

# Green Infrastructure Technical Paper April 2025

## Contents

1. Summary
2. Objectives
3. Methodology
4. Corridor Assessments
5. Trent Strategic Green Infrastructure Corridor
5.2 Sustainable flood water management12
5.3 Biodiversity
5.4 Active travel
5.5 Open space and recreation
5.6 Conclusion
6. Erewash Strategic Green Infrastructure Corridor
6.2 Sustainable flood water management
6.3 Biodiversity
6.4 Active travel
6.5 Open space and recreation
6.6 Conclusion
7. Nutbrook Strategic Green Infrastructure Corridor
7.2 Sustainable flood water management 46
7.3 Biodiversity
7.4 Active travel
7.5 Open space and recreation55
7.6 Conclusion
8. Derwent Strategic Green Infrastructure Corridor 60
8.2 Sustainable flood water management63
8.3 Biodiversity
8.4 Active travel
8.5 Open space and recreation72
8.6 Conclusion
9. Overall Conclusion

## Figures

Figure 1: Greater Nottingham ACS Green Infrastructure	5
Figure 2: Map of all SGI corridor boundaries	9
Figure 3: Map of Trent SGI Corridor boundary	10
Figure 4: Map of Flood Zones	12
Figure 5: Map of Biodiversity assets	15
Figure 6: Map of Active travel network	18
Figure 7: Map of Open space and recreation assets	22
Figure 8: Map of Erewash SGI Corridor boundary	26
Figure 9: Map of Flood zones	29
Figure 10: Map of Biodiversity assets	32
Figure 11: Map of Active travel Network	
Figure 12: Map of Open space and recreation assets	
Figure 13: Map of Nutbrook SGI Corridor boundary	42
Figure 14: Map of Flood zones	46
Figure 15: Map of Biodiversity assets	48
Figure 16: Map of Active travel network	52
Figure 17: Map of Open space and recreation assets	55
Figure 18: Map of Derwent SGI Corridor boundary	60
Figure 19: Map of Flood zones	63
Figure 20: Map of Biodiversity assets	66
Figure 21: Map of Active travel network	69
Figure 22: Map of Open space and recreation assets	72

## 1. Summary

#### 1.1 Purpose of paper

# This Paper supports **Strategic Policy 5: Green Infrastructure** (GI) of the **Erewash Core Strategy Review (CSR)**.

Strategic Green Infrastructure (SGI) Corridors have been designated on the CSR Policies map as follows:

- Trent Strategic Green Infrastructure Corridor
- Erewash Strategic Green Infrastructure Corridor
- Nutbrook Strategic Green Infrastructure Corridor
- Derwent Strategic Green Infrastructure Corridor

This Paper provides technical evidence to justify the identification of a high quality, multifunctional network of green corridors and assets across Erewash extending into neighbouring areas, which supports a growing Borough population and also informs planning decisions on land within the corridors throughout the plan period.

The key purpose of the Paper is to provide clarity in relation to why the green infrastructure corridors have been identified in the CSR, and how the boundaries of each corridor have been determined.

#### 1.2 Green Infrastructure

As set out in Strategic Policy 5, Natural England describes Green Infrastructure as a strategically planned and delivered network comprising the broadest range of high-quality green spaces and other environmental features. It should be secured as a key asset in local strategy and policy, and be fully integrated with other social, environmental and economic policies<sup>1</sup>.

Green infrastructure should be designed and managed as a multifunctional resource capable of delivering those ecological services and quality of life benefits required by the communities it serves and needed to underpin sustainability. Its design and management should also respect and enhance the character and distinctiveness of an area with regard to habitats and landscape types. Green Infrastructure includes established green spaces and new sites and should thread through and surround the built environment and connect the urban area to its wider rural hinterland.

The Strategic Green Infrastructure Corridors designated in the Erewash Core Strategy Review provide multiple natural assets including functional flood plains, land of designated wildlife importance, recreational facilities and recreational route ways. Due to their location adjacent to, and also interconnecting with urban areas, these assets have a high social value, and the capacity for further enhancement.

<sup>&</sup>lt;sup>1</sup> Green Infrastructure Guide 2023, Natural England

#### 1.3 Green infrastructure in Erewash Borough

Erewash benefits from several waterways (active and inactive) running through its towns and countryside. Key rivers, including the Trent, Derwent and Erewash, have bound the Borough to the south, west and east, and have shaped its history – particular in relation to manufacturing and industry. Other important waterways include the Erewash Canal, which runs between Long Eaton and Ilkeston.

Key recreational routes such as the Nutbrook Valley trail, Trent Valley Way and Erewash Valley Trail offer the potential for excellent connectivity. A network of sites of wildlife importance also exist across the Borough. The rivers, canals, and wetlands present within Erewash all play vital roles in offering recreation; boating, angling, informal recreation and helping the Borough's population interact with nature.

#### 1.4 Greater Nottingham Aligned Core Strategies (Adopted 2014)

Strategic Policy 5 has been influenced by **Policy 16 (Green Infrastructure, Parks and Open Space)** of the Greater Nottingham Aligned Core Strategies (Broxtowe, Gedling and Nottingham City). Policy 16 of the GNACS also informed Policy 16 of the same name in the Erewash Core Strategy (Adopted 2014). This policy will be superseded by Strategic Policy 5.

Collectively, the two policies identified the presence of Sub-regionally important Green infrastructure corridors extending outwards from Greater Nottingham across the region, broadly based on strategic waterways. The Strategic Green Infrastructure (SGI) corridors designated as part of the Erewash Core Strategy are based on the strategic GI framework provided by the Greater Nottingham ACS.

Erewash Core Strategy Policy 16 requires that development enhances the SGI network. Links between the network should be promoted to increase access, especially in areas of increased deficit for recreational and non-motorised commuting purposes, and to allow for wildlife migration.

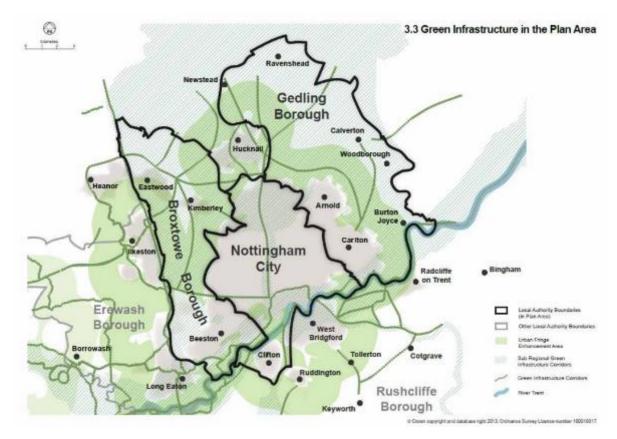


Figure 1: Greater Nottingham Aligned Core Strategies Green Infrastructure

The **Greater Nottingham Blue-Green Infrastructure Strategy** (January 2022) informs the emerging Greater Nottingham Strategic Plan and also forms part of the evidence base for the Erewash Core Strategy Review. This document sets out in more detail assets and networks in Greater Nottingham, and links outwards into the wider region.

The SGI corridors, and this Technical Paper are informed by the Greater Nottingham Blue-Green Infrastructure Strategy. This provides a key evidence base in relation to existing green infrastructure assets and networks, how they function and connect with one another, and how they should be protected, enhanced, and developed further.

The strategy identifies primary and secondary strategic GI networks. This provides important information with regards to the wider linkages between the assets and networks within Erewash and those in neighbouring LPAs, such as Broxtowe. The strategy identifies various 'primary functions' (ecosystem services) provided by green infrastructure assets and networks within the study area.

The Erewash Core Strategy Review has identified four objectives that the designated SGI corridors contribute to. These objectives provide the core purposes of **Strategic Policy 5: Green Infrastructure**. The paper explores each objective in further detail, supporting their relevance to each of the identified GI corridors.

## 2. Objectives

#### 2.1 Sustainable flood water management

The availability of green infrastructure can mitigate some of the impacts of climate change, usefully helping with water management, flood attenuation and species migration. Working with natural flood management (NFM) processes is essential in order to manage flood events sustainably.

#### 2.2 Biodiversity, including natural carbon capture

A strong GI network contributes to maintaining a rich and diverse range of habitats and ecosystems. There has been dramatic decline in biodiversity across the Derbyshire, due to actors like intensive land uses and climate change.<sup>2</sup> It is vital that a joined up network of wildlife assets, such as Local Nature Reserves (LNRs) and Local Wildlife Sites (LWS) is achieved to create resilient habitats and species migration. Strengthening nature corridors and providing more opportunities for positive relationships between people and nature is essential to future conservation and environmental education.

#### 2.3 Active travel

High quality routes, including multi-user trails, footpaths and cycleways, encourage people to walk and cycle more, thereby providing an alternative to private car journeys. Safe and direct routes should be provided, allowing for regular travel to and from homes, schools and places of employment. Engagement with more active lifestyles can have profound positive impacts on physical and mental health.

#### 2.4 Open space and recreation

Green and open spaces are an important part of the social aspect of green infrastructure. Good access to public open spaces, including public parks, play areas and local nature reserves is essential for human wellbeing, providing spaces for relaxation and exercise. Good access to countryside and quality green environments can have significant positive impacts on physical and mental health. A wide range of leisure opportunities is also important, including sports facilities, water recreation and eating and drinking establishments.

<sup>&</sup>lt;sup>2</sup> State of Nature Report gives Stark warning (2022) Derbyshire Wildlife Trust

## 3. Methodology

#### 3.1 Audit of existing green infrastructure

The central focus of the methodology is auditing existing conditions and assets within each of the four identified corridors.

The evidence base is derived from the following sources:

- Mapping of existing GI assets across the Borough
- Greater Nottingham Blue-Green Infrastructure Strategy 2022
  - Erewash Focal Area Assessments and Map Book
- Natural England National Character Areas
- The Landscape Character of Derbyshire
- Lowland Biodiversity Action Plan (2011-2020)
- Erewash Open Space Needs Assessment 2022
- Trent Rivers Trust

#### 3.2 GIS Mapping

The paper presents an audit of assets within GI corridors to support their inclusion in the plan. A map has been produced for each theme to represent key features and assets in the corridors that relate to the four central objectives:

- Sustainable flood water management
- Biodiversity, including natural carbon capture
- Active travel
- Open space and recreation

The central aspect of the methodology is the use of GIS mapping, which is used to identify existing assets and networks within each corridor. Key assets and networks identified as relevant to each of the four objectives are presented as maps at the start of each chapter.

GIS mapping allows for the overlaying of layers, to display links between the objectives and the multifunctionality of the corridors. Key linkages between the wider BGI network identified in the Greater Nottingham Blue-Green Infrastructure strategy have also been identified.

Evidence is collated in a commentary and assessment for each corridor, which identifies the main limitations that have determined the extent of the corridors, and assesses the conditions within and outside the corridor in relation to each of the four objectives. Each corridor assessment concludes by justifying the relationship between the corridor boundaries and each of the four objectives.

All mapping is produced and presented under 2025 Ordnance Survey AC0000849953.

## 4. Corridor Assessments

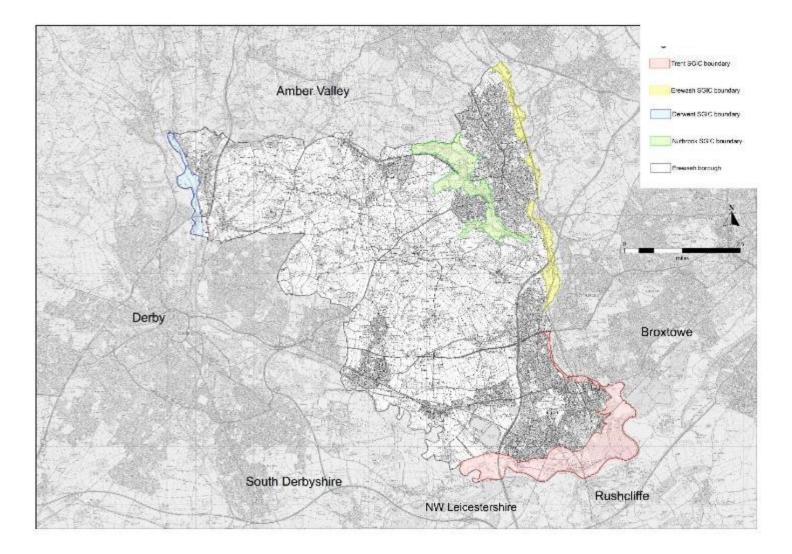


Figure 2: Map of all SGI corridor boundaries

## 5. Trent Strategic Green Infrastructure Corridor

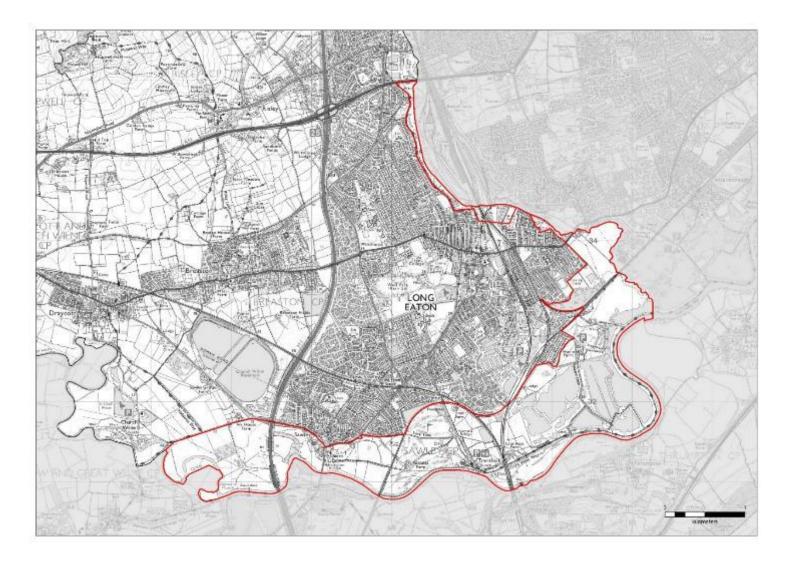


Figure 3: Map of Trent SGI Corridor boundary

#### 5.1. Scope and extent of corridor

The Trent Strategic Green Infrastructure Corridor lies within the south of Erewash Borough. From the west, the corridor begins at land adjacent to Derwent Mouth, where the River Derwent meets the River Trent. It follows the River Trent and surrounding washlands eastwards, up to the edge of the Attenborough Nature Reserve. From here it follows the River Erewash northwards towards Sandiacre, and up to the A52.

