjoyment of the water environment as an important asset within the development layout?
- Does the design seek to retain, protect and incorporate existing trees and hedges of suitable condition and quality as part of the development layout?
- Can the development minimise car parking provision, supported by controlled parking zones, car free development schemes and car clubs? In cases where this space is 'freed up', can it be used for GBI delivery and deliver multiple GBI benefits?
- Are play areas set within an attractive environment with a distinctive sense of place?
- Have incidental 'playable' spaces been incorporated into the scheme, including along walking and cycling routes?

Principle 6: Partnership and Vision

- Have delivery partners been clearly identified?
- Has the local community been engaged in the development of GBI plans, and in how they should be delivered?
- Does the scheme consider start-up funding and advertising and support which new residents can use to facilitate a community growing group?
- Have alternative models been explored, such as partnerships with the Land Trust, the Wildlife Trust, community land trusts (CLTs) or other community-led initiatives?

Principle 7: Evidence

- Does the site layout safeguard those areas identified for their GBI value within the GBI corridors set out on the interactive map accompanying this Strategy?
- Does the site layout seek to boost GBI value in areas identified as Improvement Zones in the mapping?
- Do the proposals address the shortfall of play facilities in the area, either by improving quantity and/or quality?
- Does the proposal 'make space for water' through the delivery of new GBI to sustainably manage flood risk for the duration of the anticipated lifespan of the development? Has an allowance for climate change been made in line with Environment Agency guidance?
- Do the proposed measures provide an important contribution to Flood Risk Management and Water Framework Directive objectives for each watercourse?

Principle 8: Planned, managed, valued, monitored, and evaluated

- Does the placement of trees take into account factors such as belowground infrastructure irrigation and drainage?
- Have surface water management and SuDS opportunities been considered at the earliest stages of concept planning? Including natural flow paths and potential discharge points?
- Do the design and long-term maintenance of SuDS support the findings and recommendations of the South Tyneside SFRA?
- Has long-term management and stewardship of GBI assets been discussed at an early stage of the design?

Chapter 6

Embedding GBI in the Local Plan

6.1 To deliver on South Tyneside's GBI ambitions it will be important to effectively embed GBI into the new Local Plan. Recommendations for achieving this within the Borough's emerging Local Plan are set out below.

Natural England's National GI Standards

6.2 Launched in 2023, the National Green Infrastructure Framework for England is a commitment in the Government's 25 Year Environment Plan. Please follow the link for more information: National Green Infrastructure Framework. It supports the greening of our towns and cities and connections with the surrounding landscape as part of the Nature Recovery Network. The Framework is designed to help local planning authorities and developers meet requirements in the National Planning Policy Framework to consider GBI in local plans and in new development. It can support better planning for good quality GBI and help to target the creation or improvement of GBI, particularly where existing provision is poorest.

6.3 Part of the Framework includes a 'Process Journey for Local Planning Authorities', including guidance on the GBI components of a Local Plan. Stage 4 of the process in particular (Plan Strategically and develop Green Infrastructure (GI) policy) is a helpful reference point in identifying the best ways to embed GBI into a Local Plan.

Mainstreaming GBI across policy areas

6.4 Research on what good GBI policy looks like by Hislop et al (2019) **[See reference** 41**]** also provides a useful starting point. It highlights the importance of 'mainstreaming' GBI across policy areas. That means ensuring that the value

Chapter 6 Embedding GBI in the Local Plan

of GBI is understood and reflected in decisions/actions - not only in the environment policy domain, but also in other policy domains (e.g. social and economic). GBI is a strategic 'umbrella' concept that, if planned and delivered effectively (based on sound evidence), can have multiple benefits across policy areas.

- **6.5** For the reasons set out above Hislop et al (2019) recommend that GBI policy should not just be solely located in a core policy in the environment section of a Local Plan. Rather, it should also be referenced in a range of other policies, such as those on design, housing, transport, water management, biodiversity and open space (based on discussions with relevant experts across council departments).
- **6.6** It may therefore be useful to provide training to council officers and elected members to improve understanding of the multiple benefits of GBI, to support policy development.
- **6.7** Hislop et al (2019) identify seven key areas to address in a 'good' GBI planning policy, which are summarised and updated below (taking into account the latest planning policy context). We suggest that these will be a useful reference point for developing polices and guidance in the Local Plan:
 - Design process: it will be important to emphasise the need to consider multi-functional GBI design from the pre-application stage onwards, including through engagement with relevant stakeholders (see Chapter 6 for guidance).
 - Wider context: GBI design should be informed by analysis of the site and wider context, including local needs, wider habitat networks, open space provision and public access (the final updated GBI strategy will provide relevant evidence to draw on). A strategic policy can set certain performance standards for GBI based on this evidence. For example, the new GI standards framework proposes five different standards that local planning authorities might want to impose on new development (with thresholds set based on local evidence) through their local plan:
 - S1: Green Infrastructure Strategy Standard

