Greater Nottingham Strategic Plan



Biodiversity Net Gain Background Paper September 2024











Contents

1.	Introduction	1
	Background	1
	The Environment Act (2021)	1
	Aims and Objectives	2
2.	Local Planning Policy Context	3
	Adopted Local Plans	3
	Greater Nottingham Strategic Plan	4
	Climate Change Strategy	5
3.	National Reports on Biodiversity	6
	A Green Future: Our 25 Year Plan to Improve the Environment (25 Year Environment Plan) (2018)	6
	Environmental Improvement Plan (First Revision of the 25 Year Environment Plan (2023)	8
	The State of the Environment: The Urban Environment (2021)	8
	Biodiversity in the UK: bloom or bust? (2021)	9
	An extraordinary challenge: Restoring 30 per cent of our land and sea by 203 (2023)	0 9
	State of Nature (2023)	. 10
	Conclusions	. 12
4.	Local Biodiversity Evidence	. 14
	Nottinghamshire Biodiversity Action Plan	. 14
	Sites of Special Scientific Interest (SSSIs)	. 15
	Local Sites	. 18
	Addressing Environmental Inequalities to enable Sustainable Growth	. 20
	Access to Nature	. 22
	Natural England Natural Capital Atlases	. 24
	Conclusions	. 26
5.	Local Opportunities for Biodiversity Net Gain	. 28
	Biodiversity Opportunity Mapping (Broxtowe, Rushcliffe and Gedling Borough Councils)	. 28
	Biodiversity Opportunity Mapping (Nottingham City Council)	. 34
	Call for Sites	. 36
	Partnership Local Opportunities	. 36
	Conclusions	. 37

6.	Viability	. 38
7.	Conclusions	. 40
8.	Appendix 1 – SSSI conditions in the East Midlands	.41
9.	Appendix 2 – Via East Midlands Call for Sites	. 44

1. Introduction

Background

- 1.1. The Greater Nottingham Planning Partnership (The Partnership) have produced this Strategy to support the policy approach towards biodiversity net gain within the emerging Greater Nottingham Strategic Plan. The Greater Nottingham Strategic Plan covers the administrative boundaries of: Nottingham City Council, Broxtowe Borough Council, Gedling Borough Council and Rushcliffe Borough Council.
- 1.2. The Environment Act (2021) requires all new development (except from those exempt) to deliver a minimum of 10% biodiversity net gain, leaving the natural environment in a measurably better state than it was beforehand.
- 1.3. This Strategy investigates the information available to understand if there is evidence to justify the Partnership adopting a policy requirement of up to 20% biodiversity net gain, which is above the statutory requirement of 10%.

The Environment Act (2021)¹

- 1.4. The Environment Act (2021) requires all new development (except from those exempt) to deliver a minimum of 10% biodiversity net gain. Securing a minimum of 10% biodiversity net gain should contribute to the recovery of nature whilst still allowing new development, ensuring that habitat for wildlife ends in a better state than it was before the development.
- 1.5. Securing a minimum of 10% biodiversity net gain will see an uplift in biodiversity post-development compared to a baseline assessment of biodiversity undertaken prior to development commencing and will see new habitats and green spaces created, for example. The Partnership will look to maximise biodiversity benefits and ecological connectivity as part of any development proposal through ensuring that biodiversity is a key consideration early in the design process.
- 1.6. Article 37A of the Town and Country Planning (Development Management Procedure) (England) Order 2015² sets out the Biodiversity Gain Hierarchy. Planning authorities must take into account how the Biodiversity Gain Hierarchy has been applied within planning applications. Where the hierarchy has not been applied, planning authorities must consider the reason for that or absence of a reason when determining an application.
- 1.7. The Biodiversity Gain Hierarchy is as follows:
 - In relation to onsite habitats which have a medium, high and very high distinctiveness (a score of four or more according to the statutory biodiversity metric), developers should firstly seek the avoidance of

¹ <u>https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted</u>

² https://www.legislation.gov.uk/uksi/2015/595/part/7A

adverse effects from the development and, if they cannot be avoided, the mitigation of those effects; and

- Then, in relation to all onsite habitats which are adversely affected by the development, the adverse effect should be compensated by prioritising in order, where possible:
 - o habitat enhancement of onsite habitat;
 - insofar as there cannot be that enhancement, creation of onsite habitat;
 - insofar as there cannot be that creation, the availability of registered off-site biodiversity gain for allocation to the development;
 - insofar as registered off-site biodiversity gain cannot be allocated to the development, the purchase of biodiversity credits.
- 1.8. The requirement for the delivery of a minimum of 10% biodiversity net gain became mandatory for major development in February 2024 and for non-major development in April 2024. The national figure of 10% biodiversity net gain is the minimum requirement and no cap has been set for a maximum biodiversity net gain that can be sought locally through Local Plan policies.
- 1.9. To support the legislation, the Government have published planning practice guidance³ on biodiversity net gain. The guidance provides advice at paragraph 006 on how plan-makers should deal with biodiversity net gain. The guidance states that plan makers should not seek a higher percentage of biodiversity net gain than the statutory 10%, either on an area-wide basis or for specific allocations for development, unless justified. Appropriate evidence to justify a higher percentage should address:
 - Local need for a higher percentage;
 - Local opportunities for a higher percentage; and
 - Any impacts on viability for development.
- 1.10. The guidance states that consideration will also need to be given to how any biodiversity net gain policy will be implemented.