Major assets within neighbouring authorities are of relevance to the corridor, particularly those related to biodiversity and recreation. The scope of the corridor ensures interconnectivity between assets in Derbyshire and Nottinghamshire.

The extent of the corridor is limited by administrative and physical features. These limitations have determined the boundaries of the Trent SGI Corridor.

The corridor extends up to the Rivers Trent and Erewash, which sit on the Erewash Borough boundary with the following local authorities:

- Broxtowe (to the east)
- Rushcliffe (to the south)
- South Derbyshire (to the south-west)
- North-West Leicestershire (to the south)

From the Borough boundary, the corridor includes land up to the settlements of Sawley and Long Eaton. The corridor boundary stretches around the Long Eaton urban area, until it reaches the A52 to the north east of Long Eaton. To the south-west, the corridor extends up to Wilne Road.

#### 5.1.2 Key characteristics

The Trent SGI Corridor falls within part of the Trent Valley Washland Character Area and sits entirely within the Riverside Meadows landscape character type (Derbyshire County Council). It is covered by the LBAP: Trent and Dove Valleys Action Area.

The main feature is the River Trent, a highly accessible and major navigable river, as well as the associated wetland and floodplain environment. Various waterbodies are distributed throughout the corridor, including lakes, many of which are former gravel extraction sites. Ponds are scattered throughout the corridor, mainly fishing ponds. A diverse range of notable and priority wildlife species can be found in the area, including water vole and otters. The corridor is part of a significant wider ecological corridor, which flows through the Attenborough Nature Reserve (a National Nature Reserve) in Broxtowe.

The landscape is experiencing significant change, due to increased habitat fragmentation<sup>3</sup>. It is vital that sustainable management of flood areas, and creation of multifunctional green infrastructure are carried out to ensure its resilience and maximise its vitality.

#### 5.1.3 Land uses and key developments

A mix of land uses are established across the extent of the corridor, including water recreation, golf courses and farmland.

Key development includes the Spring Lakes Watersports Centre, which is a popular site spanning a group of large former gravel pits. It hosts a range of water related recreational activities and sports.

Trent Lock is also an important centre for leisure and tourism in the corridor. Several waterside pubs and tea rooms can be found here, at the River Trent's junction with the Erewash Canal.

<sup>&</sup>lt;sup>3</sup> *Climate change and wetlands WWT*. Available at: https://www.wwt.org.uk/our-work/threats-to-wetlands/climate-change-and-wetlands.

### 5.2 Sustainable flood water management

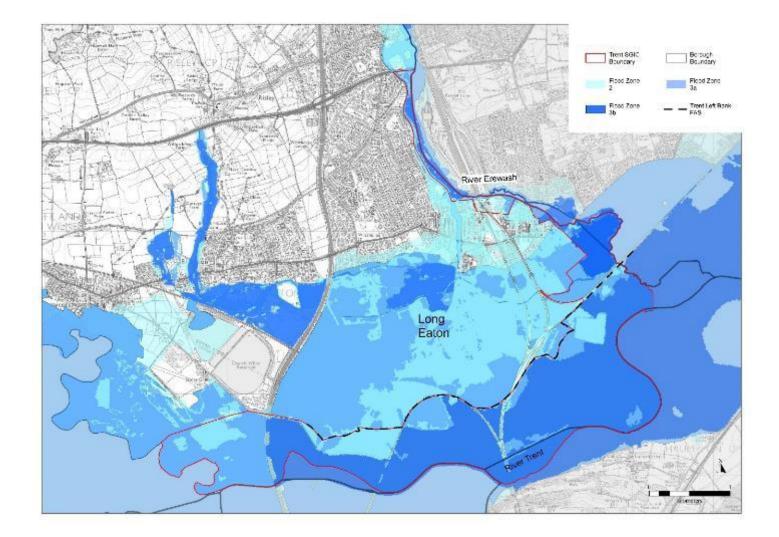


Figure 4: Map of Flood Zones

#### 5.2.1 Summary of conditions

Figure 4 shows the distribution of flood zones and flood defences across the Trent SGI corridor.

#### **Flood Zones**

The Trent Strategic GI corridor falls within the Lower Trent and Erewash sub-Catchment area. The main sources of flood risk include the River Trent, as well as the River Erewash. As shown in Figure 4, the corridor is sited entirely within flood zones 2 and 3, and consequently is at a heightened risk of flooding. (Greater Nottingham SFRA 2016).

Approximately 90% of the corridor falls within Flood Zone 3b. Areas within FZ3b, shown in dark blue, have the highest probability of flooding (annual probability 3.3%<sup>4</sup>) and may be termed functional floodplain. This refers to the function of the area being allowed to flood, in order to promote the natural management of flood waters in flood events.

As a result of flood zone coverage, the types and scope of development that would be permitted within the corridor area are significantly limited. Only water compatible uses<sup>5</sup> may be permitted in these areas, including:

- Amenity open space
- Water-based recreation (excluding accommodation facilities)
- Statutory biodiversity and nature conservation sites
- Outdoor sports

#### Flood management schemes

#### 2012 River Trent Left Bank Flood Alleviation Scheme (Environment Agency)

River Trent-wide scheme, that amongst wider objectives helps protect Long Eaton and Sawley from flooding. The scheme is based around raised flood embankments and largely follows the northern boundary of the corridor.

#### Trent Gateway 2018-ongoing<sup>6</sup>

The Trent Gateway project and masterplan, aims to create an improved river corridor for fish, wildlife and people, by making improvements to fish passages and increase habitat connectivity.

Long term objectives for the project include the creation of wetland habitats along the River Erewash within the Trent GI corridor, as well as floodplain reconnection. Short term opportunities include multi-user trail and towpath enhancements, tree planting, recreation improvements, and river education programmes at Trent Lock. The Trent is an important coarse fishing river, and these improvements will be a significant boost to tourism and the local economy by attracting anglers.

#### 5.2.2 Relationship between data and proposed corridor boundary

The land within the Trent SGI Corridor has been designated as such because it performs an essential function as functional floodplain (FZ3b), which largely extends up to the boundary

<sup>&</sup>lt;sup>4</sup> Flood risk and coastal change (2022) GOV.UK.

<sup>&</sup>lt;sup>5</sup> (2012) *Technical Guidance to the National Planning Policy Framework*. rep. Department for Communities and Local Government.

<sup>&</sup>lt;sup>6</sup> (2020) Trent Gateway creating a thriving river corridor for fish, wildlife and people. Environment Agency

with the Long Eaton urban area from the effects of flooding. This provides protection from flooding to Long Eaton and Sawley.

Land within areas of lower flood risk have been included as part of the corridor in respect to their contribution to the key objectives set out in Strategic Policy 5. Scope for optimising the high recreational value of the area is supported by the holistic projects such as the Trent Gateway.

Erewash Borough Council will seek to build a positive working relationship with the Trent Rivers Trust going forward to capitalise on schemes and initiatives which can further the purposes of GI throughout this corridor, especially in regard to maintaining key water storage areas.

## 5.3 Biodiversity



Figure 5: Map of biodiversity assets

#### 5.3.1 Summary of conditions

Figure 4 shows the distribution of sites of designated wildlife importance in the Trent SGI corridor. The following tables set out what these assets contain in more detail.

## Statutory assets

Local Nature Reserves

Name	Size	Habitat type / Ecological features
Trent Meadows	11.1ha	<ul> <li>Grassland, heathland and scrub</li> </ul>
Manor Farm	4ha	Limited data

## Non-statutory assets

Local Wildlife Sites

Name	Size	Habitat type / Ecological features
Erewash Canal	26.5ha	<ul><li>Standing open water</li><li>DRDB species</li></ul>
Attenborough West Gravel Pits	15.4ha	<ul> <li>Swamp and scrubland</li> <li>Habitat mosaic</li> <li>Bird assemblage</li> <li>Water vole population</li> </ul>
Sawley Carr	7.51ha	<ul><li>Lowland swamp, wet woodland</li><li>Invertebrate assemblage</li></ul>
Lock Lane Nature Reserve	3.5ha	<ul><li>Unimproved neutral grassland</li><li>Invertebrate and bird assemblages</li></ul>
Trent Lock Marsh	1.6ha	<ul> <li>Pond and wetland habitat, Wet woodland, Lowland swamp,</li> </ul>
Narrow Bridge Fish Pond	1.8ha	DRDB plant species
Poplars Fish Pond	1.8ha	Open water, swamp and scrub
Sheetshores Junction Pond	0.3ha	Standing open water
Attenborough Pastures	25.1ha	<ul> <li>Floodplain grazing pastures, vegetation, open water, and scrub</li> <li>Water vole population</li> <li>Bird assemblage</li> </ul>
River Trent North Bank	3.8ha	<ul> <li>Semi improved neutral grassland</li> <li>DRDB plant species</li> </ul>
Toton Sidings Pond	2.4ha	<ul><li>Open water and grassland</li><li>Broad leaved wet woodland</li></ul>
Toton Grassland	1.2ha	<ul><li>Grassland</li><li>Water vole population</li></ul>
River Erewash floodplain	5.1ha	<ul><li>Flowing water and scrub</li><li>Lowland swamp, water vole population</li></ul>

Name	Size	Habitat type / Ecological features
Lock Lane Scrub	1ha	Scrub, woodland and grassland
Nottingham Road Carr	0.9ha	Wet woodland

#### Potential Wildlife Sites

Name	Size	Habitat type / Ecological features
Trent Meadows (extension)	22.5ha	Limited data
Trent Lock Margins	4.3ha	Marshy grassland
Cranfleet Farm Flood Banks	0.8ha	<ul> <li>Unimproved neutral grassland</li> </ul>

The Trent Strategic GI corridor contains 2 Local Nature Reserves and 15 Local Wildlife Sites. These assets are host to important and increasingly rarer wetland habitats. These habitats make vital contributions to biodiversity and have significant potential to store carbon.

Trent Meadows LNR contains lowland heathland, of which only about 20% remains in England.<sup>7</sup> Other habitats including wet, broadleaved woodland throughout the corridor on LWS. Wet woodland can assist in natural flood management (NFM) and water runoff, as well a nutrient filtering, especially when situated on floodplains as they are in the Trent GI corridor. They also have potential to sequester significant volumes of carbon. Neutral grassland areas are also present and have the capacity for carbon and water storage <sup>8</sup>.

It is difficult to provide or assess information about habitat quality, age and the specific species found in different parts of the Corridor, due to a relative lack of up-to-date data and information. All LNRs within the corridor are however in local authority ownership and are effectively and positively managed. Sensitive ecological sites should be managed appropriately, and public footpath and cycling routes should be carefully directed away from, rather than encroaching.

The quantity and quality of habitats is potentially highly variable across the corridor. Potential for carbon storage and sequestration is also likely to be highly variable throughout the corridor. Available data and information are limited, and the contribution of habitats is not

 <sup>&</sup>lt;sup>7</sup> (2021) Carbon storage and sequestration by habitat: a review of the evidence. rep. Natural England.
 <sup>8</sup> (2018) The natural capital of floodplains: management, protection and restoration to deliver greater benefit. rep. Valuing Nature.

fully known. Further research and opportunities for appropriate restoration and improvement of habitats should be explored by qualified bodies.

#### 5.3.2 Relationship between data and proposed corridor boundary

The Trent SGI corridor boundaries are aligned with the focal areas identified in the Erewash Focal Area Assessments and Map Books, which are supplementary documents accompanying the Greater Nottingham Blue-Green Infrastructure Strategy. These focal areas identify Local Wildlife Sites and Local Nature Reserves, and key ecological corridors.

The diverse network of biodiversity assets is connected by high performing wildlife corridors: the Trent and Erewash rivers, which support a wider ecological network, including Attenborough Nature Reserve and the Trent and Dove Valleys. The network of rights of way across the corridor may also provide some opportunities for species movement and habitat connectivity, as well as meeting points between people and nature.

The need for a more connected biodiversity network was identified in the **Lowland Derbyshire Biodiversity Action Plan** (2011-2020), and more importantly, the emerging **Derbyshire Local Nature Recovery Strategy** which has been drafted. This is critical in order to provide resilient spaces for nature and address the biodiversity crisis<sup>9</sup>.

The Local Nature Recovery Strategy (LNRS) will develop a strategic and spatial strategy, to explore and act on opportunities to make the networks more connected. Erewash Borough Council maintains a strong working relationship with this programme and those who are producing the LNRS. The Council will seek to build positive relationships with other management and improvement projects, including the Trent Gateway project.

<sup>&</sup>lt;sup>9</sup> The Lawton Review, 2010.

#### 5.4 Active travel

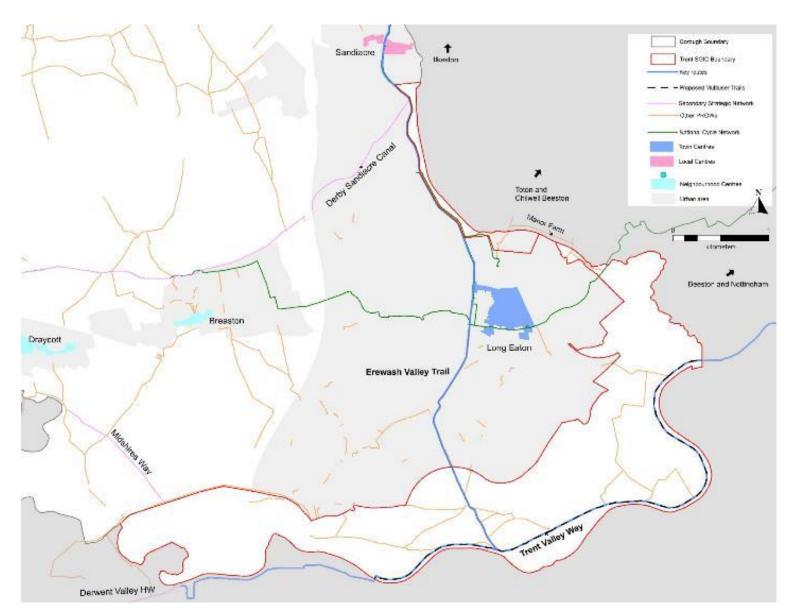


Figure 6: Map of Active travel network

#### 5.4.1 Summary of conditions

Figure 6 shows the network of multiuser trails, cycleways and footpaths throughout the Trent SGI corridor. It shows directions to locations outside the corridor accessible via active travel means.