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- S2: Accessible Greenspace Standard
- S3: Urban Nature Recovery Standard
- S4: Urban Greening Factor Standard
- S5: Urban Tree Canopy Cover Standard
- **Biodiversity**: GBI policy should link to policy on biodiversity net gain (mandatory BNG will be a key new driver of funding for GBI) and be designed to protect and enhance onsite biodiversity and habitat networks within and adjacent to the site.
- Water management: sustainable drainage (SUDS) should form an integral part of multi-functional GI design, maximising amenity and biodiversity benefits alongside flood management (and public access where safe and appropriate).
- Access networks: GBI design should retain and enhance active travel routes (linking key destinations such as housing to town centres and schools) to encourage walking and cycling.
- **Greenspace**: GBI should meet the council's quantity, quality and accessibility standards for open space, seeking to address deficiencies in access and be designed to cater for all in the community (note that Natural England's new National Standards for GBI include an updated Accessible Natural Greenspace Standard).
- Stewardship: appropriate management and maintenance agreements for GBI, supported by clear and long-term funding mechanisms, must be agreed with the council.
- **6.8** The National GI standards also highlight the importance of wording GBI policies appropriate to secure delivering:

In a local plan, consideration should be given to the strength of wording of GI policies. An assessment of the strength of the policy wording, including the extent to which the policy and supporting text promotes action can be useful. For instance, does the policy say "you may wish to consider", or

"this action could be taken". This can make a different in whether existing GI assets are safeguarded and not lost. Where this is unavoidable policies should ensure that mitigation and compensation for GI is designed to meet needs rather than simply replacing what has been lost. GI policies should work together with policies on Biodiversity Net Gain to ensure an uplift in the quantity and quality of GI."

- National GI Framework (2023): Process Journey for Local Authorities

Funding GBI through the planning process

- **6.9** As noted in the introduction to **Chapter 5**, the delivery of GBI in South Tyneside will need to draw on differing delivery mechanism and funding sources resting on a strong partnership approach bringing together sources from public, private, philanthropic or third sector sources.
- **6.10** Funding of GBI (both upfront delivery and ongoing management) has often been a challenge, especially in areas with lower land values where development viability can be an issue. However, by setting out clear GBI plans the council will be best placed to secure funding from multiple public and private sector sources. It will also enable the council to provide clarity to developers about GBI requirements so that they can factor these costs into the price paid for land.
- **6.11** It should also be recognised that investment in GBI as part of high-quality design/place-making will contribute to higher sales values for developers and help to reduce local opposition to development. GBI should not simply be seen as a cost to developers and this should be made clear in design guidance and pre-application discussions (see **Chapter 6**).

Future stages of GBI policy development

- **6.12** At the time of publishing, South Tyneside's emerging Local Plan was set to undergo further consultation during 2023. As development of the Local Plan progresses further, consideration should be given to how GBI requirements can also be integrated into:
 - Site allocation policies and associated design codes/guidance/masterplans
 to provide clarity to developers on requirements and inform early design thinking.
 - Any South Tyneside-wide design guidance or code (the Levelling Up and Regeneration Bill includes a requirement for area-wide design codes for all local authorities).
 - The next update to the Infrastructure Delivery Plan to clarify how new GBI will be funded.
 - Validation/developer checklists to help ensure effective, early design thinking on GBI.
 - Template conditions and section 106 clauses.
- **6.13** The development of a local policy on biodiversity net gain (BNG), including on what level of gain is required and where offsite habitat investment should be targeted, should be closely integrated with the refinement of GBI policies.
- **6.14** It will also be important to consider what body or partnership can take on responsibility for overseeing delivery of the council's GBI ambitions. Third sector organisations already active in this space (e.g. Thames Chase Trust) may have a key role to play and/or the council might want to consider the feasibility of created a dedicated post to champion GBI delivery.

Building with Nature

- **6.15** South Tyneside Council might also want to explore accreditation with the 'Building With Nature' scheme. Building with Nature (BwN) is an evidence-based standard that defines high quality GBI. Please follow the link for further detail: 'Building With Nature'
- **6.16** As part of wider requirements for GBI in new developments (see **Chapter 6**), the Standard could be adopted by South Tyneside Council as a benchmark for assessing and accrediting the quality of GBI delivered as part of development. Developers could be signposted to use the BwN Standards to create better places for people and wildlife.
- **6.17** South Tyneside Council could also encourage, or require, successful achievement of a BwN Award as a preferred mechanism for demonstrating a commitment to design and build quality. A BwN Award is an external verification that reassures a range of stakeholders that the benefits of high-quality green infrastructure will be more effectively secured at each stage of development, including implementation and post-construction, and by requiring evidence of effective arrangements for long-term management and maintenance.
- **6.18** Training is available if the Council wanted to develop in-house BwN expertise, or there is a UK-wide BwN approved assessor network.

Cross-boundary GBI and Local Nature Recovery Strategies

6.19 Looking at GBI across local authority boundaries is increasingly important. As part of the Environment Act 2021, the government has committed to establish Local Nature Recovery Strategies (LNRSs). LNRSs are a new, England-wide system of spatial strategies that will drive nature's recovery and provide wider environmental benefits. LNRS areas and "responsible bodies" to lead preparation of each LNRS are currently being agreed with Defra. The aim

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is to bring forward LNRSs before mandatory biodiversity net gain is introduced in November 2023, although legislation and guidance has been repeatedly delayed.

6.20 Each LNRS will, for the area that it covers:

- agree priorities for nature's recovery.
- map the most valuable existing areas for nature.
- map specific proposals for creating or improving habitat for nature and for wider environmental goals (e.g. net zero carbon, flood risk reduction, water quality)
- **6.21** The production of each LNRS will be evidence-based, locally led and collaborative, to help create a network of shared plans that public, private and voluntary sectors can all help to deliver. LNRSs are expected to be developed on a county scale, drawing on local data and expertise. The strategic opportunities identified in this GBI strategy should therefore be used to inform the larger scale LNRS.
- **6.22** This will be important as LNRSs will identify and incentivise the use of specific off-site biodiversity net gain (BNG) locations (helping to secure BNG funding for projects). They are also anticipated to be used to help target wider investment in habitat enhancement, such as the new multi-billion pound environmental land management funding schemes for farmers/land managers.