Aims and Objectives

- 1.11. This Strategy has been compiled to form part of the evidence base for the Greater Nottingham Strategic Plan. Specifically, this report aims to address:
 - The Local Plan position for the Greater Nottingham area;
 - A review of national reports on the state of biodiversity in the UK;
 - A review of local data on the state of biodiversity in the Greater Nottingham Area;
 - Details on the local opportunities to accommodate a higher percentage of biodiversity net gain in the Partnership area; and
 - Whether a higher percentage of biodiversity net gain is a viable policy requirement.

³ <u>https://www.gov.uk/guidance/biodiversity-net-gain</u>

2. Local Planning Policy Context

2.1. The members of the Greater Nottingham Planning Partnership have historically worked together on planning policy matters in the Greater Nottingham Area. The Partnership includes the Councils of Broxtowe, Erewash, Gedling, Nottingham City and Rushcliffe together with the Hucknall part of Ashfield District, and the two associated County Councils of Derbyshire and Nottinghamshire.

Adopted Local Plans

- 2.2. The Councils of Broxtowe, Erewash, Gedling, Nottingham City and Rushcliffe agreed in 2009 to work together to produce Aligned Core Strategies, with the aim to ensure that the policies of the proposed Aligned Core Strategies were consistent across Greater Nottingham.
- 2.3. During the production of the Aligned Core Strategies, Erewash and Rushcliffe departed from the joint work on the Strategies and opted to produce individual Core Strategies. However, they utilised some of the joint evidence base commissioned by the Partnership.
- 2.4. The following Local Plan Core Strategies have been adopted in the Greater Nottingham Area:
 - Broxtowe Borough⁴, Gedling Borough⁵, Nottingham City⁶ Aligned Core Strategies Part 1 Local Plan (September 2014)
 - Rushcliffe Local Plan Part 1: Core Strategy (December 2014)⁷
 - Erewash Core Strategy (March 2014)⁸
- 2.5. Broxtowe, Gedling, Nottingham City and Rushcliffe opted to progress with Part 2 Local Plans. The Part 2 Local Plans were prepared individually and set out the Councils' non-strategic development allocations and detailed policies for managing new development, following on from the strategic framework set out in the Core Strategies.
- 2.6. The following Part 2 Local Plans have been adopted by the Partnership:
 - Broxtowe Part 2 Local Plan 2018-2028 (October 2019)⁹
 - Gedling Local Planning Document Part 2 Local Plan (July 2018)¹⁰

⁴ <u>https://www.broxtowe.gov.uk/for-you/planning/planning-policy/local-plan/part-1-local-plan-core-strategy/</u>
⁵ https://www.gedling.gov.uk/acs/

⁶ <u>https://www.nottinghamcity.gov.uk/media/kyhhfdx4/the-nottingham-city-aligned-core-strategy-acs.pdf</u>

⁷ https://www.rushcliffe.gov.uk/planning-growth/planning-policy/local-plan/local-plan-part-1/

⁸ https://www.erewash.gov.uk/images/Planning Policy/ErewashCoreStrategy2011-2028.pdf

⁹ <u>https://www.broxtowe.gov.uk/for-you/planning/planning-policy/local-plan/part-2-local-plan/</u>

¹⁰ https://www.gedling.gov.uk/lpd/

- Nottingham City Land and Planning Policies Local Plan Part 2 (January 2020)¹¹
- Rushcliffe Local Plan Part 2: Land and Planning Policies (October 2019)¹²