#### Strategic Policy 4: Transport (Proposed multi-user trails)

#### **Trent Valley Way**

The Trent Valley Way (TVW) is a long-distance path that runs through Staffordshire, Derbyshire Nottinghamshire and Lincolnshire. This is a strategic recreational route in the Greater Nottingham region. A section of the TVW runs through the Trent SGI corridor alongside the River Trent, although one section runs along the Cranfleet Canal.

It provides direct access to various destinations, including Attenborough Nature Reserve, Beeston and Nottingham. The TVW continues into South Derbyshire to the west, towards Derwent Mouth, where the Derwent Valley Heritage Way (secondary strategic network) can be accessed.

Strategic Policy 4 proposes to upgrade this route to multi-user (walking, cycling and horseriding standards). This would effectively extend the Big Track from Attenborough Nature Reserve to Trent Lock and thus connect to the Erewash Valley Trail along Erewash Canal. Other key assets within the Trent GI corridor are accessible along the Trent Valley Way, including Spring Lakes Watersports Centre and Trent Meadows, with links via public footpaths and other rights of way.

#### Key trails

#### **Erewash Valley Trail**

The Erewash Valley Trail (EVT) is a circular walking and cycling trail that runs northwards through the centre of the Trent SGI corridor. Canal towpaths along the trail are well maintained, allowing for easy accessibility for walkers and cyclists. The EVT follows the Erewash Canal and connects to the Trent Valley Way at Trent Lock. The trail provides excellent access to Long Eaton town centre.

The EVT rejoins the Trent SGI corridor in the section north east of Long Eaton, where continuing northwards would provide access to Sandiacre and Ilkeston. In this section, there are also trails and footbridges linking the corridor with Toton (Broxtowe), including Toton Fields Nature Reserve and Manor Farm open spaces, which provide a variety of trails. The former Derby and Sandiacre Canal (Multi-user Trail) can also be accessed from this section of the corridor. The Erewash Valley Trail continues northwards towards Sandiacre and Ilkeston.

#### National cycle network

#### NCN Route 67 (Nutbrook Trail)

National Route 67, also known as the Nutbrook Trail is a cycling and walking trail that runs along the Erewash Canal, from central Long Eaton to Ilkeston, and eventually to Heanor in Amber Valley.

#### National Route 6

National Cycling Route 6 runs across the Long Eaton urban area and passes through a small part of the Corridor along Manor Farm LNR. This connects the Corridor to Chilwell and Beeston (both in Broxtowe) to the east, and Breaston to the west. Further afield, the route extends out to Borrowash.

#### 5.4.2 Relationship between data and proposed corridor boundary

Opportunities exist throughout the Trent SGI corridor for people to engage in active travel. Two strategic recreational routes; the Trent Valley Way and Erewash Valley Trail, provide direct access routes to locations in Erewash, and outside of the Borough.

The northern section of the corridor is served especially well by national cycle routes, including NCN route 6 and the Nutbrook Trail, which provide good east-west and northern links respectively. These are further supported by the former Derby and Sandiacre Canal, which links these two routes.

To the south-west along Wilne Road, the corridor maintains links to the wider primary and secondary strategic networks, including the Midshires Way (via Wilne Road) and the Derwent Valley Heritage Way (via the Trent Valley Way).

A strong degree of interconnectivity between walking and cycling routes inside and outside the corridor ensure that key population areas, such as Long Eaton, Sandiacre, Ilkeston, Breaston, Beeston and Nottingham are all accessible via active and non-motorised means of travel. Identified routes ensure the corridor promotes a network of joined-up assets.

These routes are versatile and lend themselves to both recreational and active travel purposes, ensuring their high social value. The availability of active travel routes would make significant contributions to encouraging non-motorised travel, and engagement with more active travel lifestyles.

The Erewash Valley Trail allows for good connectivity and permeability between the Trent and Erewash SGI corridors, which sit in proximity with another, separated by the A52.

### 5.5 Open space and recreation

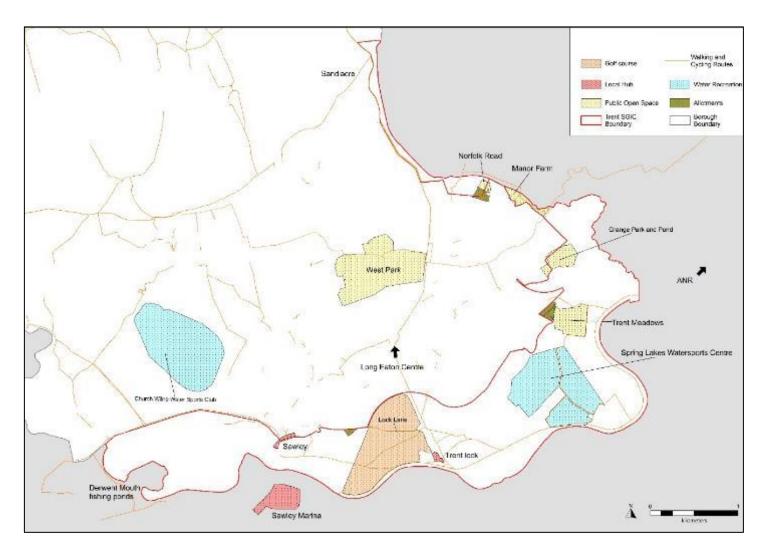


Figure 7: Map of Open space and recreational assets

#### 5.5.1 Summary of conditions

Figure 7 shows the distribution of public open spaces and other recreational opportunities in relation to the Trent SGI corridor.

A diverse array of recreational and leisure activities are available within the Trent SGI Corridor. Much of which, relate to open space and water based activities. The River Trent and the River Erewash, as well as the Erewash Canal, provide excellent recreational opportunities, including boating, kayaking and angling. Activities such as recreational angling are highly popular along the River Trent, and proposed schemes, such as the Trent Gateway project, seek to optimise this.

Several sailing and water sports clubs exist throughout the corridor, encouraging responsible recreational and social use of the corridor.

## Public open spaces

Name	Features	Accessibility / Connectivity
Trent Meadows (LNR)	Public park with play space provision.	Good access to Trent Valley Way. Access from country lanes (Meadow Lane) from Long Eaton urban area.
Meadow Lane allotments	Allotments for the local community, encouraging socialisation and local food production.	Good access from Meadow Lane, adjacent to Trent Meadows. Good access from Meadow Lane to Long Eaton town centre.
Norfolk Road Recreation Ground	Public park with play area.	Access to this area from the corridor is limited.
Norfolk Community Garden Allotments	Allotments adjacent to Norfolk Park.	Access to this area from the corridor is limited.
Lock Lane Allotments	Allotments adjacent to Lock Lane in Sawley.	Directly south of Lock Lane supporting Sawley and south Long Eaton local communities.
Manor Farm (LNR)	Forms part of the Manor Farm open space which straddles the Erewash and Broxtowe Borough boundary. It is an extensive open space, which the River Erewash flows through.	There are good paths across the space, and it supported by walking and cycling routes to and from. Paths into neighbouring Broxtowe, connecting the Nutbrook Trail and Erewash Valley Trail.
Grange Park and Pond	Playing fields and pitches. Grange Pond (fishing pond) is located adjacent to the east.	Access to this area from the corridor is very limited.

Sensitive and appropriate management of open spaces should be promoted. This will help balance a network of strong walking and cycling routes, with the requirements of biodiversity and wildlife restoration, and other strategic priorities.

#### Leisure facilities

Name	Features	Accessibility / Connectivity
Spring Lakes Water Sports and Leisure Centre	High quality, popular recreational asset regional importance. Caters for a variety of water-based activities on former gravel ponds.	Excellent access to the centre via walking and cycling, along country lanes (Meadow Lane and Pasture Lane), and from the Trent Valley Way.
Trent Lock	Major waterway junction with a collection of pubs, tearooms, small industrial businesses and water sports storage. There is a public large car park central to the facilities found at Trent Lock.	Excellent access from the Erewash Valley Trail.
Trent Lock Golf and Country Club	Large golf course adjacent to Trent Lock and Erewash canal.	Good access from Lock Lane and Erewash Valley Trail.

The corridor is well connected to other leisure facilities outside the corridor:

- Sawley Village (Conservation Area)
- Sawley Lock and Marina (North-West Leicestershire)
- Derwent Mouth fishing ponds

#### 5.5.2 Relationship between data and proposed corridor boundary

The Trent SGI corridor provides access to an extensive area of open countryside, which promotes a range of recreational activities and provides excellent opportunities to enjoy a range of waterside, and other natural environments. Public rights of way across open fields also provide restricted access to greenspace or countryside.

A healthy range of formal public open spaces are also accessible throughout the corridor, including allotments. This ensures that the general Long Eaton urban area population and local communities are supported with good nearby opportunities to relax, exercise and socialise.

The corridor contains recreational assets of regional importance, including Spring Lakes. Leisure facilities contribute significantly to the local economy, and their vitality is strengthened by a central location in the corridor in the vicinity of key recreational routes. Local hubs such as Trent Lock provide a boost to the local economy, and promote an attractive, waterside environment for pub fare. Most open space is concentrated in the north eastern section of corridor, although Sawley and south Long Eaton residents are served by allotments on Lock Lane. This provides space for sustainable food production, and a range of wildlife shelters. This develops community cohesion and helps to boost local forms of biodiversity.

## 5.6 Conclusion

The proposed Trent SGI corridor forms an important part of the sub-regional green infrastructure network. This is largely due to its relationship with the River Trent, which provides a significant wildlife corridor, and an abundance of recreational opportunities.

The land designated as a corridor sits between the River Trent and the Long Eaton urban area. This area provides excellent access to the open countryside and important waterways. This also provides an extensive area across which there is scope to explore and maintain a range of recreational opportunities, delivering health, social and cultural benefits.

The corridor is in a healthy position to make valuable contributions to the four key objectives. The land is primarily functional floodplain (FZ3b), and therefore performs a vital function in NFM, and is largely undevelopable except for water compatible uses. The boundaries of the GI corridor ensure functional floodplains, and other important flood storage areas around the Long Eaton urban area, are maintained and allowed to continue functioning effectively.

The Trent SGI also promotes the protection of protected and supported species across the network. The River Trent constitutes an important wildlife corridor that connects a range of important habitats, including wet woodland, with many of these areas having strong capacity for carbon storage. There is capacity for habitat improvement, expansion and creation. The corridor provides ample opportunities to build positive relationships between people and nature.

Inclusion of the Trent SGI corridor as part of the CSR, allows for improved protection of identified assets within the area, and improved integration with related Core Strategy policies. It also allows for improved integration with external partnerships to deliver improved conditions across the corridor.

## 6. Erewash Strategic Green Infrastructure Corridor

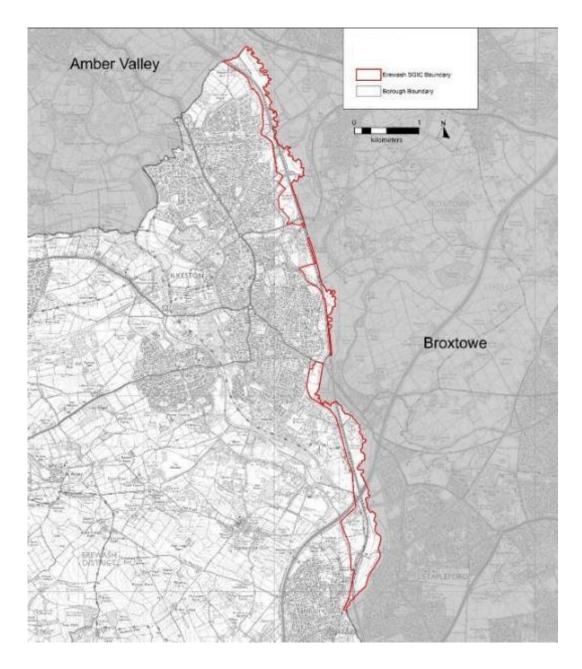


Figure 8: Map of Erewash SGI Corridor boundary

#### 6.1 Scope and extent of corridor

The Erewash SGI corridor is located along the eastern edge of Erewash Borough, directly west of Ilkeston, and sitting between the River Erewash and the Erewash Canal. To the south from the edge of Sandiacre, the corridor follows the River Erewash, which for the most part constitutes the boundary between Erewash and Broxtowe, extending northwards towards Cotmanay in Ilkeston.

Assets within neighbouring authorities are of relevance to the wider BGI network. The scope of the corridor ensures interconnectivity between assets in Derbyshire and Nottinghamshire. The extent of the corridor is limited however by administrative and physical features. These limitations have determined the boundaries of the Erewash SGI Corridor.

The eastern boundary with the corridor stretches along the River Erewash, which forms the Borough boundary with Broxtowe. To the north, a small part of the corridor sits on the Borough boundary with Amber Valley.

To the west, the corridor stretches along the eastern fringe of the Ilkeston urban area. As a result, the Erewash SGI corridor is fragmented, as the Ilkeston urban area isolates parts of the corridor. The contribution of these areas to the local and wider economy, however, necessitates this fragmentation. The Erewash Canal provides a continuous asset of BGI along the western edge of the corridor, extending northwards from the Trent SGI corridor.

#### 6.1.2 Key Characteristics

The corridor forms part of the Nottinghamshire, Derbyshire and Yorkshire Coalfield landscape character area, and more specifically the Riverside Meadow landscape type (Derbyshire County Council).

Its main feature is the River Erewash, and associated wetland habitats on the floodplains, including reedbeds, fen, wet woodland and marsh (LBAP: Erewash Valley Area Action Plan). The Erewash Canal also adds to the watery character of the corridor. A diverse range of notable and priority species are found in the area, including water vole and otters.

The landscape is experiencing significant change, due to increased habitat fragmentation<sup>10</sup>. It is vital that sustainable management of flood areas, and creation of multifunctional green infrastructure is carried out to ensure its continued resilience and vitality.

#### 6.1.3 Main land uses and key developments

Due to the high flood risk associated with the River Erewash, the diversity of land uses within the corridor are generally limited. Farmland, public open spaces and hiking routes make up the majority of land uses evident within the corridor. Land within the corridor is mainly designated as Green Belt.