Appendix A

Policy Context for baseline analysis

A.1 This Appendix includes the full policy context which informs the baseline analysis of South Tyneside's GBI network set out in **Chapter 2**. It is broken down by the overarching study themes of People, Nature, Place and Climate Change.

People

What does national policy say?

A.2 As a result of the ambitions set out in the 25 Year Environment Plan (25YEP), the role of GBI has risen rapidly up the political agenda in the UK. Published in 2018, it outlined the UK government's support for natural spaces close to where people live and work and connecting people with the environment to improve health and wellbeing.

A.3 The Environmental Improvement Plan (EIP) 2023 reasserts this message, stating that 90% of adults report that time spent outdoors is good for their physical and mental health and setting a new commitment "to ensure that anyone can reach green or blue space within 15 minutes from their front door".

A.4 The National Planning Policy Framework (2021, but currently undergoing updates) emphasises the need for GBI networks and their benefits for local communities. It also requires that planning policies should aim to achieve healthy, inclusive and safe places, including through the provision of 'safe and accessible green infrastructure' (Paragraph 92).

A.5 In early 2023, Defra launched a new Green Infrastructure Framework - Principles and Standards for England. This was a government commitment in the 25 Year Environment Plan. The GI Framework is intended to help local planning authorities and developers meet requirements in the National Planning Policy Framework to consider GBI in local plans and in new development. It will support better planning for good quality GBI and help to target the creation or improvement of GBI, particularly where existing provision is poorest. Please follow the link for more information: Green Infrastructure Framework - Principles and Standards for England.

What does local policy say?

A.6 South Tyneside's adopted Local Plan 2021 - 2039 outlines a number of policies relating to people, notably Policy 2 (Air quality), which notes that good air quality has been identified as an important need by the World Health Organisation.

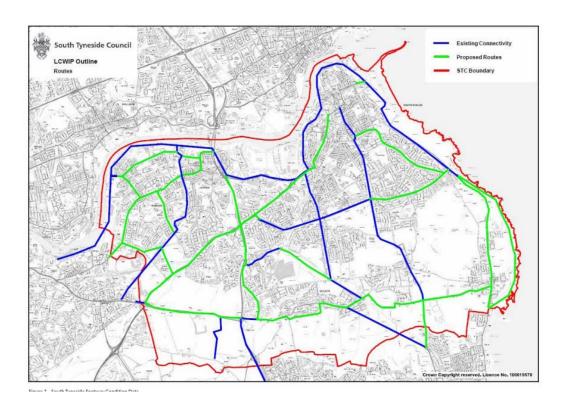
A.7 The health and wellbeing of communities is a key driver of existing policy in South Tyneside. The **South Tyneside Vision 2023-43** (**A place where people live healthy, happy and fulfilled lives**) sets out the shared long-term ambitions agreed with the Councils' partners for the economic, social and environmental wellbeing of South Tyneside. One of the guiding ambitions to deliver this vision is for all people in South Tyneside to 'healthy and well'.

A.8 Meanwhile Borough's **Our Better Health and Wellbeing Strategy 2017-2021** is the go-to plan for tackling the big health and wellbeing issues in South Tyneside. A key priority is the need for safe and healthy places to live, learn and work, as well as a strong focus on mental health.

A.9 In terms of open space provision, a number of studies have been carried out to assess the quantity and quality of open space, sport and recreation provision in South Tyneside. The previous **Open Space Assessment (2015)** outlines the existing provision in the area, its condition, distribution and overall quality. At the time of publishing this assessment is in the process of being

updated with a new assessment due in early 2023. This sets out renewed quantity, access and quality standards for open spaces within the borough.

A.10 Transforming walking and cycling infrastructure in the Borough is also a key focus for South Tyneside. The **Local Cycling and Walking Investment Plan (LCWIP) 2021-2036** was a project requested by Central Government for the development of new sustainable travel infrastructure within Local Authorities. They are a new, strategic approach to identifying cycling and walking improvements required at the local level - and form a vital way to increase the number of trips made on foot or by cycle.



Nature

What does national policy say?

A.11 One of the key targets of the UK government's 25 Year Environment Plan (25YEP) is to "achieve a growing and resilient network of land, water and sea that is richer in plants and wildlife". This includes targets to restore 75% of protected terrestrial sites to favourable condition, as well as creating or restoring 500,000 hectares of wildlife-rich habitat outside this protected network. Another target focuses on improving at least three quarters of the UK's waters to close to their natural state as soon as practicable.

A.12 The subsequent Environment Act (2021) sets the 25YEP on statutory footing. It includes a number of legally binding environmental targets - notably the provision of mandatory 10% Biodiversity Net Gain (BNG) [See reference 42] for development, the mapping and maintenance of a national Nature Recovery Network (NRN) [See reference 43] and the development of future Local Nature Recovery Strategies (LNRS) [See reference 44]. In 2020, the UK government committed to protecting 30% of land for nature conservation by 2030.