Greater Nottingham Strategic Plan¹³

- 2.7. The Councils of Broxtowe, Erewash, Gedling, Nottingham City and Rushcliffe agreed to work on a joint Strategic Plan to replace their existing Core Strategies. However, prior to a draft version of the Strategic Plan being consulted, Erewash departed from the joint work to undertake an individual Core Strategy Review. Broxtowe, Gedling, Nottingham City and Rushcliffe continued to work together on the Greater Nottingham Strategic Plan.
- 2.8. Broxtowe, Gedling, Nottingham City and Rushcliffe have previously consulted on the Greater Nottingham Strategic Plan Growth Options document in July 2020 and February 2021, the Greater Nottingham Strategic Plan Preferred Approach in January-February 2023, and on the Greater Nottingham Strategic Plan: Distribution and Logistics Preferred Approach in September-November 2023.
- 2.9. The Councils have now prepared the Greater Nottingham Strategic Plan Publication Version. The Publication Version details the proposed policies for the Greater Nottingham Area and includes strategic site allocations for the four Councils which will help meet their housing and employment needs. Currently, all four Councils are carrying forward strategic housing allocations from their adopted Core Strategies as well as the Chetwynd allocation in Broxtowe. The Strategic Plan is also proposing an extension to the Top Wighay Farm site in Gedling. In addition to the strategic housing sites, two new strategic employment sites are proposed to be allocated: one on the site of the Ratcliffe on Soar Power Station and land to the south of the A453, and the other on the site of the former Bennerley Coal Disposal Area.
- 2.10. The Strategic Plan includes a policy on biodiversity that requires the delivery of biodiversity net gain on all sites (except those exempt) and provides localised details on biodiversity which complement the statutory framework. Whilst it is a statutory requirement to deliver a minimum of 10% biodiversity net gain, this Strategy provides evidence which justifies a policy that requires the delivery of up to 20% biodiversity net gain.
- 2.11. Each chapter of this Strategy sets out evidence which justifies why the Partnership could include a policy requirement above the statutory 10% biodiversity net gain. Chapter 3 references documents on a national level that have raised concern over the state of the UK's biodiversity, which justifies on a national level why there is a need for the Partnership to pursue a higher percentage of biodiversity net gain. As required by the biodiversity net gain planning practice guidance, Chapter 4 of this

¹¹ <u>https://www.nottinghamcity.gov.uk/media/vzxjnxaa/land-and-planning-policies-document-lapp-2020.pdf</u>

¹² https://www.rushcliffe.gov.uk/planning-growth/planning-policy/local-plan/local-plan-part-2/

¹³ <u>https://www.gnplan.org.uk/consultations/</u>

report provides evidence on the state of biodiversity in the Greater Nottingham Area, which considers whether local need justifies a policy requirement above the statutory 10% biodiversity net gain, chapter 5 focuses on whether there are local opportunities in the Greater Nottingham Area to deliver up to 20% biodiversity net gain; and chapter 6 addresses the viability of a policy requirement of up to 20% biodiversity net gain.

Climate Change Strategy

- 2.12. In 2019, Broxtowe Borough, Gedling Borough and Nottingham City Councils declared a climate emergency with the aim for the Councils to become carbon neutral by 2027 for Broxtowe, 2030 for Gedling and 2028 for Nottingham City. Whilst Rushcliffe Council did not declare a climate emergency, they did commit to becoming carbon neutral by 2030.
- 2.13. Each Council has prepared a Climate Strategy to assess the impacts of climate change on the Council's Area and sets out actions to combat climate change across each Council's remit, such as waste, air quality, the natural environment and the water environment. The Strategies are listed below:
 - 1. Rushcliffe Climate Change Strategy 2021-2030¹⁴
 - 2. Broxtowe Climate Change and Green Futures Strategy 2023-2027¹⁵
 - 3. Gedling Carbon Management Strategy 2021-2030¹⁶
 - 4. Carbon Neutral Nottingham 2020-2028 Action Plan¹⁷
- 2.14. In terms of biodiversity, all of the strategies aim to improve and protect the biodiversity and ecology of green spaces (including through the delivery of biodiversity net gain), support quality networks of green infrastructure and ensure the consideration of biodiversity both in policy and practice. Resilience to the impacts of climate change and sequestration of carbon to reduce the future impacts of climate change can only be achieved through habitat management and creation at scale and at pace.

¹⁴ <u>https://www.rushcliffe.gov.uk/about-us/about-the-council/policies-strategies-and-other-documents/accessible-documents/climate-change-strategy/#biodiversity</u>

¹⁵ <u>https://www.broxtowe.gov.uk/media/10827/tagged-climate-change-green-futures-strategy-2023-27.pdf</u>

https://www.gedling.gov.uk/media/gedlingboroughcouncil/documents/environmentalhealth/Appendix%20A %20-%20Carbon%20Management%20Strategy%20%20Action%20Plan.pdf

¹⁷ https://www.cn28.co.uk/media/nwplzbc0/2028-carbon-neutral-action-plan-v2-160620.pdf

3. National Reports on Biodiversity

3.1. This section outlines some of the key reports that discuss on a national scale the condition of the environment and biodiversity levels in the UK.

A Green Future: Our 25 Year Plan to Improve the Environment (25 Year Environment Plan) (2018)¹⁸

- 3.2. The 25 Year Environment Plan sets out government action to help the natural world regain and retain good health. The Plan states that the effects of human impact on wildlife and habitats are stark, with human-induced extinctions and human-induced climate change threatening unpredictable and potentially irreversible damage to the planet. To aid the recovery of the natural world, the Plan sets out government action (see Figure 3.1) with the aim to deliver cleaner air and water, protect threatened species and provide richer wildlife habitats.
- 3.3. Focusing on the Plan's impact on biodiversity, the first policy 'using and managing land sustainably', will be delivered partly by Government embedding an 'environment net gain principle' for development including housing and infrastructure to achieve measurable improvements for the environment. In the future, the Plan expects that the net gain approaches used for biodiversity will be expanded to include wider natural capital benefits.
- 3.4. To address the second policy 'recovering nature and enhancing the beauty of landscapes' the Government will seek to protect and recover nature, to restore losses suffered over the past 50 years. To fulfil this, the Government have proposed the following actions:
 - Develop a Strategy for Nature to tackle biodiversity loss;
 - Develop a Nature Recovery Network to complement and connect wildlife sites;
 - Provide opportunities for species conservation; and
 - Reintroduce native species.