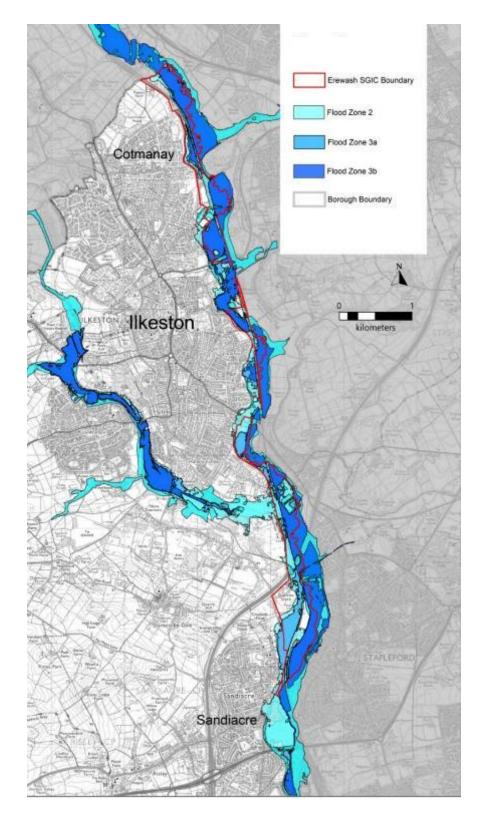
<sup>&</sup>lt;sup>10</sup> *Climate change and wetlands WWT*. Available at: https://www.wwt.org.uk/our-work/threats-to-wetlands/climate-change-and-wetlands.

The fragmented nature of the corridor along the built-up fringe results that the corridor has good interaction with the Ilkeston urban area. Key developments that serve to break up the corridor include:

- Gallows Inn Industrial Estate (Strategic Employment Site Strategic policy 2)
- Ilkeston Junction industrial estate
- The Rope Walk industrial estate
- Waterside Retail Park
- Land adjacent to Ilkeston Town Football Club and Industrial Estate (including depot)

#### Strategic Policy 2.1 Stanton North

Stanton Strategic Employment Allocation is directly adjacent to the west of the corridor. This policy allocates 80ha of land for employment development, with approximately 55ha of this directly for employment facilities. Provisions are made in policy for the development to contribute to GI integration as well as flood management, biodiversity and active travel routes and open spaces.



## 6.2 Sustainable flood water management

Figure 9: Map of Flood zones

#### 6.2.1 Summary of conditions

Figure 9 shows the distribution of flood zones across the Erewash SGI corridor, from the Greater Nottingham 2016 Strategic Flood Risk Assessment (AECOM).

#### **Flood Zones**

The Erewash Strategic GI corridor falls within the Lower Trent and Erewash sub-Catchment area, with the main source of potential flooding being the River Erewash. The corridor is shown to sit entirely within Flood zones 2 and 3.

Approximately 80% of the corridor is within Flood Zone 3b. These areas are intended to provide functional floodplain, which refers to the function of the area being allowed to flood, in order to promote natural management of flood waters in flood events.

As a result of these conditions, the types and scope of development that would be permitted within the corridor area are significantly limited. Only water compatible uses<sup>11</sup> may be permitted in these areas, including:

- Amenity open space
- Water-based recreation (excluding accommodation facilities)
- Statutory biodiversity and nature conservation sites
- Outdoor sports

#### Flood defence and management schemes

The presence of existing flood defences and management schemes is limited. Raised embankments exist in some parts of the corridor along the River Erewash.

Existing partnerships promote positive flood management. **The Lower Trent and Erewash Catchment Partnership** seeks to manage the catchment area sustainably and effectively. This sets out Flood Risk Management objectives for the catchment area including:

- Promotion of SUDS
- Promotion of Natural Flood Management (NFM) Schemes
- Sustainable management of floodplains

It also seeks to address biodiversity (fish migration), as well as water quality and community engagement, whilst promoting effective joint working between partners.

<sup>&</sup>lt;sup>11</sup> (2012) *Technical Guidance to the National Planning Policy Framework*. rep. Department for Communities and Local Government .

#### 6.2.2 Relationship between data and proposed corridor boundary

The land within the Erewash SGI Corridor has been designated as such because it performs an essential function as functional floodplain (FZ3b), which protects much of the Ilkeston urban area from the effects of flooding.

It is critical therefore that the area within the corridor remains largely open and free of obstruction, in order for it to function as a sustainable and effective floodplain that can respond to the challenges of climate change and increased flood risk to protect a large proportion of Ilkeston's population from the effects of flooding.

Development opportunities in the corridor are severely limited. The Lower Trent and Erewash Catchment Partnership will play a key role in ensuring the effective, holistic management of the Erewash SGI corridor in particular, with regard to flood management, biodiversity and carbon capture, active travel and recreation.

Areas not highlighted in Figure 9 are recognised to provide some contribution to natural drainage and flood management.

## 6.3 Biodiversity

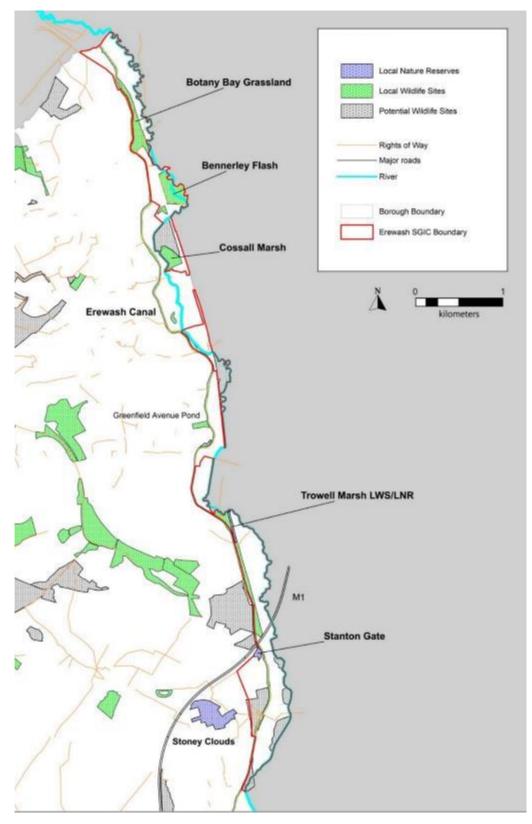


Figure 10: Map of biodiversity assets

#### 6.3.1 Summary of conditions

Figure 10 shows the distribution of sites of designated wildlife importance across the Erewash SGI corridor. The following tables set out what these assets contain in more detail.

#### Statutory assets

#### Local Nature Reserves

Name	Size	Habitat type/ Ecological features
Stanton Gate	0.7ha	Unimproved neutral grassland, lowland swamp and scrub – woodland
Trowell Marsh (LNR)	0.86ha	Wet grassland and lowland swamp

#### Non-Statutory

#### Local Wildlife Sites

Name	Size	Habitat type / Ecological features
Erewash Canal	26.4ha	Protected DRDB Species
Sandiacre Marsh	0.2ha	Water-margin vegetation, lowland swamp, secondary broadleaved wet woodland and scrub
Trowell Marsh (LWS)	2.5ha	Wet grassland, lowland swamp
Bennerley Flash	6.9ha	Bird assemblage, limited data
Botany Bay Grassland	9.7ha	Reed bed, lowland swamp, unimproved neutral grassland
Awsworth Road Pond	0.5ha	Lowland swamp
Cossall Marsh	3.5ha	Water vole population, limited data
West Hallam towpath scrub	4.12ha	Standing open water, Habitat mosaic and Water Vole population

#### **Potential Wildlife Sites**

Name	Size	Habitat type / Ecological features
Moorbridge Lane grassland	2.4ha	Wet grassland, swamp
Cossall Marsh extension	6.75ha	Wet grassland
River Erewash at Cossall	6ha	Swamp, wet grassland
Stapleford Pastures	3.3ha	Wet grassland
River Erewash Grassland	2.1ha	Wet grassland
Ilkeston Road Pastures	6.8ha	Grassland

The Erewash SGI corridor supports an extensive range of wetland habitats. Wet grassland is highly prominent throughout the corridor and plays a valuable role in the carbon cycle. Reedbeds are known carbon sinks, whilst also providing vital habitats.

Further research is needed to understand the exact contributions of many different types of habitats. Conditions of habitats within the corridor will also need to be assessed and updated.

There are opportunities for habitat creation, enhancement and reconnection in the Erewash Valley. The Lower Trent and Erewash Valley Partnership<sup>12</sup> identifies that a restoration plan has been developed to address ecological issues, including waterbody quality. The Derbyshire Local Nature Recovery Strategy will support ambitions for a more interconnected network of ecological assets in the Erewash SGI corridor, and the wider Borough.

#### 6.3.2 Relationship between data and proposed corridor boundary

The Erewash SGI corridor boundaries are aligned with the focal areas identified in Erewash Focal Area Assessments and associated Map Books (Supplementary documents to GN BGI Strategy). These focal areas identify statutory and non-statutory assets within Erewash. The corridor boundaries ensure that an extensive network of biodiversity assets is included within the corridor.

Identification of the corridor between Ilkeston and Broxtowe Borough, ensures increased protection of sensitive ecological assets, whilst maintaining good public access to nature.

Despite the fragmented nature of the Erewash SGI corridor due to the adjacent presence of the Ilkeston urban area, the River Erewash and Erewash Canal maintain continuous, high performing wildlife corridors, connecting important assets within and outside the corridor. The network of rights of way which extend throughout the corridor also plays a valuable role

<sup>&</sup>lt;sup>12</sup> (2019) Lower Trent & Erewash Catchment Management Plan. rep. Trent Rivers Trust.

in habitat connectivity. These assets also provide excellent opportunities to develop an enhanced and better-connected biodiversity network.

The Council will seek to build a closer working relationship with relevant partners, including the LNRS and the Lower Trent and Erewash Catchment Partnership, to work to improve biodiversity throughout the corridor. Policy designation allows for identification of important features and assets of the wider BGI network between Erewash and Broxtowe, as well as Amber Valley.

#### 6.4 Active travel

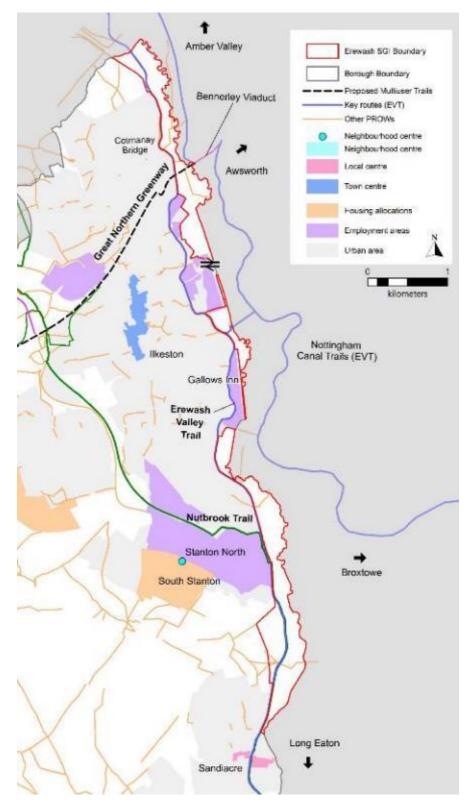


Figure 11: Map of Active Travel Network

## 6.4.1 Summary of conditions

Figure 11 shows the distribution of multiuser trails, cycleways and footpaths across the Erewash SGI Corridor and wider area, including Broxtowe Borough.

## Strategic Policy 4: Transport (Proposed Multiuser Trails)

## **Great Northern Greenway (GNG)**

The Great Northern Greenway is to be upgraded to Multi-user Trail status as part of Strategic Policy 4's implementation. The GNG crosses the north of the Borough in a broadly east-west alignment and when complete, will connect Ilkeston to Derby City. Sections of the route are currently relatively impassible with a physical break around Stanley Village. Other parts are fragmented by the Erewash Canal, and residential areas and roads in Ilkeston.

Improvements to the route would create a key strategic link between a wide range of areas and assets in the north of the Borough, including key employment sites including West Hallam Storage Depot. It would also connect assets in Ilkeston, including other open spaces and employment sites such as Manners industrial estate.

Upgrading of the Great Northern Greenway would connect the proposed Erewash, Nutbrook and Derwent SGI corridors with an off-road route across the north of the Borough.

## **Key Trails**

### **Erewash Valley Trail**

The Erewash Valley Trail (EVT) continues northwards from the Trent SGI Corridor, along the Erewash Canal, providing connectivity between Ilkeston to Long Eaton. This provides a direct route throughout the entirety of the Erewash GI corridor and extends over into Amber Valley to the north.

Several canal bridges throughout the corridor provide crossing and access points for local centres in Sandiacre and the main urban and residential areas in Ilkeston, including Cotmanay at Cotmanay Bridge. Ilkeston railway station is a short walk from the Erewash Valley Trail, promoting a connected network of more sustainable modes of travel.

Other important strategic routes are accessible from the EVT. The Nutbrook Trail (NCN route 67) provides a route through the redeveloping Stanton North employment site, and onwards to Kirk Hallam and west Ilkeston.

In the northern section of the corridor, the Great Northern Greenway can be accessed. This provides strategic links into Ilkeston and onwards to Derby. Continuing east from the GNG, access to the Bennerley Viaduct, reopened in 2022 as a new footbridge is achieved. This provides pedestrian and cycle access to destinations in Broxtowe which include Awsworth and the disused Nottingham Canal trails which are part of the Erewash Valley Trail inside Broxtowe. Additionally, three public crossings of the railway that link to the Nottingham Canal Trails are also available from the Erewash Valley Trail demonstrating that the railway is not a barrier to movement within the general area.

## National Cycle Network

## Nutbrook Trail (Route 67)

This is a key route connecting to the south-west of the corridor from the EVT.

Figure 11 shows employment sites within the corridor. The Nutbrook Trail provides a direct link (from the EVT) through the Stanton regeneration site, supporting the employment and housing allocations and providing excellent opportunities to travel to work in non-motorised ways. This promotes active lifestyles, helping to improve health outcomes.

The NT links the corridor to the areas in the wider Borough to the north west, including Kirk Hallam. It also provides for open space recreational uses.

#### **Rights of way**

#### **Public footpaths**

There is an effective network of footpaths throughout the corridor. The majority are in good condition and adequately surfaced allowing for strong walking and cycling access. Some footpaths are not accessible to cyclists, however.

#### 6.4.2 Relationship between data and proposed corridor boundary

The Erewash SGI corridor contains, and is linked to, a range of routes of the primary and secondary strategic BGI network (Greater Nottingham Blue-Green Infrastructure Strategy).

The Erewash Valley Trail provides a direct recreational route along the Erewash Canal which forms the western boundary of the Erewash SGI corridor. Adjoining canal bridges and footpaths provide access to a number of destinations within Ilkeston. The EVT, alongside the Great Northern Greenway and Bennerley Viaduct, also provide strong and legible connections over into Broxtowe.