A.13 The National Planning Policy Framework (2021) – undergoing revisions at the time of publishing - emphasises that Local Plan policies should set out an overall strategy that makes sufficient provision for the conservation and enhancement of green infrastructure (Paragraph 20). Planning should enhance natural capital at a catchment or landscape scale across local authority boundaries by "establishing ecological networks" which are resilient to current and future tensions (Paragraph 170 & 171). Wild-life rich areas should be identified, mapped and safeguarded to ensure that species and habitats are protected (Paragraph 174).

A.14 The management of agricultural land lies outside of the planning process. However, the new Environmental Land Management Schemes (ELMS) are

currently being rolled out to support the 25YEP. This offers valuable opportunities for improving the existing agricultural landscape to shift toward a more biodiverse, multi-purpose land management approach.

A.15 The UK government's recent Marine Strategy (2019) [See reference 45] assessment confirms that our marine environment is not healthy. It notes that an ocean in crisis is not only bad news for our climate, but also for our local fishing and tourism industries and for our health, wellbeing and prosperity in our local communities. However, there are signs of hope – legislation such as the UK's Environment Act (2021) is providing momentum for efforts to build a nationwide Nature Recovery Network.

A.16 The National Pollinator Strategy 2014-2024, sets out a 10 year plan to protect and increase pollinator abundance and diversity in order to maintain and enhance biodiversity and food production. It identifies actions to optimise opportunities for pollinators as a cohesive landscape scale network. Please follow the link for more information: National Pollinator Strategy 2014-2024

A.17 The national Green Infrastructure Framework includes a standard for urban tree canopy cover to be "increased by an agreed percentage based on a locally defined baseline and taking into account local needs, opportunities and constraints". Further information on the Green Infrastructure Framework is available via the following link: Green Infrastructure Framework. The England Trees Action Plan 2021-2024 includes an aim of increasing woodland cover to 12% by 2050. Please follow the link for more information: England Trees Action Plan 2021-2024

What does local policy say?

A.18 South Tyneside's adopted Local Development Framework (2007) (available via the following link: <u>Local Development Framework</u>) outlines a number of policies relating to biodiversity as follows:

■ Policy EA1 – Local Character and Distinctiveness

- Policy EA2 The Coastal Zone
- Policy EA3 Biodiversity and Geodiversity

A.19 These policies focus on conserving the natural qualities and local character and distinctiveness of the landscape and coastline. The main focus of the biodiversity policy is to secure and enhance the integrity of designated sites and conservation interests, to ensure that development results in no net loss of biodiversity value of priority habitats and to reduce habitat fragmentation.

A.20 However, the emerging draft Local Plan 2021 - 2039 reflects the current challenges facing the Borough and outlines a number of draft policies relating to the protection and enhancement of local biodiversity and the wider environment, notably (see **Chapter 6** for further guidance on embedding GBI in the emerging Local Plan):

- Policy 11 Protecting water quality
- Policy SP21 Natural environment
- Policy 33 Biodiversity, geodiversity and ecological networks
- Policy 34 Internationally, nationally and locally important sites
- Policy 35 Delivering Biodiversity Net Gain
- Policy 36 Protecting trees, woodland and hedgerows

A.21 South Tyneside's 2020 Wildlife Corridor Review provides an up-to-date evidence base of the wildlife corridor network. Please follow the link for more information: 2020 Wildlife Corridor Review. It forms a response to the Lawton Report (2010), which identified the requirement for 'coherent and resilient ecological networks' in order to support nature recovery and strengthen wildlife sites. Please follow the link for further detail: Lawton Report (2010). The Review updated the database of corridors within South Tyneside using the mapping methods of the Natural England Nature Networks Evidence Handbook and informed recommendations for using the network as a delivery mechanism for emerging policies such as the Nature Recovery Network (NRN), Biodiversity Net Gain (BNG) and Local Nature Recovery Strategies (LNRS). Further

information is available via the following link: <u>Natural England Nature Networks</u> Evidence Handbook.

A.22 NEEP also developed a series of Landscape Action plans – setting out landscape scale projects for delivery between 2016-2028 and beyond. The projects identified within South Tyneside include:

- Tyne to Tees, Shores and Seas (by the SeaScapes Landscape Partnership) Please follow the link for more information: <u>SeaScapes</u> Landscape Partnership
- Discovering the River Don (by the Don Catchment Partnership). Please follow the link for further information: <u>Discovering the River Don</u>
- The Gateshead Nature Network, which contains several wildlife corridors with strategic multifunctional access routes. One of these links to South Tyneside at Hebburn Riverside Park.

A.23 The Durham Biodiversity Action Plan (BAP) (available via the following link: Durham Biodiversity Action Plan (BAP)) outlines a range of objectives for priority habitats and species to safeguard the long-term survival of biodiversity in the area surrounding South Tyneside. Broadly, the BAP identifies the following types of priority habitats [See reference 46] (32 habitats in total) and 74 associated priority species [See reference 47] for targeted protection, appropriate management and enhancement.

A.24 South Tyneside also lies within the North East Community Forest (NECF) and is committed to enhancing woodland and increasing canopy cover guided by a local forest plan. NECF has a goal of increasing canopy cover across the region by 30% by 2050, which is double the national average. Please follow the link for more information: North East Community Forest (NECF)

A.25 Given the close inter-relation between biodiversity health and climate change, several policies related to climate change (see "Climate Change" content in this chapter) also have significant implications for South Tyneside's biodiversity network. These include the impact of flood risk and levels of tree cover for biodiversity.