¹⁸ https://www.gov.uk/government/publications/25-year-environment-plan



Figure 3.1 – The 25 Year Plan Goals and Policies (Department for Environment, Food & Rural Affairs)

- 3.5. To address the second policy 'recovering nature and enhancing the beauty of landscapes' the Government will seek to protect and recover nature, to restore losses suffered over the past 50 years. To fulfil this, the Government have proposed the following actions:
- 3.6. It is essential to consider the above in the context of two key targets in the 25 Year Environment Plan:
 - Restore or create more than 500,000 hectares of wildlife rich habitat outside protected sites by 2042; and
 - Restore or create 140,000 hectares of wildlife rich habitats outside protected sites by 2028, compared to 2022 level.

3.7. Biodiversity net gain will contribute to meeting these targets, and for the equitable distribution of habitats across England, those hectares created should as far as possible equate to a proportionate number of hectares for the size of the Greater Nottingham Area when disaggregated from the England-wide figure.

Environmental Improvement Plan (First Revision of the 25 Year Environment Plan (2023)¹⁹

- 3.8. The report is the first review of the Government's 25 Year Environment Plan and sets out how the Government intends to deliver the vision of the Plan. The report sets out the progress made against the ten goals within the Plan, and the specific targets and commitments made in relation to each goal.
- 3.9. The Plan identifies the Government's apex goal 'Thriving Plants and Wildlife' which will halt the decline in biodiversity. All other goals identified in the 25 Year Environment Plan will help to achieve this apex goal.
- 3.10. The Plan identifies ways in which the Government has started to meet the apex goal, including creation and restoration of wildlife habitats, investment into tree planting and peatland restoration and the establishment of a network of marine protected areas. To continue progression towards the goal, the Government has listed a number of strategies it intends to implement, including:
 - Create, restore and extend around 70 areas for wildlife through projects including new National Nature Reserves;
 - Protect 30% of England's land and sea for nature through the Nature Recovery Network;
 - Implement the Environment Act 2021, including rolling out Local Nature Recovery Strategies to identify areas to create and restore habitat, and Biodiversity Net Gain to enhance the built environment.

The State of the Environment: The Urban Environment (2021)²⁰

- 3.11. The Environment Agency published data and information summarising the state of the environment in England. The reports covered a range of areas, including: the urban environment; health, people and the environment; the coastal and marine environment; soil; air quality; water resources; and water quality.
- 3.12. With regards to the urban environment, the report found that urbanisation is a significant pressure on biodiversity in the UK, with thousands of hectares of previously undeveloped land including habitats such as farmland, woodland and wetland built on every year. The Environment Agency found that in 2017-2018, of

¹⁹ <u>https://www.gov.uk/government/publications/environmental-improvement-plan</u>

²⁰ <u>https://www.gov.uk/government/publications/state-of-the-environment/the-state-of-the-environment-the-urban-environment</u>

the 28,294 hectares of land developed, 12,748 ha (45%) was previously developed land, and 15,546ha (55%) was previously undeveloped.

- 3.13. The report found that urban areas are lower in biodiversity than rural areas, with habitats often fragmented and degraded. Noise and light pollution can negatively affect wildlife, whilst polluted water adversely affects the plants and wildlife in urban rivers and lakes. The report suggested that a systems approach could maximise the co-benefits of interventions such as nature-based solutions. These actions could protect, sustainably manage and restore natural or modified ecosystems that address societal challenges such as climate change while providing additional biodiversity and wellbeing benefits.
- 3.14. The report found that incorporating space for nature into development plans could reduce biodiversity impacts, referencing the Environment Act as legislation that will ensure new development benefits biodiversity.

Biodiversity in the UK: bloom or bust? (2021)²¹

- 3.15. The report emphasised the decline in global biodiversity, and stated that this is reflected in the UK, with the UK identified as one of the most nature-depleted countries in the world. The report stated that of the G7 countries, the UK has the lowest level of biodiversity remaining, and to reverse the trend of biodiversity loss, would require urgent transformative change.
- 3.16. The report welcomed Government policies aimed at improving the natural environment, such as the 25 Year Environment Plan, 'state of nature' target, Local Nature Recovery Strategies, biodiversity net gain for new developments and a Nature Recovery Network. However, the report stated that the policies do not represent the transformative change required to change the trend of biodiversity loss.
- 3.17. The report includes numerous recommendations to ensure Government policies can deliver change, through improvements to biodiversity monitoring, funding, policy implementation, economics and education.