The corridor has strategic links to an employment allocation via the Great Northern Greenway and the Nutbrook Trail. Links with the Stanton North site promote the provision of functional active travel routes, encouraging walking and cycling to work at a location which is expected when fully implemented to support thousands of new jobs. This allows for an increasing uptake of more active lifestyles, and reduced private car use, addressing improved health outcomes, and reducing emissions and congestion on the local road network.

Strategic links also allow the corridor's extent to promote an interconnected network of GI corridors across the Borough. The Erewash Valley Trail, the Nutbrook Trail, and the Great Northern Greenway all form an interconnected network of recreational routes, that when improved will link the Erewash, Nutbrook and Derwent SGI corridors together into an integrated SGI network spanning the Borough.

6.5 Open space and recreation

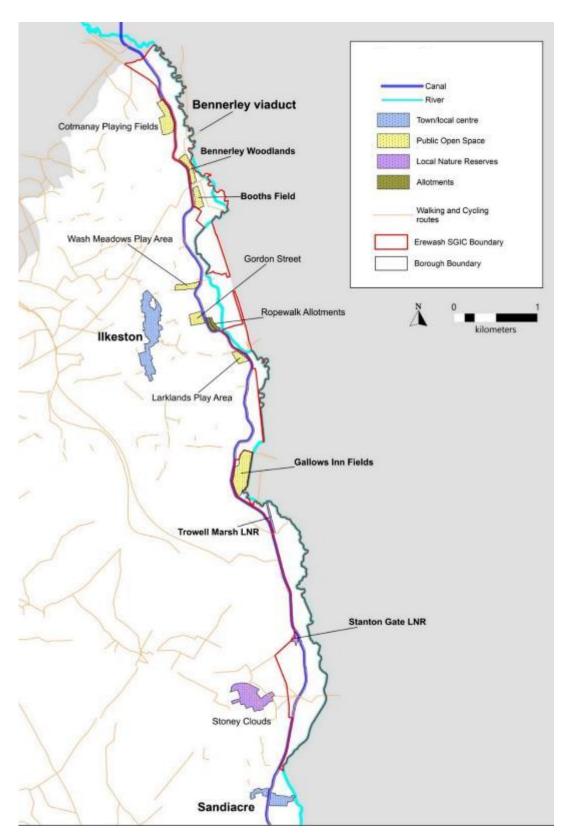


Figure 12: Map of Open space and recreational assets

## 6.5.1 Summary of conditions

Figure 12 shows the distribution of publicly accessible open spaces across the Erewash SGI corridor, as well as important open spaces adjacent to the identified area.

## Public open space

Name	Features	Accessibility / Connectivity
Booths Playing Field	Large playing field adjacent to Erewash Canal.	Can be accessed from the EVT along the Great Northern Greenway towards the Bennerley Viaduct, however, access would benefit from improvement.
Bennerley Woodlands	Hiking area directly north of Booths playing field.	It can be accessed via the Erewash Valley Trail and connects into neighbouring Broxtowe via Bennerley rail crossing.
Gallows Inn Playing Fields	Large public park with play facilities directly south of the Gallows Inn industrial estate.	Can be accessed from the EVT, and from Nottingham Road directly north which leads into Ilkeston.
Cotmanay Playing Fields	Large recreation ground and playing fields, with play area.	Connected to corridor via footpaths from Cotmanay Bridge which adjoins the Erewash Valley Trail.
Stanton Gate LNR	Small woodland area and Local Nature Reserve.	Accessible from the road Stanton Gate from the Erewash Valley Trail.
Trowell Marsh LNR	Trowell Marsh Local Nature Reserve is a borrowpit, and forms part of the wider Local Wildlife Site.	Accessible from the EVT.

## Public open space outside corridor

Name	Features	Accessibility / Connectivity
Larklands Play Area and Park	Large open space and park, supported by playground facilities. This space is accessible from the Erewash Valley Trail, across a canal bridge. It supports the surrounding residential area, with easy walking access.	The EVT connects the park to other pieces of open space, including Gordon Street Playing fields.

Name	Features	Accessibility / Connectivity
Gordon street playing fields	Large open space with two large sport playing fields. There is also a play area in the south of the site.	The EVT links the site to other open space to the north and south.
Ropewalk Allotments	Area of allotments directly south of the Rope Walk industrial estate. Access from the corridor is significantly limited.	Users can access from Station Road which can be accessed via the EVT.
Wash Meadows play area	Large open space to the west of the corridor. This includes a play area, supporting the residential area.	Accessible from EVT via bridge
Stony Clouds LNR	Large Local Nature Reserve area with lots of footpaths across the site.	

The corridor offers links to several sports clubs and facilities in Ilkeston. There are also good links to Ilkeston town centre, which provides a wide range of services, including shops for leisure, as well as a museum supporting the town's tourism offer. The significant historical landmark of Bennerley Viaduct (Grade II Listed) also promotes leisure and tourism in the corridor. Excellent routes are provided to and throughout this area, encouraging visitors to the corridor and wider surrounds.

## 6.5.2 Relationship between data and proposed corridor boundary

The Erewash SGI includes a range of extensive open spaces, accessible to the public. This includes public parks and playing fields, as well as hiking areas.

The corridor is also well served by open space outside its boundary. Areas within and outside of the boundaries are highly accessible via the Erewash Valley Trail, and other recreational routes and rights of way. This helps create a strong network of open space for the area, providing crucial opportunities for play and relaxation.

There is potential to improve access along the Erewash Valley Trail to the open spaces and other recreational assets, such as allotments. New access and connection points could be sufficiently created along this trail. Good connectivity to the Ilkeston urban area ensures that the corridor is well linked to sports facilities, shopping areas and other local services.

# 6.6 Conclusion

The Erewash SGI corridor is an established part of the identified sub-regional GI network. This is largely due to its location between the boroughs of Erewash and Broxtowe, and the presence of two key strategic waterways; the River Erewash and Erewash Canal, the latter of which is navigable.

These waterways form natural geographic boundaries for the corridor to follow. To the south, the corridor boundary has been determined by the extent of the Sandiacre built-up area, whereby the Erewash Canal and River Erewash pass through the urban area. Canal bridges and trails connect the two waterways here, although they run closely in parallel throughout the corridor. The SGI corridor continues northwards, ending at the Borough's boundary with Amber Valley, which forms an end point for the corridor.

Land within the corridor buffers the largest town in the Borough, Ilkeston, and provides an easily accessible, multifunctional resource for the population to benefit from. This provides a range of ecosystem services which contributes to addressing the objectives of Strategic Policy 5.

The corridor consistently sits within areas of high flood risk. The high proportion of functional floodplain (FZ3b) throughout the corridor has also influenced the need to designate this area, in order to maintain a good level of natural flood management (NFM). The waterways and floodplain support a high level of biodiversity throughout the corridor, with many important wetland habitats. These are offered enhanced recognition and protection through policy designation, as well as opportunities to work with external organisations to improve conditions.

There is an abundance of public open space located across the corridor, as well as nearby within the Ilkeston urban area. This provides the local population with many opportunities to engage in recreational activities. Connections to the sub-regional primary and secondary strategic network are strong, provided largely by the Erewash Valley Trail, and multiuser links across Bennerley viaduct. This provides an excellent route serving Ilkeston, Sandiacre and Long Eaton.

# 7. Nutbrook Strategic Green Infrastructure Corridor

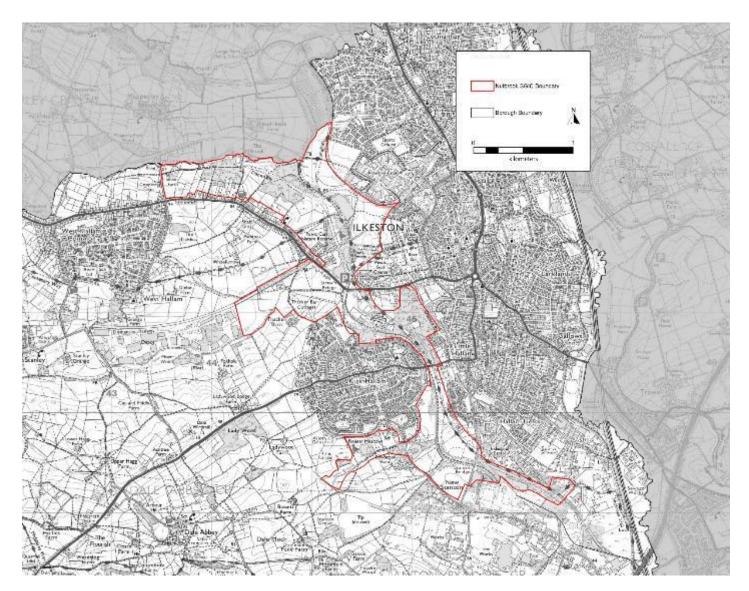


Figure 13: Map of Nutbrook SGI Corridor boundary

## 7.1 Scope and extent of corridor

The Nutbrook Strategic Green Infrastructure Corridor is located in the north-east of the Erewash Borough and sits adjacent to the Ilkeston urban area. The corridor follows the Nut Brook with areas projecting away from the Brook in several locations.

The Nutbrook SGI corridor follows the Nut Brook, from its starting point just north of the Stanton Strategic Employment Allocation. From here it continues to move between Kirk Hallam and Ilkeston up to the Borough boundary.

A range of environmental and administrative considerations have determined the boundaries of the corridor. The corridor interacts significantly with urban areas which provide an influence on both of its sides. As such, the boundaries of the Nutbrook SGI corridor extend up to the edge of the Ilkeston urban area.

The Nutbrook SGI corridor widens and narrows across its extent. While generally following the Nutbrook trail, and Nutbrook Canal, the corridor deviates from this pattern:

- Westwards to include the LNR extension south-west of Kirk Hallam.
- Westwards north of Kirk Hallam up to West Hallam Storage Depot
- Westwards across Shipley West up to the north-east edge of West Hallam

The SGI corridor extends along the Borough boundary with Amber Valley, where its extent of the Borough ends.

## 7.1.1 Key Characteristics

The Nutbrook SGI Corridor is located partly within the Erewash Valley. It falls within the Nottinghamshire, Derbyshire and Yorkshire Coalfield Character Area. There is a diversity of landscape character (Derbyshire Landscape Character Appraisal) evident throughout the corridor. The corridor contains land within the Coalfield Village Farmlands, with significant urban crossover, although the land throughout the corridor remains open and free of major forms of development, such as residential. Some post-industrial aspects of the landscape remain visible, and the remains of brickworks (Oakwell Brickworks), such as kilns can be found at points throughout the corridor.

A small section of the corridor also lies within the Coalfield Estatelands landscape character type. The corridor also falls within the Erewash Valley Area Action Plan (Lowland Derbyshire LBAP 2011-2020), and supports a variety of important wetland habitats, including reedbeds, wet woodland, fen and marsh. Priority species in the Erewash Valley include Great crested newts, otter and water vole.

## 7.1.2 Land uses and key developments

The corridor consists of a large amount of agricultural land, primarily for grazing, and other private areas of open land. The corridor has significant interaction with important land uses directly adjacent to it. Ilkeston, and Kirk Hallam lie along the corridor's boundaries. Small sections of the corridor lie within the Erewash Green Belt.

Large applications for housing have been approved and completed outside the Nutbrook SGI corridor, along the boundary with Ilkeston where flood risk allows. School development has also taken place, including Kirk Hallam Community Academy.

## Strategic Policy 1.2 South Stanton

Brownfield development for 1,000 new homes, with new primary school and local centre, with improved walking and cycling access across the site. The site is an extension of the llkeston urban area.

## Strategic Policy 1.5 South West of Kirk Hallam

1,000 new homes, with a new primary school and local centre. Improved pedestrian and cyclist access across, and to the site. An extension will also be made to the Pioneer Meadows Local Nature Reserve and a new relief road joining Ladywood Road (A6096) and Sowbrook Lane south of Kirk Hallam.

### **Strategic Policy 2 Employment**

- Manners industrial estate strategic employment zone
- Quarry Hill industrial estate strategic employment zone

### **Strategic Policy 2.1 Stanton North**

40 hectares of high-quality employment development on part of the former Stanton Ironworks site. This is a major brownfield development, with approximately 4,000 jobs set to be created here.

# 7.2 Sustainable flood water management

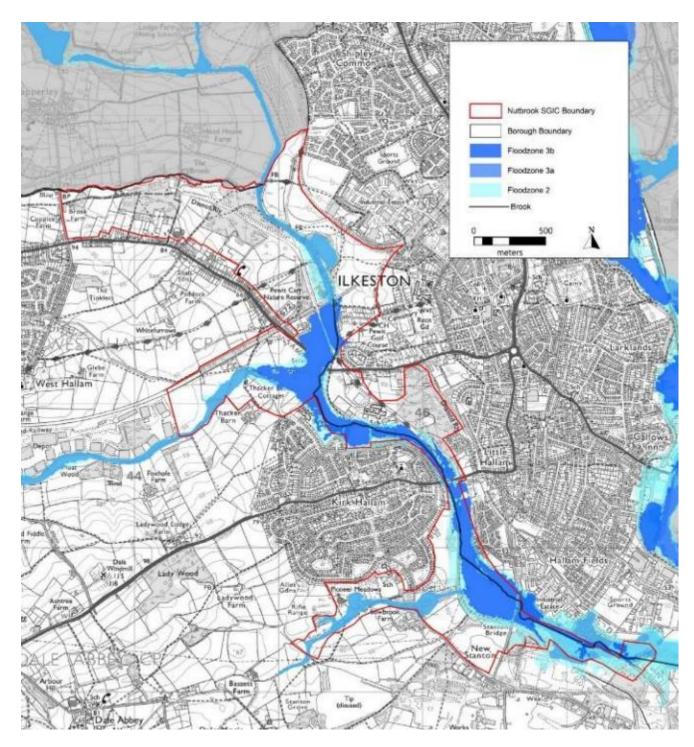


Figure 14: Map of Flood zones

## 7.2.1 Summary of conditions

Figure 14 shows the extent of coverage flood zones throughout the corridor.

## Flood zones

Flood zone coverage throughout the corridor is mixed. Along the Nut Brook, flood risk is especially high, with extensive areas of FZ3b here. It is critical that these areas of functional floodplain remain free and open to maintain their capacity to contribute natural and sustainable management of flood waters and reduce the potential impacts to urban areas.

A significant proportion of the corridor does not fall within any of the at-risk flood zones with land located within Flood Zone 1.

## **Flood management schemes**

Data and information related to any schemes or flood defences along the Nut Brook or within the corridor is limited.