Place

What does national policy say?

A.26 The 2020 report of the UK's Building Better, Building Beautiful Commission "advocates a radical programme for the greening of our towns and cities, for achieving environmental targets, and for regenerating abandoned places." It notes that the emerging environmental goals – durability, adaptability, biodiversity – are "continuous with the pursuit of beauty." More information is available via the following link: <u>Building Better, Building Beautiful Commission</u>

A.27 The UK's National Design Guide outlines ten characteristics that create a well-designed place. One of these emphasises the importance of the provision of a network of high quality, green open spaces with a variety of landscapes and activities, including play. Please follow the link for further detail: National Design Guide.

A.28 In terms of job creation, a 2021 report on Valuing Nature by the Centre for Ecology and Hydrology (CEH) and Bournemouth University sets out the clear benefits of nature restoration for economic growth and job creation. The research showed that many local businesses rely on having a healthy and attractive local environment. This includes not only tourism, recreation and agriculture, but other businesses such as manufacturing and construction, which require clean water, natural materials and a hazard-free environment. Please follow the link for more information: Valuing Nature

What does local policy say?

A.29 The **South Tyneside Vision 2023-2043**sets out the shared long-term ambitions agreed with the Councils' partners for the economic, social and environmental wellbeing of South Tyneside. Among its strategic objectives, its

priorities include regeneration, better transport, better housing and neighbourhoods and a clean, green environment.

A.30 The South Tyneside Economic Recovery Plan 2020 responds to the economic challenges presented by the Covid-19 pandemic, which sent shockwaves across the northeast. It recognises that the Borough's economy is changing quickly, presenting both challenges and opportunities. It sets out the key economic drivers of the Borough's recovery and a series of interventions to help build the right conditions for future growth - with a major focus on skills, green growth and social inclusivity. Key to this will be fostering an inclusive recovery by boosting the Borough's vibrant communities, cultural assets and places, while tackling barriers to health and wellbeing.

A.31 Several parts of South Tyneside's Local Development Framework highlight the role of GBI in the broader placemaking agenda within several of the key settlements. There is a significant focus on green and blue corridors as part of placemaking. These include:

- The South Shields Town Centre & Waterfront Area Action Plan (AAP).
- The Central Jarrow Area Action Plan (AAP).
- The Hebburn Town Centre Area Action Plan (AAP).
- The International Advanced Manufacturing Park (IAMP) Area Action Plan (AAP).

Climate Change

What does national policy say?

A.32 The UK's Climate Change Act 2008 (as amended in 2019) sets targets for UK greenhouse gas emission reductions of net zero by 2050. Further information is available via the following link: Climate Change Act 2008 (as amended in 2019) The government's 25 Year Environment Plan (25YEP) includes a strong focus on protecting and improving the environment in order to

tackle climate change. Please follow the link for more information: <u>25 Year Environment Plan.</u>

A.33 The UK Government has announced it will invest significantly in tree planting and peatland restoration in England. The country's independent Climate Change Committee recommends increasing woodland cover in the UK from 13% to a minimum of 17% by 2050, and ideally, to 19% to ensure the country achieves net zero carbon emissions. Please follow the link for further detail: https://www.theccc.org.uk/publication/land-use-policies-for-a-net-zero-uk/

A.34 The Nature Positive 2030 report aims to combat climate change and biodiversity loss through the deployment of nature-based solutions for climate change mitigation - notably by restoring peatlands and planting native trees. The Nature Positive 2030 report is available via the following link: Nature Positive 2030.

A.35 The country's National Planning Policy Framework (NPPF) contains as part of its environmental objectives a requirement to mitigate and adapt to climate change. This includes the need to use the planning system to move toward a low carbon economy. Please follow the link for more information: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/att achment data/file/1005759/NPPF July 2021.pdf.

A.36 The NPPF states that the "planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change." To achieve these aims, new development should be planned to ensure appropriate adaptation measures are included (including green infrastructure) and should be designed, located and orientated as to help to reduce greenhouse gas emissions.

What does local policy say?

A.37 The Sustainable South Tyneside Strategy (2020-2025) recognises that "climate change is the defining issue of our time". The Council is committed to

playing a leadership role as a local authority by supporting the reduction in emissions to be carbon neutral by 2030 and implementing coordinated actions that will bring about change - with two interim targets in 2023 and 2025. Please follow the link for more information: <u>Sustainable South Tyneside Strategy (2020-2025)</u>.

A.38 Within 'Sustainable South Tyneside 2020-2025', South Tyneside's Climate Change Action Plan, Theme 4 (Environment and Biodiversity) identifies that South Tyneside currently has tree cover of 10%, but the Borough aims to increase this in order to tackle climate change. The Action Plan includes an objective to plant a minimum of 3,000 trees per year in order to achieve a 12% canopy coverage. Additional objectives which could be co-delivered though this GI Strategy include EB1 (on carbon capture and storage) and EB2 (on habitat management to maximise biodiversity).

A.39 The Council's January 2022 declaration of an urgent need for Ocean Recovery notes that "the health of our ocean is inextricably linked with our climate". It explains that a healthy ocean is fundamental in regulating the global climate system and is an essential ally in our fight against climate change. The ocean absorbs more than 90% of the excess heat in the climate system as well as absorbing around 20% of annual carbon dioxide (CO2) emissions generated by human activity. This has led to an ocean crisis – and an unhealthy ocean does not absorb or store carbon as effectively as a healthy one, further worsening the impacts of the climate crisis. More information is available via the following link: https://oceanconservationtrust.org/app/uploads/South-Tyneside-Council Motion-for-the-Ocean as-passed-13.01.2022 Motion-only.pdf.