An extraordinary challenge: Restoring 30 per cent of our land and sea by 2030 (2023)²²

3.18. This report by the Environment and Climate Change Committee covers the 30 by 30 target on both land and sea. The report stated that nature is in decline in the UK - 41% of species have decreased in abundance since 1970 and 15% of species are classified as threatened with extinction. A global 30 by 30 target was adopted at the UN Biodiversity Summit COP15 in December 2022, as part of a

²¹ <u>https://committees.parliament.uk/publications/6498/documents/70656/default/</u>

²² <u>https://committees.parliament.uk/publications/41074/documents/200340/default/</u>

Global Biodiversity Framework, and the Government joined this international commitment to protect 30% of land and sea for nature by 2030.

- 3.19. The extent of land in England that already meets the criteria for 30 by 30 is around 6.5%, whilst 23.5% of land, or over three million hectares, in England remains to be protected to meet the target. The report stated that Government is not on course to meet the 30 by 30 commitment, with urgent action required in order to meet it.
- 3.20. Protected sites are an important component of 30 by 30 as they protect nature, are a fundamental part of environmental recovery and can contribute towards halting the decline in biodiversity. However, the report raised that it is not just the extent of protected land that is important, but also the quality. The report found that threatened species in particular fare better in protected areas than the wider environment. But existing protected sites are often in a poor condition with no management plan for improvement. The report recommended that protected areas should have a management plan in place based on an up-to-date condition assessment that is regularly updated.

State of Nature (2023)23

- 3.21. The State of Nature report presents the trends in nature over the past 50 years and provides an objective assessment of the state of nature in the UK. The trends follow on from major changes to the UK's nature over previous centuries which have resulted in the UK being one of the most nature-depleted countries on Earth.
- 3.22. The report used two types of data:
 - Abundance data report the average change in abundance across species; and
 - Distribution data report the average change in distribution across species.
- 3.23. The UK abundance indicator for 753 terrestrial and freshwater species showed a decline in average abundance of 19% between 1970 and 2021 and a decline of 3% between 2010 to 2020 (illustrated in Figure 3.2). However, there is substantial variation among individual trends.

²³ <u>https://stateofnature.org.uk/wp-content/uploads/2023/09/TP25999-State-of-Nature-main-report_2023_FULL-DOC-v12.pdf</u>



Figure 3.2 – UK abundance indicator (State of Nature Partnership)

- 3.24. The report stated that one measure of success of conservation action is whether the population of priority species have stabilised or recovered. By 2021, the abundance of priority species in the UK had declined by 63% from its base-line value in 1970. Over this time, 19% of species showed a strong or weak increase and 58% showed a strong or weak decline.
- 3.25. When considering the change in species distribution across plants and lichens, the report found that between 1970 to 2019, vascular plants distribution decreased by 16%, bryophyte species distribution decreased by 19% and lichens, whilst initially declined, have increased this century by 15%.
- 3.26. When considering the distribution change in some animal groups, there was an average decrease in invertebrate species of 13% between 1970 and 2020 (illustrated in Figure 3.3), an average decrease of small mammals by 29% between 1970 and 2016 and a similar but not significant decrease of 15% in mid-sized mammals between 1970 and 2016 (illustrated in Figure 3.4).



Figure 3.3 - Change in average species distribution for terrestrial and freshwater invertebrates (State of Nature Partnership)



Figure 3.4 – Change in average species distribution for mammals (State of Nature Partnership)

Conclusions

3.27. Having reviewed a number of national documents, the evidence indicates that the UK's biodiversity is in a state of decline, with no significant improvements being

made. The evidence also suggests that Government's plans and policies will not be sufficient to halt the decline and bring about meaningful change.

3.28. The evidence indicates there is a national need for local planning authorities to take action through their planning policies to support the protection and enhancement of the environment and biodiversity. The situation is critical, and the Partnership believe the current position justifies a biodiversity net gain policy requirement above the minimum 10% required.

4. Local Biodiversity Evidence

4.1. The natural environment is a key concern for the Partnership, who wish to see biodiversity gains maximised in the Greater Nottingham Area. Research into the environment of Greater Nottingham has been undertaken to demonstrate that there is a local need which justifies the inclusion of a policy requiring the delivery of up to 20% biodiversity net gain in the Strategic Plan.