The corridor falls within the Lower Trent & Erewash Catchment, and efforts by **the Lower Trent and Erewash Catchment Partnership** seek to improve sustainable flood management, and other GI related objectives in across the catchment area. This includes:

- Promotion of SUDS
- Promotion of Natural Flood Management (NFM) Schemes
- Sustainable management of floodplains:
- Biodiversity and fish migration
- Community involvement and recreation
- Water quality
- Joint working between partners

## 7.2.2 Relationship between data and proposed corridor boundary

The Nutbrook SGI corridor contains a significant amount of identifiable functional floodplain (FZ3b). These zones play a key role in protecting Ilkeston and Kirk Hallam from flooding, which ensures that best practice in flood risk management is followed, and sustainable management of land is achieved.

The corridor is largely sandwiched between two urban areas which collectively contain a significant proportion of the Borough's population. As a result, the corridor boundaries have been drawn to ensure suitable buffer zones are included that further protect the urban area from the effects of flooding, recognising that open, undeveloped land plays a key role in the hydrology of managing water tables and run off. This includes retaining areas of open countryside less prone to flooding, even if such areas are not publicly accessible.

Areas of Flood Zone 3a have also been influential in determining the extent of the corridor. The network of watercourses in the area, including the Nut Brook, Sow Brook and Stanley Brook are all prone to flooding. The corridor boundaries accommodate this.

Land designated in the corridor that is not shown to be within any of the identified flood zones in Figure 14 in most cases contributes to the other objectives set out in Strategic Policy 5. Much of this land is recognised as designated sites of wildlife importance. These sites are extensive and should be afforded protection.

# 7.3 Biodiversity

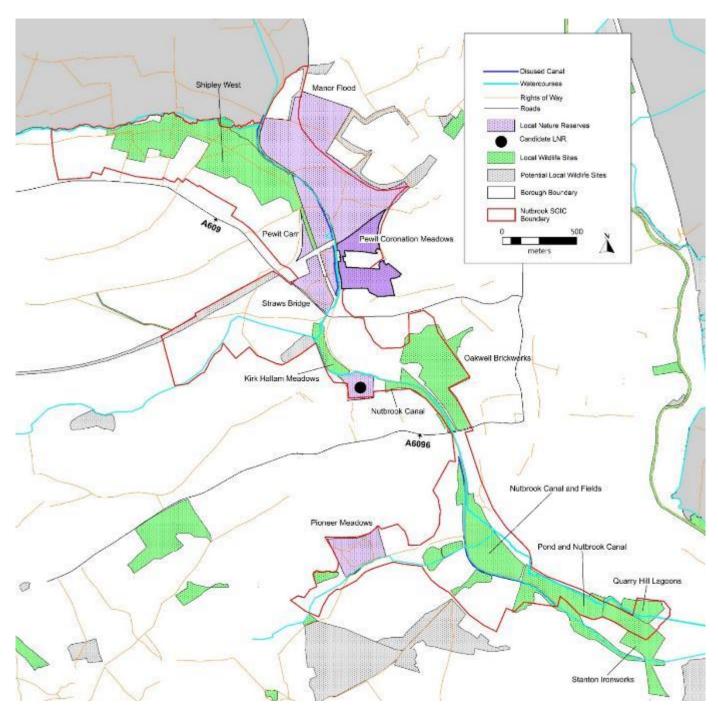


Figure 15: Map of biodiversity assets

## 7.3.1 Summary of conditions

Figure 15 shows the distribution of designated sites of wildlife importance across the Nutbrook SGI corridor. The following tables set out what these assets contain in more detail.

## Statutory

# Local Nature Reserves

Name	Size	Ecological features / Habitat type
Manor Floods	38.65	Limited data
Straws Bridge	6.27ha	Limited data
Pewit Carr	6.65ha	Wetland habitat mosaic, reedbed, woodland, scrub, summer insect populations, species-rich meadow
Pioneer Meadows	7ha	Secondary broadleaved wet woodland, unimproved neutral grassland, DRDB Species
Pewit Coronation Meadows	10ha	Woodland planting, fruit trees, grassland and open mosaic habitat

## Non-Statutory

## Local Wildlife Sites

Name	Size	Ecological features / Habitat type
Shipley West Reclamation Site	30.90ha	Habitat mosaic
West Hallam Marsh Wood	2.50ha	Secondary broad-leaved wet woodland
Pewit Carr	7.38ha	Habitat mosaic, unimproved hay meadow, Lowland swamp and Secondary broadleaved wet woodland
Kirk Hallam Meadows	2.63ha	Semi-improved neutral grassland
Oakwell Brickworks and the Beauty Spot	15.52ha	Unimproved neutral grassland, unimproved acid grassland and Lowland swamp
Nutbrook Canal, Brook and Wet Woodland	3.59ha	Secondary broad-leaved wet woodland and Lowland swamp
Nutbrook Canal and Fields	12.46ha	Standing open water, Lowland swamp and Wet grassland
Ilkeston Road Pond & Nutbrook Canal	12.77ha	Standing open water, Lowland fen, habitat mosaic and Amphibian population
Quarry Hill Lagoons	2.97ha	Lowland swamp
Stanton Ironworks	9.16ha	Habitat mosaic, butterfly and reptile assemblage and Post- industrial grassland
Rifle Range Pond	0.9ha	Standing open water
Kirk Hallam Wood	0.95ha	Secondary broad-leaved woodland

Name	Size	Ecological features / Habitat
		type
Kirk Hallam Fishing Pond	1.48ha	Standing open water and Reptile/amphibian assemblage
Sowbrook Pond	1.37ha	Standing open water

## **Potential Local Wildlife Sites**

Name	Size	Ecological features
West Hallam Disused	7ha	Unimproved grassland,
Railway		scrub
Nutbrook Meadows	1.8ha	Wet and neutral grassland

As the large number of assets shown above indicate, there is a high level of biodiversity within the Nutbrook Strategic GI corridor across a diverse array of sites. These include natural areas, reclaimed areas, and brownfield land. Identified wetland habitats within the corridor makes valuable contributions to natural carbon capture and storage.

The corridor is well served by statutory and non-statutory, biodiverse areas, many of which, through wetland habits and mosaics, make valuable contributions to carbon capture and storage. This includes secondary broadleaved wet woodland, which are known carbon sinks, and assist in reducing runoff.

There is a precedent for nature recovery within the corridor. The former Pewit Golf Course has been transformed into a Local Nature Reserve to support a wide range of plant and animal species and is shown as such on Figure 15. This serves as an extension to existing LNRs and consolidates a wider area of biodiversity, extending opportunities for exercise and relaxation.

**Strategic Policy 1.5** also makes provision for the extension of the Pioneer Meadows LNR, including creation of a new wildlife corridor along the Sow Brook. This will increase habitat connectivity despite some potential barriers to wildlife movement, including main roads such as Ladywood Road (A6096).

Opportunities for further habitat enhancement, creation and linkage may be explored by relevant bodies and partnerships, including the Derbyshire Local Nature Recovery Strategy.

## 7.3.2 Relationship between data and proposed corridor boundary

The Nutbrook SGI corridor boundaries include several key and extensive biodiversity assets. A network of LNRs exist throughout the corridor. The presence of these assets has formed a significant part of the rationale in designating the Nutbrook SGI corridor.

By following the Nut Brook and the Nutbrook Canal (disused), the corridor encompasses a valuable wildlife corridor that provides an interconnected network of assets. The corridor boundaries have been aligned to include assets in the wider area.

Other watercourses provide more opportunities for movement, as well as the network of rights of way. This network also provides opportunities for meeting points between people and nature and help to foster positive relationships, where there are publicly accessible sites such as LNRs. The extent of the corridor ensures that many residents of Kirk Hallam and Ilkeston will have access to nature on their doorstep, which provides a range of physical and mental health benefits.

Areas providing additional biodiversity value, despite the lack of statutory or non-statutory designations have been included in the GI corridor. This includes the piece of land identified north of Sowbrook Lane, which includes mature hedgerows. This supports the informal biodiversity network that operates within that part of the corridor, as well as providing an appropriate interface between the Nutbrook Canal and open land to its south.

# 7.4 Active travel

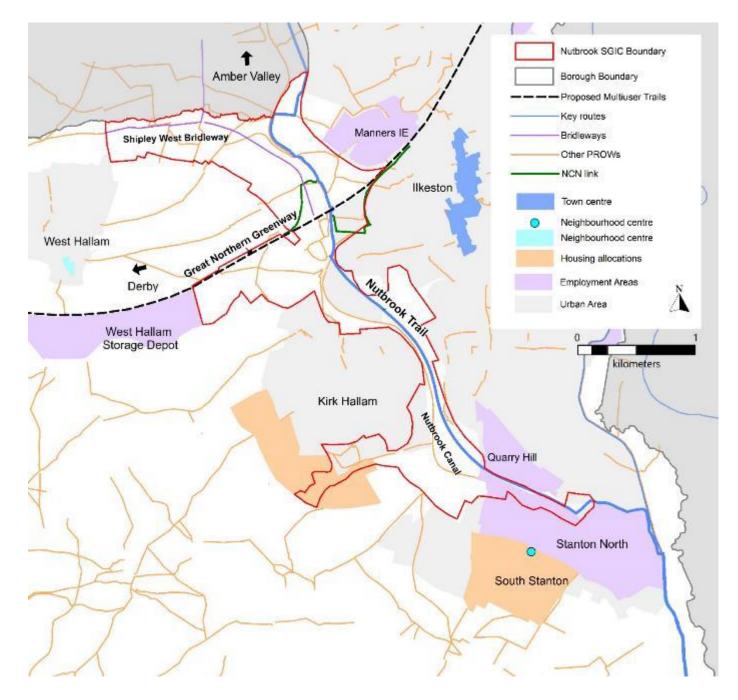


Figure 16: Map of Active travel network

### 7.4.1 Summary of conditions

Figure 16 shows the distribution of key strategic routes, and other rights of way across the Nutbrook SGI corridor.

## Strategic Policy 4: Transport (Proposed Multiuser Trails)

## **Great Northern Greenway (GNG)**

The Great Northern Greenway is to be upgraded to Multi-user Trail status as part of Strategic Policy 4. The GNG crosses the Nutbrook SGI corridor to the north, and intersects with other routes, including the Nutbrook trail, and additional trails associated with the cluster of Local Nature Reserves located nearby.

When improved, this route will link the corridor to Breadsall, and Derby to the west, and provide a link between these locations and Ilkeston. Physical fragmentation along its course is experience as a result of main roads, lessening its navigability – but resolved through the provision of suitable crossing points.

The GNG also connects the corridor to the West Hallam Storage Depot, a notable local employment site where several hundred employees work. Improvements to access along the route, and into the site will encourage more cycle to work schemes and greater non-car travel in general.

## Key trails

## Nutbrook Trail (National Cycle Network Route 67)

The Nutbrook Trail is a major recreational route throughout the corridor and provides a good quality route for walking and cycling. It links Long Eaton and Heanor, in Amber Valley. Continuing northwards provides access to Shipley Country Park, in Amber Valley. The Nutbrook Trail is also well connected to the Erewash Valley Trail at Stanton Lock canal bridge adjacent to the Stanton regeneration site.

A series of adjoining footpaths and bridleways connect the Nutbrook Trail to assets and key locations across the corridor. This includes the Nutbrook Canal (disused) which alongside a further network of trails south of Kirk Hallam, ensures a network of GI is available to integrate with the allocation at South West Kirk Hallam.

Other adjoining paths to the Nutbrook Trail provides additional links to facilities across the corridor, such as schools including Kirk Hallam Community Academy, and other sports and recreational facilities.

An adjoining bridleway that runs through the Shipley West site ensures the corridor includes links westwards to West Hallam. Another bridleway adjoins this, and extends northwards, out of the borough, connecting the corridor to Shipley Country Park in Amber Valley.

### 7.4.2 Relationship between data and proposed boundary extent

The extent of the Nutbrook SGI corridor ensures it includes a range of recreational routes, that encourage people to make more journeys by non-motorised modes of travel. Key aspects of the strategic network; Nutbrook Trail and the Great Northern Greenway, as well as adjoining rights of way, ensure that key services and amenities in the Ilkeston urban area, but particularly to the north, east and west of the Nutbrook Canal, are within walking and

cycling distance of the corridor. This encourages increased engagement with more active lifestyles.

The corridor's boundary supports new housing allocations at Stanton (Strategic Policy 1.2) and South West of Kirk Hallam (Strategic Policy 1.5). Key routes and footpaths ensure that Kirk Hallam, and the new allocation to its south west are well linked, and accessible. Improved pedestrian and cycling access to the new development, and around the new local centre will be improved through Strategic Policy 1.5.

Employment allocations are also supported, in particular the Stanton North strategic employment allocation (Strategic Policy 2.1). This ensures the corridor allows scope for travel to work, as well as to school, by walking, and cycling to take place, easily and safely, encouraging fewer private car journeys – easing congestion across the localised road network.

## 7.5 Open space and recreation

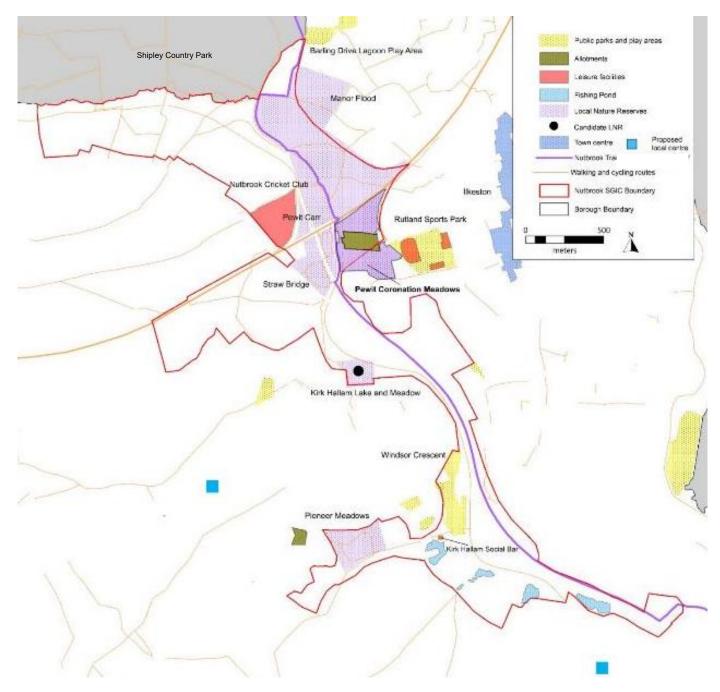


Figure 17: Map of Open space and recreational assets

## 7.5.1 Summary of conditions

Figure 17 shows the distribution of public open spaces and other recreational assets inside and outside the Nutbrook SGI corridor.