6.23 The declaration requires the Council to consider ocean recovery in all strategic decisions, plans, budgets and approaches to decisions by the Council – considering ocean-based solutions toward a climate resilient future.

Appendix B

Summary of Stakeholder Engagement

Stakeholder engagement strategy

- **B.1** The engagement strategy rested on three main strands of engagement:
 - An online survey
 - An <u>interactive map</u>
 - A key stakeholder 'virtual round table'

The following national organisations took part in the stakeholder engagement process:

- Natural England
- Historic England
- Sustrans
- Marine Management Organisation
- Environment Agency
- British Horse Society
- National Trust
- National Farmers Union
- **B.2** The following local community organisations took part:
 - Whitburn Neighbourhood Forum
 - East Boldon Forum
 - South Tyneside Tree Action Group

- South Tyneside Environmental Protection Group
- RISE
- North East Animal Rights
- Hebburn Litter Pickers
- Temple Park Friends Groups
- **B.3** The following South Tyneside Council officers took part:
 - Senior Ecologist (plus additional members of the Ecology team)
 - Operations manager for Natural Environment Team
 - Senior Tree officer
 - Operation manager for Environmental Protection projects
 - Highways and Infrastructure Manager
 - Public Rights of Way officer
 - Stronger Shores Delivery Manager
 - Senior Transport Planner
 - Public Health Practitioner
 - Senior Planning Policy Officer
 - Operations manager for Spatial Planning team
 - Service Lead for Environmental Sustainability
- **B.4** The following neighbouring Councils took part:
 - Gateshead Council
- **B.5** Three elected members also took part.

Online Survey

B.6 An online survey was open between the 18th October-27th November. It was made available to key stakeholders with an interest in GBI. Stakeholders were asked for their views on:

- How GBI is performing as a whole across South Tyneside
- What are the key challenges GBI needs to address?
- What are the key areas of opportunity?
- What are the barriers to delivering better GBI?

B.7 In total, 23 responses were received to the online survey.

Interactive Map

B.8 A link to the <u>interactive</u> map was sent out along with the online survey, on the same date and to the same stakeholders. The map allowed stakeholders to leave "points" on the map within any area of South Tyneside. Stakeholders were asked to leave points on the map with comments to identify:

- Where in the district there are specific challenges facing the GBI network
- Where participants aware of key opportunities for improving the network or ongoing projects
- Any comments on the relevance of the existing GI corridors from the 2013 strategy

B.9 A total of 35 comments were left on the <u>interactive map</u> (16 GI opportunities, 16 GI challenges and 3 comments on the 2013 GI corridor). East

Key stakeholder 'virtual round table'

B.10 On Thursday 8 December, the team convened a 1.5 hour virtual 'round table', inviting key selected stakeholders (see Appendix B to see those organisations which participated). Other than core project team, there were 12 participants on the day, representing a range of viewpoints.

B.11 The key purpose of the round table was to:

- Gather feedback on our proposed method for updating the 2013 GBI corridors (including the mapping of both 'GBI corridors' and 'GBI Improvement Zones' across the district).
- Gather views on what the GBI Strategy should be used by different stakeholders.
- The round table resulted in a rich and useful discussion which gave further direction to how best to map GBI corridors and deficits in South Tyneside as part of the final methodology.

B.12 A MIRO 'virtual whiteboard' was used to capture conversation and results were shared with participants.

Summary of issues raised by stakeholders

Comments raised within the online survey and interactive map

B.13 Stakeholders were asked in the online survey to comment on how the GBI network in South Tyneside is performing in relation to six key themes:

- Place
- Nature

- People
- Climate Change
- Vision
- Delivery

Theme 1: Place

B.14 Stakeholders were asked about Place. This includes a consideration the underlying geology, landform and hydrology across the area. It also means thinking about how GBI can enhance a sense of place, how it can support regeneration initiatives, how it promotes local heritage and how it fosters economic growth. Key issues raised by respondents were:

- Management of open spaces- managed in isolation, people aren't educated on the management, no direction of management.
- Development on greenfield negatively impacts on GBI.
- There are poor performing areas of GBI which bring a place down over enhancing the place.
- Funding for GBI such as a Heritage Trail is often limited.
- GBI is threatened through development, profitability of a place takes priority over retaining green spaces.
- Environmental impacts- coastal overdevelopment leaves little space for river birds, loss of wetlands/mud-flats, loss of coast impacts on people's mental health/well-being.