Nottinghamshire Biodiversity Action Plan²⁴

- 4.2. The Nottinghamshire Biodiversity Action Plan recognises that Nottinghamshire has a special character with a unique variety of species and habitats that it is rapidly losing. Of the national key habitats, the Plan identified fourteen that occur in Nottinghamshire, as well as several habitats that are important at a county level. The Plan aims to conserve and enhance Nottinghamshire's unique variety of wild species and natural habitats to contribute towards the conservation of biodiversity in the County.
- 4.3. The Plan sets out the threats to local species and habitats. Of particular relevance is the threats posed by the urban environment and the planning system. The threats include:
 - Loss of, and damage to, urban wildlife sites through development;
 - The loss of wildlife sites and agricultural land to development as rural areas become increasingly urbanised;
 - The decline in the wildlife value of green space, including parks and gardens, due to inappropriate management (particularly excessive tidiness) and the increasing use of chemicals;
 - The continuing loss of designated wildlife sites and other areas of high value for biodiversity to development;
 - The failure to take up opportunities for habitat creation arising from development schemes; and
 - The environmental consequences of development may not be accurately assessed. Natural systems are complex, and knowledge of how they function is limited, making it difficult to predict the long-term effects of any impact on them. Unless the possible effects of a proposed development are systematically assessed, the consequences for biodiversity may be underestimated. The cumulative effect of the gradual erosion of the County's biodiversity must also be considered.
- 4.4. The Plan identified actions to ensure habitats are maintained and, where necessary, enhanced, for species to survive and thrive in the County. The Plan is

²⁴ https://nottsbag.org.uk/lbap/lbap-introduction-and-sections-1-to-6/

an important document for demonstrating the state of nature in the County and the role that planning needs to play in reversing biodiversity loss. For example, the Plan identifies bats as a priority species in the County, and then details a specific action plan for bats, which includes proposed actions, such as "*Ensure that bats and their habitats are protected and promoted through appropriate local planning policy instruments*".

Sites of Special Scientific Interest (SSSIs)25

- 4.5. SSSIs are legally protected and selected because of their special features, such as their wildlife, geology or landform. They represent the best of England's nature. Landowners with SSSIs amongst their holdings must manage their land effectively and appropriately to conserve the special features of the SSSIs.
- 4.6. Natural England assess the condition of all SSSIs and categorise them into one of the following groups:
 - favourable habitats and features are in a healthy state and are being conserved by appropriate management;
 - unfavourable (recovering condition) if current management measures are sustained the site will recover over time;
 - unfavourable (no change) or unfavourable (declining condition) special features are not being conserved or are being lost, so without appropriate management the site will never reach a favourable or recovering condition; and
 - part destroyed or destroyed there has been fundamental damage, where special features have been permanently lost and favourable conditions cannot be achieved.

Natural England's objective is to achieve 'favourable condition' status for all SSSIs.

4.7. Natural England breaks down individual SSSIs into appropriate units, and then assesses the condition of each individual unit. Individual units within the same SSSI can receive different condition statuses. Analysis of Natural England's data on SSSIs has been undertaken based on these units.

SSSI National Targets

4.8. The Government has set national targets to improve the condition of SSSIs. Within the 25 Year Environment Plan, the Government committed to restoring 75% of

²⁵

https://designatedsites.naturalengland.org.uk/SiteList.aspx?siteName=&countyCode=33&responsiblePerson= &DesignationType=All

SSSIs to favourable condition by 2042. Within the Environment Improvement Plan, the Government set an interim target to encourage the delivery of the 25 Year Environment Plan target, requiring 50% of SSSIs to achieve favourable condition by 2028.

4.9. As can be seen in Figure 4.1 below, the SSSIs located in Nottinghamshire are not achieving either of these national targets, with only 23% of SSSI units being classified as in a favourable condition.



Figure 4.1 – condition of SSSI Units in Nottinghamshire (December 2023)

- 4.10. The majority of SSSIs within Nottinghamshire are in an unfavourable condition, and it is unlikely that within four years significant improvement will be made to achieve the interim national target of 50% of SSSIs achieving favourable condition within the County.
- 4.11. The condition of the SSSIs indicates the poor condition of the environment within Nottinghamshire, despite the legal protection afforded to SSSIs. The evidence raises concerns that Nottinghamshire's environment is declining in quality and cannot support the flora and fauna that make the County unique.

Comparison of SSSI condition in the East Midlands

4.12. The condition of Nottinghamshire's SSSI units has been compared across the five counties within the East Midlands, to understand whether Nottinghamshire is in a better, similar or worse situation regarding the condition of its SSSIs.

4.13. Appendix 1 contains an individual breakdown of the SSSI conditions for the five East Midlands Counties, and Figure 2 below compares the SSSI conditions between the counties. As discussed at paragraph 4.9, currently Nottinghamshire does not meet the national target of 75% of SSSIs achieving favourable conditions, nor does it meet the interim national target of 50% of SSSIs achieving favourable conditions. Figure 4.2 illustrates that none of the Counties are currently meeting the 75% target, and only one (Lincolnshire) is meeting the interim target of 50%. Unfavourable conditions for SSSIs are therefore prevalent across a majority of the East Midlands Counties.