# Public open space

Name	Features	Accessibility / Connectivity
Windsor Crescent	Play area and large playing field on the edge of Kirk Hallam. Kirk Hallam Skatepark is located to the south.	Accessible from the Nutbrook Canal (disused) path.
Kirk Hallam Lake and Meadows Candidate LNR	The site is made up of a large lake, a section of the River Nutbrook and a patchwork of meadows, north of Kirk Hallam. Amenities available on this site include children's play area and picnic areas. Strategic Policy 1.5 will make provision for an extension of the LNR, with improved recreational access.	Access to the site from the Nutbrook Trail is available via adjoining footpaths to the east and west of the site.
Straw's Bridge LNR	Lake and woodland area, with two fishing ponds. Contains multiple circular walks. An important recreational site for local people.	Highly accessible via the Nutbrook Trail.
Pioneer Meadows LNR	This is a large pond area south of Kirk Hallam, with paved paths around the site. It is a highly valued local asset.	Well connected to Kirk Hallam by existing trails. Accessible from a network of paths south of Kirk Hallam that connect to the Nutbrook canal path.
Manor Flood LNR	Large area with lake on the edge of the north west of likeston.	Well connected to Straw Bridge LNR, the Nutbrook Trail, and Great Northern Greenway, and many paths across the site.
Pewit Carr LNR	Woodland and meadows area with a pond, on the edge of Ilkeston. The site has a variety of recreational paths.Highly accessible from the Nutbrook trail, and the G Northern Greenway.	
Pewit Coronation Meadows	Ilkeston's former Pewit municipal golf course. Footpaths and trails are provided on the site, as well as benches and information boards. There is potential for the former pavilion building on site to become a coffee shop and educational centre.	Highly accessible via the Nutbrook Trail and Great Northern Greenway.

All LNRs within the corridor are either owned by Erewash Borough Council, or Derbyshire County Council. The concentration of LNRs in the north of the corridor provides large residential areas within Ilkeston and Kirk Hallam with good access to extensive and wellconnected open space. This allows for better connections with nature, while enjoying the associated health benefits of the natural environment.

A range of leisure and sport opportunities exist within and just outside the corridor, including:

- Stanton fishing clubs and fishing ponds spread across the corridor, particularly along the Nut Brook
- Kirk Hallam skate park
- Nutbrook Cricket Club
- Rutland Sports Park and play area

Good access to Ilkeston also allows for retail opportunities, whilst good existing access to amenities and services exists in Kirk Hallam from most of the corridor. New future local centres in nearby strategic allocations at Kirk Hallam and Stanton will also provide services to those living at the two areas of new housing. Improvements to pedestrian and cyclist infrastructure will improve accessibility to these.

## 7.5.2 Relationship between data and proposed corridor boundary

The Nutbrook SGI corridor includes several extensive areas of accessible green spaces within easy walking distance of core residential areas in Kirk Hallam and Ilkeston. Other recreational opportunities include a series of fishing ponds throughout the corridor, as well as formal and informal sports facilities.

These sites are broadly linked along the Nutbrook Trail, and other adjoining trails, supporting the interconnected network of GI. New housing allocations at South West Kirk Hallam and Stanton South would be well supported by a range of options for open space.

The corridor protects the excellent recreational opportunities already available to residents in Kirk Hallam and Ilkeston already available that allow for engagement in physical activity and social activities.

## 7.6 Conclusion

Designation of the Nutbrook SGI corridor is in-keeping with the Green Infrastructure Corridor identified as part of the GNACS. It is of particular importance to Erewash Borough, as it sits between two large urban areas; Kirk Hallam and Ilkeston, which collectively make up the Ilkeston urban area.

Broadly, the corridor boundaries follow the land which exists in-between the two urban areas, extending up to their respective edges. The boundaries have been drafted to incorporate an interconnected network of wildlife sites and open spaces that are present in this land.

The setting of appropriate boundaries for the Nutbrook SGI corridor are more complex when compared to the accompanying SGI corridor proposals elsewhere in the Borough. This is due to the proximity of important locations and assets within the wider area, and the opportunities of recognising the existence of a wider network of GI.

The corridor boundaries that extend south west of Kirk Hallam, ensure that the LNR extension associated with the housing allocation here (Strategic Policy 1.5) is included in the corridor, as an emerging and important part of the GI network.

Extension of the corridor up to West Hallam Storage Depot was determined by the Great Northern Greenway which extends westwards from the Nutbrook SGI corridor. This ensures this employment area is linked to Ilkeston. This section is generally limited by Stanley Brook to the south, although some additional land has been included in order to avoid any constraining of the SGI corridor.

To the north, the corridor extends westwards, encompassing the Shipley West LWS. It extends beyond this asset to include a wider area of biodiversity, and to recognise the availability of links to West Hallam. This is connected to the Nutbrook Trail by an identified bridleway that runs through Shipley West LWS. Bridleways that extend northwards into Shipley Country Park ensure additional connections to Amber Valley both for wildlife and people.

Land north of Sowbrook Lane has been included within the extent of the Nutbrook SGI corridor as a result of its intrinsic biodiversity value, which includes mature hedgerow which surrounds the land. Identification of this land also ensures the corridor remains unconstrained and provides opportunities to explore the expansion and improvement of habitats in an area between the disused Canal and listed cottages at Twelvehouses.

Inclusion of this open and undeveloped land would also provide further benefits for natural flood management and the wider hydrology, allowing rainwater to return naturally to the ground.

The corridor's boundaries do include some larger forms of development, including the Kirk Hallam Community Academy school. However, these are recognised to not have a significant current, and any potential future detrimental impact on assets within the GI corridor. The Academy's presence within the corridor is a positive factor, with a significant community facility being located in a highly accessible location helping it to be accessed by non-motorised forms of transport – whilst encouraging healthy modes of travel to the school from pupils and staff. Without the inclusion of schools and similar facilities, the corridor would be constrained. These facilities are not considered to be incompatible with the SGI corridor

The SGI corridor should prevent use of the land for potential incompatible or harmful uses. This includes major housing developments, which would not positively contribute to any the four key objectives set out in Strategic Policy 5.

# 8. Derwent Strategic Green Infrastructure Corridor

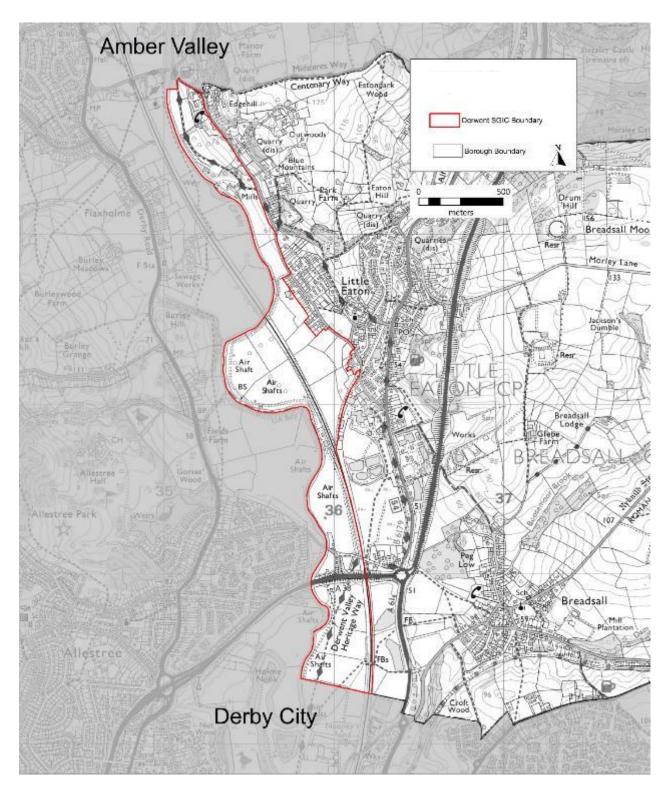


Figure 18: Map of Derwent SGI Corridor boundary

## 8.1 Scope and extent of corridor

The Derwent Strategic Green Infrastructure Corridor is located in the furthest north-west part of Erewash Borough. It follows the River Derwent for its extent within the Borough and sits between the River and the settlement of Little Eaton.

Assets within neighbouring authorities are of relevance to the corridor, particularly those related to biodiversity and recreation where linkages straddle administrative boundaries. The scope of the corridor ensures interconnectivity between assets in other Derbyshire councils.

The extent of the corridor is limited by administrative and physical features. The corridor extends across the western boundary of Erewash Borough, which borders the following local authorities:

- Derby City (to the east and south)
- Amber Valley (to the north)

The eastern boundary of the Derwent SGI corridor has been partly determined by the mainline railway (Derwent Valley Line) which passes through the central area of the corridor. Moving northwards, the corridor stretches around the eastern edge of Little Eaton and its wider Parish and residential area, until reaching the Borough boundary with Amber Valley.

## 8.1.2 Key characteristics

The Derwent SGI Corridor is located within the Derbyshire Peak fringe and Lower Derwent Derbyshire Character Area, and within the Riverside Meadows landscape type (Derbyshire Landscape Character Appraisal). The area is characterised by broad floodplains and meandering rivers. The wet meadows remain partly flooded throughout much of the year.

The River Derwent is a key strategic waterway that forms the basis for the corridor. The corridor falls within the LBAP Peak Fringe Action Area, and protected species can be found in the area, including water vole and otters.

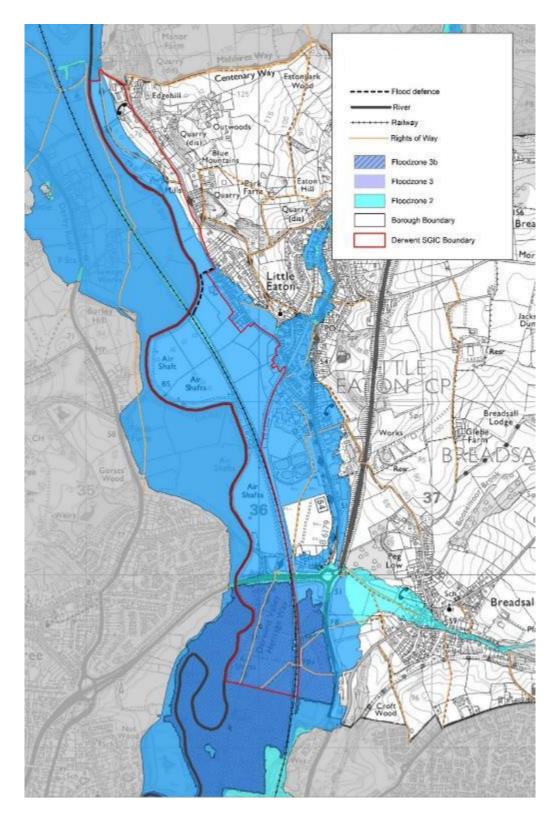
The corridor incorporates the River Derwent washlands that are designated as part of the Derwent Valley Mills World Heritage Site on account of their relict landscape quality. Historically, the area is known for its textile mills, such as Peckwash Mill in the north of the corridor, and their role in the industrial revolution, due to the importance of the area as the birthplace of water-powered textile manufacturing.

## 8.1.3 Land uses and key developments

The corridor is entirely designated as Green Belt and is mainly agricultural land, with intensive farming, predominantly grazing taking place.

Adjacent land uses include villages and village housing development at Little Eaton, as well as an industrial estate south of the village. The corridor is further surrounded by farmland. Due to high flood risk, and protections necessitated by the World Heritage Site and buffer zones, most forms of development within the corridor are heavily restricted.

Modern housing developments have encroached onto floodplains, although these areas are not within the SGI corridor. Recent planning applications within the corridor relate mainly to agricultural changes of use, and small householder applications. Some industrial unit and office development has also taken place, as well as the installation of solar farm.



# 8.2 Sustainable flood water management

Figure 19: Map of Flood zones

## 8.2.1 Summary of conditions

Figure 19 shows the distribution of flood zones across the Derwent SGI corridor, and the wider area, from the Greater Nottingham 2016 Strategic Flood Risk Assessment (AECOM) and Environment Agency.

## **Flood zones**

Data related to flood zone coverage is more limited for the Derwent SGI corridor and surrounding areas.

From the available data, the entire Derwent SGI corridor is shown to be within Flood Zone 3, showing that it is a high risk of flooding. A portion of land south of the A38 is functional floodplain.

## Flood management schemes

There is a section of levee which is identified as a flood defence, where the River Derwent meanders significantly in the central area of the corridor. This extends until the railway line, which is elevated upon a raised embankment to add resilience to the safe operating of trains in adverse periods of rainfall.

Data on proposed schemes and defences is limited, and there are unlikely to be any.

**The Derbyshire Derwent Catchment Partnership Plan** provides a vision for how natural flood management (NFM) will be achieved within the area.

Some relevant in development and conceptual projects proposed by the DDCPP include restoration of the Bottle Brook, a tributary of the River Derwent, and strategic woodland creation throughout the catchment. This will help reduce run-off and flood risk.

This also includes addressing:

- Habitat connectivity
- Nature recovery
- Fish passages
- Water quality
- Mitigating climate change
- Community engagement

## 8.2.2 Relationship between data and proposed corridor boundary

The land within the Derwent SGI corridor has been designated as such because it falls within areas of heightened flood risk. It performs a critical role in natural flood management (NFM) as functional floodplain (FZ3b). This protects Little Eaton and Breadsall from river flooding.

It is important that the area within the corridor remains open and free of obstruction, in order to function as a sustainable and effective floodplain that can respond to the challenges of climate change and increased flood risk to protect the Borough's population in this part of Erewash from the effects of flooding.

As a result, development opportunities are heavily limited. Good recreational opportunities, including long distance walking available via the Derwent Heritage Valley Way, and the World Heritage Site, offer opportunities to optimise the recreational value of the land.

Efforts to improve flood management and reduce risk, as well as address other conditions within the corridor, and the wider area will have a positive impact on the corridor's capacity to deliver multifunctional GI. The Council will seek to build a working relationship with the Derbyshire Derwent Catchment Partnership, alongside neighbouring authorities Amber Valley and Derby City, to promote and deliver sustainable flood management projects in this part of the County.