Theme 2: Nature

Stakeholders were asked about Nature. This considers the habitats within South Tyneside and species they support, including blue infrastructure. It also considers the connectivity across the GBI network and how this facilitates or impedes the movement of wildlife. Key issues raised by respondents were:

- Very limited blue infrastructure. What blue infrastructure there is, is not utilised due to anti-social behaviour on riversides
- No structure on how GBI facilitates wildlife.
- Habitat management is overlooked financially and other considerations such as neat/tidy takes precedence.
- How can GBI be promoted alongside the building of new homes in some instances on greenbelt/natural habitats.
- Lack of resources to maintain and protect the natural environment.
- Green spaces issue is currently given greater attention than blue infrastructure, which is just as important.
- Not enough focus on aquatic ecology such as fish and risk to invasive species.
- Development threatens key sites for biodiversity and wildlife / Green spaces are being built upon without wider considerations of the ecological and climate emergency.
- Needs of the natural world are secondary to development.
- Impacts on nature from sewage pollution.
- Impact proposed housing allocations have on locally important sites/wildlife corridors

Theme 3: People

B.15 Stakeholders were asked how People use the GBI network, including how accessible nature spaces are. Do they promote physical activity? Do they support mental health and wellbeing? How do they impact air quality? And does the network play a role in addressing health inequalities? Key issues raised by respondents were:

Poor air quality.

- Impact on people's mental health due to reduction in governmental funding.
- Lack of diversity, education and use in GBI.
- Residents are unaware of long-term GBI strategy.
- Unknown impacts of GBI on the local community.
- Absence of links on the bridleway network which hinders habitat creation and physical /mental health.
- Limited resources for the council to provide access to green and open spaces.
- Inaccessible, poor quality GBI areas, which prevents active travel.
- People are not encouraged to use GBI networks.
- Greater need for green spaces within housing which encourages nature.
- Impacts on people from untreated sewage waste.

Theme 4: Climate Change

B.16 Stakeholders were asked to consider both mitigating the causes of Climate Change and adapting to a changing climate. For example, the use of GBI to store carbon and reduce energy demand, as well as the benefits of GBI to reduce the urban heat island affect and for reducing flooding. Key issues raised by respondents were

- Spaces are not being managed to support climate change. Soft flood defences have been removed.
- Concern over tarmac on public rights of way increases surface run-off which leads to flooding and excess water flow in water courses.
- Building on Green Belt- prevents the objective of making all Council activities carbon neutral by 2030.
- Lack of resources prevents progress with tree planting and creation of habitats.

- GBI is not multi-functional, could better mitigate and adapt to climate change.
- More can be done by individuals, organisations, infrastructure and attitudes.
- Too much time is given to this theme, local action will have no impact globally.

Theme 5: Vision

B.17 Stakeholders were asked about the existing Vision for Green Infrastructure in South Tyneside (from the existing 2013 Strategy). The survey asked how appropriate the Vision is today and how it could be improved. Key issues raised by respondents included:

- No mention of the role individuals can play.
- Need to turn the vision into real action in the heart of every community.
- Confusion over what the natural built environment means.
- Some elements are vague, needs more detail.
- Need to engage more with residents and young people.
- Requirements of the National Planning Policy Framework (NPPF) have been overlooked.
- Ocean Recovery Declaration Pledge has been overlooked by South Tyneside Council.

Theme 6: Delivery

B.18 Finally, stakeholders were asked about delivering GBI in South Tyneside, in relation to the primary barriers to deliver and potential delivery mechanisms. Key issues raised by respondents were:

Insufficient prioritisation within policy.

- Inadequate funding sources. Through education people can understand and value their places.
- Inadequate resourcing for ongoing management and maintenance.
- Lack of understanding of the GBI and its benefits, which creates other issues such as prioritisation and funding.
- More pressing priorities.
- Poor coordination between partners due to conflicting pressures.
- Lack of community interest in GBI. Need to engage with local people.
- Insufficient championing of cause from senior leaders.

Comments raise during the key stakeholder 'virtual round table' (8 December)

B.19 At the virtual round table, key points relating to the data sets used in our proposed method were the following:

- Importance of incorporating local data sets (Council Officers offered to provide).
- The value of incorporating data sets on sea level rise (from the EA) and carbon sequestration data sets for a range of habitats beyond trees including soils, seagrass and kelp.
- Sustrans can provide data on the quality of routes on the National Cycle Network (crossings/access restrictions etc).
- Use of data sets relating to flood resilience in 'improvement zones' from the Draft Drainage and Water Management Plan (by Northumbrian Water).
- Should we include a buffer around protected sites? Can the GBI network contribute to expanding them?
- The District's AQMAs may be being revoked, so we may need another way of indicating air quality.

Conservation Areas (particularly those at risk) might be worth including in 'Improvement Zones' – Historic England is looking to be more proactive in these areas, making sure they contribute to the local economy / regeneration, as they tend to be in areas in decline.

B.20 Views on the purpose of the corridors and policy implications included:

- The need to think of different types of corridor e.g. rivers v coast v Green Belt. The implications will be different for each.
- Warning to be conscious of conflicts between GBI functions e.g. opening up access can be problematic for ground-nesting birds.
- Question of "are we trying to protect everything? Or are we trying to preserve?"
- Discussion around ways to categorise different corridors and the need to look at improvement opportunities beyond the corridors.

B.21 Finally, stakeholders had the following further comments to add:

- There is an opportunity to touch on "backland sites" in the district unused/unloved sites that are surrounded by housing and have become defunct. Could we enhance them? (see example of Longtown in Carlisle).
- We need a clear framework for developers bringing forward development / we need to define specific opportunities to flag to developers where possible (albeit noting this is a strategic study).
- We didn't use the last GBI strategy actively as an authority. We need everyone to use it as a tool.
- The Strategic can be used to build the case for funding for climate adaptation/resilience showing how urban greening can play a function.
- Support for a document that makes the case for changes in the urban environment – getting attitude changed toward urban green spaces. Because of funding/maintenance difficulties, we often end up with amenity green space with few GBI functions.