Figure 4.2 - Comparison of SSSI unit condition in the East Midlands by County (December 2023)

- 4.14. When compared with its neighbouring Counties in the East Midlands, the evidence demonstrates that Nottinghamshire has the lowest percentage of SSSI units achieving favourable condition, with under a quarter of its SSSI units being assessed as favourable. This suggests that within Nottinghamshire the environment is in a particularly poor condition and cannot support the special features which define the SSSI designations.
- 4.15. Whilst Figure 4.2 shows that Nottinghamshire has the second highest percentage of SSSI units in an unfavourable (recovering) position, it also shows that Nottinghamshire has the second highest percentage of SSSI units in an unfavourable (no change/declining) position. This indicates that Nottinghamshire, compared to others East Midlands Counties, has one of the worst environmental conditions for SSSIs, with 23% of the SSSI units' special features not being conserved or the features are becoming lost.
- 4.16. This reiterates that the environmental conditions in Nottinghamshire are particularly poor in quality and could benefit from the introduction of a policy requiring up to 20% biodiversity net gain in the Greater Nottingham Area,

particularly as this could ensure the buffering and defragmentation of SSSIs by habitat creation on adjacent land through biodiversity net gain, which would help to improve the condition of the protected habitats.

Local Sites

- 4.17. Local Sites are non-statutory areas identified at a local level for their significant nature conservation value. They include both local wildlife sites (identified for significant biodiversity value) and local geological sites (identified for their significant geological value).
- 4.18. There are estimated to be more than 40,000 Local Sites in England, covering coastal, rural and urban situations. Although they do not have any statutory status, many are equal in quality to statutory SSSIs.
- 4.19. Local Site networks provide many opportunities in addition to conservation action to protect habitats and species. On a local level, these sites provide ecological services to their communities, including natural processes that maintain air, soil and water quality, as well as contributions towards well-being and quality of life.

Local Sites in positive conservation management²⁶

- 4.20. Local Authorities must submit to central Government data on Local Sites in positive conservation management. Whilst they are responsible for collating the data relating to Local Sites, Local Authorities are often not responsible for the management of the Local Sites.
- 4.21. Local Sites in positive conservation management are defined as those sites which are being managed in order to conserve their nature conservation interest. Assessing the extent of positive management can help to identify sites where positive management is lacking and will help to focus efforts ensuring Local Sites are managed and their nature conservation value is maintained or enhanced.
- 4.22. The data has been analysed and comparisons have been made between England, Nottingham Unitary Authority area and the county of Nottinghamshire. In some years, data has not been submitted to central Government by the Unitary Authority or County Council. For the years 2019/20 and 2020/21 the Department for Environment, Food and Rural Affairs confirmed that data did not need to be submitted due to the Covid-19 pandemic.
- 4.23. A comparison between the Unitary Authority areas and County Council areas in the East Midlands was attempted, but the availability of data was too inconsistent for conclusions to be made.

²⁶ <u>https://www.gov.uk/government/statistics/local-sites-in-positive-conservation-management--2/nature-conservation-local-sites-in-positive-conservation-management-in-england-2008-09-to-2021-22</u>



Figure 4.3 – Comparison between the percentage of Local Sites in positive management in England, Nottingham City and Nottinghamshire County

- 4.24. Figure 4.3 illustrates the percentage of Local Sites in England, Nottingham and Nottinghamshire that are under positive management. For five years, Nottingham has reported a higher percentage of local sites in positive management compared to England, and for another two years both Nottingham and England have reported the same percentage.
- 4.25. This demonstrates that Nottingham has a higher percentage of Local Sites that are positively managed when compared to the average in England. However, it should be noted that in five of its ten data submissions, Nottingham reported 50% or less of its Local Sites as being positively managed. This is a low figure and means a significant number of Local Sites in Nottingham are not receiving appropriate management to ensure suitable conservation action to protect and improve the Local Site habitats and species.
- 4.26. The comparison between Nottinghamshire and England is considerably different. Nottinghamshire has never reported a higher percentage of Local Sites under positive management when compared to England (although Nottinghamshire's last submission was before the Covid-19 pandemic). For Nottinghamshire, the data illustrates that the number of Local Sites in positive management is below the average of England and is consistently 30% or lower. Local Sites in Nottinghamshire are therefore at risk of losing their environmental value, whether that be their contributions made to biodiversity or geology. Whilst Nottingham is not in the same position, the percentage of Local Sites in positive management has historically been low, often below 50%.

4.27. Work needs to be done to improve the levels of positive management in Nottingham and Nottinghamshire to enhance the environmental quality of Local Sites to protect the habitats and species they provide a home for. This could be achieved through the implementation of a biodiversity net gain policy above the statutory 10%, which could enable the long term positive management of Local Sites in the Greater Nottingham Area, with a requirement above the statutory 10% increasing the opportunities to improve the management of Local Sites to meet or exceed the English average. A higher level of habitat creation though biodiversity net gain will be essential if the network of Local Sites is to be strengthened and individual degraded Local Sites can be buffered and reconnected, which will help to improve their overall condition.