# 8.3 Biodiversity

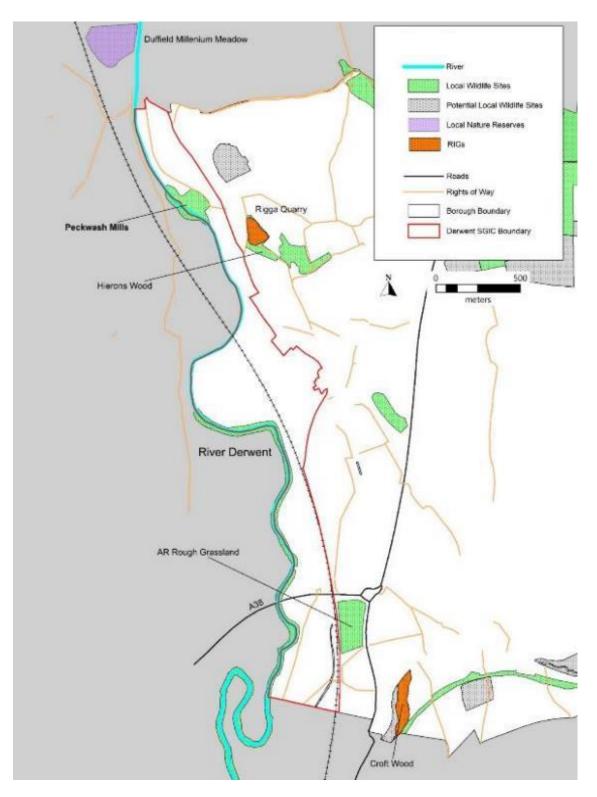


Figure 20: Map of biodiversity assets

## 8.3.1 Summary of conditions

Figure 20 shows the distribution of sites of designated wildlife importance in the Derwent SGI corridor. The following tables set out what these assets contain in more detail.

## **Non-Statutory**

### **Local Wildlife Sites**

Name	Size	Ecological features / Habitat Type
Peckwash Mills	3.4ha	Secondary broad-leaved woodland, flowing water, wet grassland
River Derwent	N/A largely outside of Erewash Borough	Flowing water, water voles

### **Potential Local Wildlife Sites**

Name	Size	Ecological features / Habitat type
Marsh Area, Breadsall	0.3ha	Swamp

### **Outside corridor**

### Local Wildlife Sites

Name	Size	Ecological features / Habitat
		Туре
Alfreton Road Rough	4ha	Floodplain semi-improved
Grassland		grassland, Bird assemblage
Hierons Wood	1.6ha	Secondary broad-leaved
		woodland

Due to intensive farming, the ecological value of the corridor's landscape is significantly limited. Existing biodiversity assets within the corridor do however make important contributions.

Areas of secondary broad-leaved woodland, and wet woodland are also found in the corridor. Their coverage is limited; however these are highly important habitats, and support a range of protected and priority species. As carbon sinks, these habitats have capacity for significant carbon sequestration and storage. Floodplain woodland also reduces run-off and therefore contributes to Natural Flood Management (NFM)<sup>13</sup>.

The condition and contribution of habitats is likely to require more research, however, provides a foundation for biodiversity improvement in the area. Strategies like the Local

<sup>&</sup>lt;sup>13</sup> (2021) Carbon storage and sequestration by habitat: a review of the evidence. rep. Natural England.

Nature Recovery Strategy will develop a spatial and strategic plan for nature, ensuring that existing, and potentially new habitats are protected, connected, and enhanced.

## 8.3.2 Relationship between data and proposed corridor boundary

The Derwent SGI corridor contains a more limited range and amount of designated assets of wildlife importance. The River Derwent serves as a major wildlife corridor and linear habitat across the western outline of the corridor, allowing for species movement and habitat connectivity within and outside the corridor. This links assets within the corridor to biodiversity sites in Amber Valley and Derby City.

Habitats and biodiversity assets on the outline, or just outside the corridor and just also provide habitats and may be linked by public rights of way and other watercourses. Wildlife movement may be restricted by the railway line, as well as the dualled A38, and other roads. The network of rights of way should provide adequate opportunity for this movement, inside and outside the corridor. The network of hedgerows throughout the corridor also allows for wildlife movement.

The Council will seek to continue building a strong working relationship with the Derbyshire LNRS, looking at opportunities to enhance habitats within the corridor, create new carbon sinks and develop the network within and outside the corridor.

Two Regionally Important Geomorphological Sites (RIGs): Rigga Quarry, and Croft Wood, sit in close proximity to the corridor, as well as a number of local wildlife sites. The physical boundaries of the railway line, and Little Eaton, have determined that the natural end of the corridor, and so these designated sites, are not included in the corridor.

## 8.4 Active travel

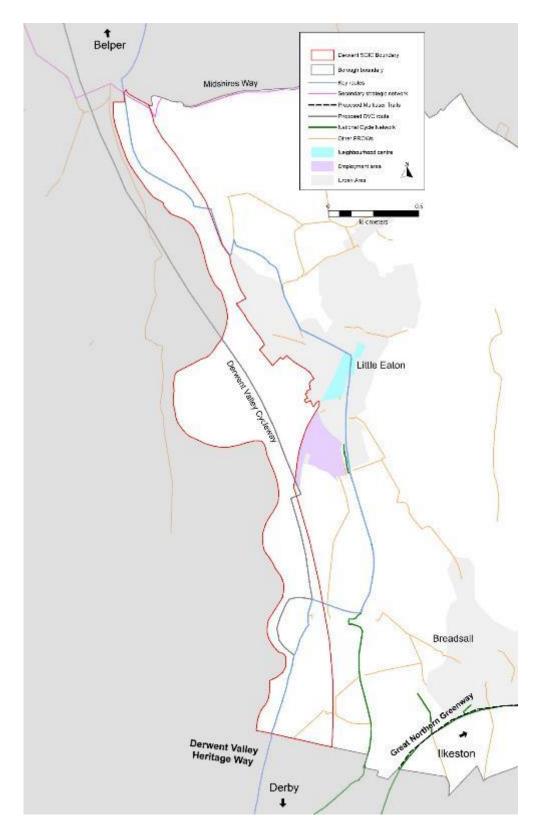


Figure 21: Map of Active travel network

## 8.4.1 Summary of conditions

Figure 21 shows the network of trails, cycleways and footpaths throughout the Derwent SGI corridor. It shows directions to locations outside the corridor accessible via active travel means.

## Key trails

## **Derwent Valley Heritage Way (DVHW)**

The DVHW is a long-distance path that can be walked from the Peak District to Derby, and from there to Derwent Mouth. The DVHW links the corridor to the settlement of Little Eaton.

In the far south of the corridor, the path broadly follows the River Derwent, however, follows roads outside the corridor through Little Eaton, until it returns back into the corridor in its far south, broadly following the River again. The route varies in its accessibility.

## Proposed upgrades: Derwent Valley Cycleway (DVC)<sup>14</sup>

The Derwent Valley Trust propose to create a multi-user route through the Derwent Valley between Baslow and Derby. The route is to follow the River Derwent and will provide an attractive means of travel for commuters, leisure cyclists and tourists. This would provide excellent cycling access to Derby City.

To the south of the A38, a planning application for a new cycleway was approved in 2023. The proposed route runs partly through the Derwent SGI corridor.

## Strategic Policy 4: Transport: Proposed Multi-user Trails

## **Great Northern Greenway (GNG)**

The Great Northern Greenway is in close proximity to the Derwent SGI corridor, and can be accessed via public rights of way, and the national cycle network. From here, the route continues across the north of the Borough towards Ilkeston. When upgraded, the GNG would have the capacity to link the Derwent SGI, Nutbrook SGI, and the Erewash SGI.

## National Cycle Network Route 54

The SGI corridor is connected to the National cycle network by the Derwent Heritage Valley Way, as well as other rights of way. This route provides links between Little Eaton and Derby.

<sup>&</sup>lt;sup>14</sup> (2020) Derwent Valley Cycleway. rep. Derwent Valley Trust.

## 8.4.2 Relationship between data and proposed corridor boundary

The Derwent SGI corridor is primarily served by active travel routes outside of its boundaries. The corridor has a fragmented relationship with the Derwent Valley Heritage Walk, however this provides good access to Little Eaton, and connects with a wider BGI network including St Peter's Park. The network of public rights of way provides links to Little Eaton and Breadsall.

It is hoped that the corridor will encourage further improvements to the Derwent Valley Heritage Way. Supporting paths would improve accessibility, direct routes through the corridor, allowing for increased access to open countryside and River Derwent.

There is a network of public footpaths and bridleways in the corridor, and a wider one which extends outside of it. Some of these footpaths help make up trails like the DVHW, and the Midshires Way connects to the corridor at its northern boundary.

While links in the north and south of the corridor, to Duffield and Belper, and Derby respectively, are effective, the trail strays from the corridor for the majority of its length.

# 8.5 Open space and recreation

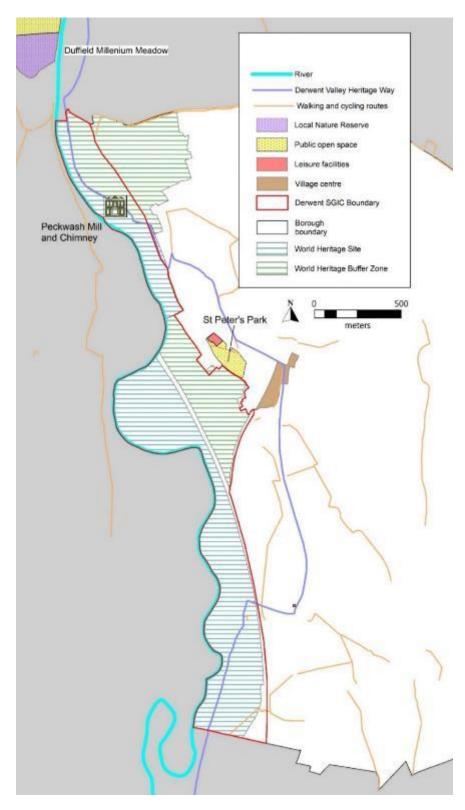


Figure 22: Map of Open space and recreational assets

## 8.5.1 Summary of conditions

Figure 22 shows the distribution of open space and recreation opportunities in the corridor and wider area. Publicly accessible open space is only available outside of the corridor.

## Public open space

## **Derwent Valley Mills World Heritage Site**

Name	Features	Accessibility / Connectivity
St Peter's Park, Little Eaton	Public park and village hall adjacent to Derwent SGI corridor. Tennis courts, playing pitches and other facilities are provided to the east of the park.	Good access to Derwent Valley Heritage Way which passes alongside the park.

The Derwent SGI corridor largely falls within the Derwent Valley Mills UNESCO World Heritage Site. WHS buffer zones also include land in the east of the corridor, providing an added layer of land-use policy protection. World Heritage Sites are assets of the highest significance, and development should respect, and avoid harm to the landscape character.

The wider site has been designated as such for its historic mill complexes, weirs and associated settlements, to preserve its special character. Peckwash Paper Mill is identified as a key site by the World Heritage Site, located in the north of the Derwent SGI corridor. This mill building is not open to the public, though the Derwent Valley Heritage Way passes through the site.

## 8.5.2 Relationship between data and proposed corridor boundary

Critically, the corridor is entirely situated within the Derwent Valley Mills WHS, and Buffer Zones; an area of special character. The corridor boundaries ensure that the attributes that warrant this designation are preserved, and the landscape character and setting of identified assets are protected from harm. Allocation of corridor boundaries follows the those of the WHS, across their extent in Erewash.

The corridor has good links with Little Eaton. The extent of the Derwent Valley Heritage Way ensures that people are encouraged to visit the village, and access respective leisure opportunities here, providing increased footfall and opportunities to grow the local economy. The DVHW provides excellent access to attractive open countryside, and enjoyment of the World Heritage Site.

While public open space is significantly limited within the corridor, public parks and sport facilities can be accessed on the eastern corridor boundary with Little Eaton. This promotes healthy lifestyles and active lifestyles and encourages socialisation. The corridor extent and boundary are also supported by amenities and open space in neighbouring authorities,

including pubs and nature reserves in Amber Valley. This creates a network of recreational and leisure opportunities, strengthening the wider economy.

## 8.6 Conclusion

The Derwent SGI corridor has been designated as such, due to its location within the subregional GI network. This has largely been determined by the Derwent Valley Mills World Heritage Site, which includes land around the River Derwent.

The boundaries of the GI corridor have been drawn to reflect those of the World Heritage Site (and buffer zones). This policy designation will provide increased protection of the relict landscape character and existing assets, while ensuring the land is optimised as a multifunctional resource.

The decision to designate the Derwent SGI corridor, have also been determined by the location of the River Derwent. This is another one of the strategic waterways (non-navigable) in the borough and is a significant wildlife corridor. The River Derwent also forms the Borough boundary with Derby City and therefore forms a logical end for the corridor.

The Derwent SGI corridor has also been designated due to its siting within areas of high flood risk, including areas of functional floodplain. It is vital to protect water storage areas that promote NFM, in order to manage flooding sustainably.

As multifunctional resource, the Derwent also provides good links to Little Eaton, and is connected to the wider strategic GI network, including the Great Northern Greenway. Improvements to active travel routes would allow for better access to the waterside environment, and better connections between the corridor and Derby, encouraging for commuting via active travel means.

# 9. Overall Conclusion

This Technical Paper provides evidence to support the designation of Strategic Green Infrastructure (SGI) corridors which form the basis for Strategic Policy 5: Green Infrastructure of the Erewash Core Strategy Review. After assessing the conditions and merits of each corridor, the Paper can conclude that each of the designated SGI corridors are appropriate and justifiable.

Erewash benefits from a strong network of existing GI assets, notably with its strategic waterways to the east, west and south. The areas benefitting belong together in a coherent Borough-wide network and have long been identified as forming part of the wider sub-regional GI network identified within the Greater Nottingham Aligned Core Strategy. Suitable boundaries for the corridors have been identified through their siting within the sub-regional GI network, often bordering neighbouring local authorities.

As identified through detailed GI mapping and assessment, the SGI corridors individually and collectively make valuable contributions to the four objectives set out in Strategic Policy 5. The corridors boundaries have been drawn to include contributing assets within Erewash's GI network, such as the Pioneer Meadows LNR extension. SGI corridors benefit from a degree of interconnectivity despite their largely geographic and peripheral character, with notable trails including the Erewash Valley Trail and Great Northern Greenway - both providing key strategic links.

It is intended that designation of the SGI corridors will offer policy protection for the important and diverse array of assets and networks contained within them - preventing harm from inappropriate forms of development. The corridors also form the basis for improving conditions within each one, whilst engaging with external partnerships to deliver enhancements in Erewash and across the wider network.