- Community involvement in delivery will be important for a sense of ownership over GBI assets – long term stewardship should be considered early on.
- Stakeholders use the wildlife corridors to respond to applications would be useful to have the data available as shape files.
- We need to push for opportunities for investment/enhancement, not only protecting (this is covered in other designations).

Appendix C

Summary of data sets used

Table C.1: Data List

Dataset	Source	
Neighbouring local authorities and South Tyneside District	Ordnance Survey open source	
Green belt	Acquired from South Tyneside District Council	
People:		
Public Rights of Way	Acquired from South Tyneside District Council	
OS OpenMap Local Functional Sites	Ordnance Survey open source	
National Cycle Network	Available from Sustrans data repository	
OS Greenspace	Ordnance Survey open source	
Accessible Natural Green Space Standards in Towns and Cities	Natural England open source	
Index of Multiple Deprivation (IMD) 2019	Office for National Statistics	
Nature:		
Areas of High Landscape Value	Acquired from South Tyneside District Council	
Watercourses	Ordnance Survey open source	
Special Protection Area	Natural England open source	
Special Area of Conservation	Natural England open source	

Appendix C Summary of data sets used

Dataset	Source	
Sites of Special Scientific Interest	Natural England open source	
National Forest Inventory	Forestry Commission	
Local Wildlife Site	Acquired from South Tyneside District Council	
Local Nature Reserve	Natural England open source	
Wildlife network	Acquired from South Tyneside District Council	
Place:		
Scheduled Monument	Historic England	
Town Centre – HAAP region	Acquired from South Tyneside District Council	
Main district/shopping centre	Acquired from South Tyneside District Council	
Registered Parks and Gardens	Heritage England open source	
Formal park	Acquired from South Tyneside District Council	
Conservation area	Acquired from South Tyneside District Council	
Heritage at risk	Heritage England open source	
Climate Change:		
Risk of surface water flooding	Environmental Agency open source	
Sustainable urban drainage system	Acquired from South Tyneside District Council	
Floodplain Woodland Potential	Environmental Agency	
Riparian Woodland Potential	Environmental Agency	
Flood zone 2	Environmental Agency Flood Risk Assessment	
Flood zone 3	Environmental Agency Flood Risk Assessment	

Appendix C Summary of data sets used

Dataset	Source	
Other layers used within the corridors and improvement zones		
Local geodiversity site	Acquired from South Tyneside District Council	
Bathing waters	Environmental Agency open source	
Air Quality Management Areas	Acquired from South Tyneside District Council	
Rail noise	Department for Environment, Food and Rural Affairs Open source	
Road noise	Department for Environment, Food and Rural Affairs Open source	

Appendix D

Full method for updating GBI corridors and identifying Strategic Projects

Table D.1: Data sets used for mapping GBI corridors and Improvement Zones (IZ)

Layer	Data Sets	Justification
Corridors – Nature Theme	Wildlife Habitat Mapping	2020 mapping of habitat corridors between natural sites in South Tyneside
Corridors – People Theme	Open space / Greenspace	Accessible open space
	Public Rights of Way Network (outside urban areas)	Accessible of road links through wider countryside / between sites
	Common / open access land	Accessible open space
	Bathing Water	Promotes access to blue asset - sea
	National and Local Cycle Network (off-road)	Accessible of road links through wider countryside / between sites
Corridors – Place Theme	Areas of high landscape value	Landscape value can enhance sense of place
	Formal Parks	More formal green assets which reflect sense of place and historic character

Appendix D Full method for updating GBI corridors and identifying Strategic Projects

Layer	Data Sets	Justification
	Registered Parks and Gardens	More formal green assets which reflect sense of place and historic character
	Local Geodiversity Site	Can enhance sense of place and natural character
	Scheduled Monument	Can enhance historic assets
Corridors – Climate Change Theme	SuDS	Provides water storage and water quality benefits, particularly useful in face of climate change
	National Forest Inventory	Carbon storage potential
	Riparian Woodland Potential – floodplain and riparian woodland	Carbon storage potential and reduction in flooding
Improvement Zones	Flood Zone 2 and 3	GBI can be used to reduce flood risk
	Surface Water Flooding	GBI can be used to reduce flood risk
	Road noise	GBI can screen intrusive noise
	Rail noise	GBI can screen intrusive noise
	ANGSt deficiencies – within access buffers for 2 or fewer levels of the hierarchy (which overlap urban areas)	GBI offers accessible open spaces which offer social and wellbeing benefits
	Town Centres	Regeneration focus where GBI can play an important role in reviving high streets and

Appendix D Full method for updating GBI corridors and identifying Strategic Projects

Layer	Data Sets	Justification
		creating thriving hubs at the centre of communities.
	Conservation Areas at Risk // Heritage at risk	GBI has potential to improve setting of historic assets in these areas.
	Index of Multiple Deprivation (2019). Most 10% deprived LSOAs according to the Health Decile	GBI has known health benefits and can address health and wellbeing in areas defined as suffering from health deprivation.

D.1 In some cases, data sets were merged to avoid double counting (for example areas in Flood Zone 3 will also be in Flood Zone 2). Different functions/needs were not "weighted" in terms of priority or importance, but simply overlaid – this is because the aim was to develop deficiency mapping for multiple functions/needs to support the Strategy, rather than to attempt prioritise certain needs over others.

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