Addressing Environmental Inequalities to enable Sustainable Growth²⁷

- 4.28. The Environment Agency produced a report to enable a better understanding of environmental inequality and climate risks in Nottinghamshire and Derbyshire, and how they can impact on the aspirations and prospects of achieving sustainable economic growth in the areas.
- 4.29. To do this, the Environment Agency developed environmental quality scorecards for the Nottinghamshire and Derbyshire Authorities to enable the comparison of environmental effectors as well as high level measures of liveability and productivity. The scorecards rank each Authority amongst the 326 English Authorities for overall environmental inequality, for each of the seven environmental quality themes, for flood risk exposure, for Indices of Multiple Deprivation (IMD), health and disability rankings, and for Gross Value Added (GVA) per capita. The seven environmental quality themes are:
 - Clear air
 - Exposure to chemicals
 - Breadth and Protection of Plants and Wildlife
 - Engagement with the Natural Environment
 - Minimising waste
 - Clean plentiful water
 - Climate change (water)

²⁷ <u>https://www.nottinghamshire.gov.uk/media/zatauwcm/adaptive-investment-report.pdf</u>

	Environmental overall	Clean Air	Exposure to chemicals	Plants & Wildlife	Engaging with the environment	Minimising waste	Clean plentiful water	Climate change (water)	Flood risk	DMI	health & disability	GVA Per head
Ashfield	112	172 -	44	- 152 -	- 148	-189 -	164	4	84	248	260	259
Broxtowe	138	200-	139 -	- 183 -	- 168 -	200-	91	18 -	221	109	- 130 -	261
Rushcliffe	174	219	220	295	229	78	89	32 -	251	8	33 -	233
Mansfield	179	171	159	240 -	37	255	243	20	63	271	285	313
Gedling	182	153	156	174	310	236	156	19	210	124	169	322
Newark & Sherwood	222	109	306	209	264	245	175	52	212	174	180	236
Bassetlaw	233	206	- 193 -	- 172 -	234	288	167	26	169	213	247	237
Nottingham	238	274	78 -	- 246 -	51 .	307	51	. 7	300	319	308 -	75
GOOD					А	VERAGE					P	OOR

Figure 4.4 – Scorecard for Nottinghamshire (Environment Agency)

- 4.30. As illustrated in figure 4.4, the overall environmental indicator provides a broad idea of the environmental quality in the local authority areas. Three of the four Greater Nottingham Authorities are scored average or worse when compared to the other English Authorities, suggesting that the quality of the environment in the Greater Nottingham Area is average or poor when compared to other Authorities in England.
- 4.31. The environmental quality theme 'Breadth and Protection of Plants and Wildlife' was informed by data regarding various environmental sites and the quality of the biodiversity within them, including areas such as: special areas of conservation, ancient woodland priority habitat inventory, priority river habitat and RSPB reserves. When looking specifically at this environmental quality theme, none of the four Greater Nottingham Authorities were considered 'good' when compared against all of the English Authorities. Both Broxtowe and Gedling were 'average' and Nottingham and Rushcliffe in particular were considered 'poor'. This suggests that the quality of plants and wildlife in the Greater Nottingham area is below average when compared to other Authorities in England.
- 4.32. The overall environmental indicator and the specific 'Breadth and Protection of Plants and Wildlife' environmental quality theme evidence that the environment of the Greater Nottingham Area is average or worse when compared to the other English Authorities, suggesting that the biodiversity in Greater Nottingham is

particularly poor in quality and would benefit from a biodiversity net gain policy above the statutory requirement of 10%.

Access to Nature

- 4.33. People's lives are shortened and worsened by distance from a healthy environment. A chronic lack of nature in people's lives is a catalyst for ill-health and low productivity; and it can be considered a symptom of the worsening state of nature. This is acknowledged in the Environment Improvement Plan, which recognised that when people can connect to nature, it is good for their physical and mental health. Yet, the Environment Improvement Plan states that 38% of people do not have access to green or blue spaces within 15 minutes' walk of their home. To combat this, within the Environment Improvement Plan the Government committed to ensuring that everyone can reach a green or blue space within 15 minutes of their home as part of the Access for All programme.
- 4.34. Friends of the Earth²⁸ undertook research into access to green space in England, bringing together data on public green space, garden space, and open access land such as mountain, moor, heath, down or common land, and combining it with neighbourhood population data. Their research found that in the Greater Nottingham Area, 8% of residents in Rushcliffe and Broxtowe and 12% of residents in Gedling were found to be deprived of access to green space. However, in Nottingham City 50% of residents were found to be deprived of access to green space. Friends of the Earth identified Nottingham City as one of the top 50 priority Local Authorities that require the most investment towards improved access to green space as it has one of the greatest numbers of green space deprived neighbourhoods.
- 4.35. Similarly, Nottinghamshire Wildlife Trust recognise the pressures on nature in urban environments and are encouraging a nature first approach to support the recovery of wildlife found in urban areas to secure a greener recovery for urban landscapes and the people who live in them. They recognise that wildlife in urban environments is in decline, with species that were once common such as the hedgehog and water vole, being threatened with extinction from Great Britain.
- 4.36. As part of their report 'Transforming our towns and city for people and nature' ²⁹ Nottinghamshire Wildlife Trust mapped areas of publicly accessible green and blue spaces (per 1,000 people) within Nottinghamshire. Figure 4.5 below illustrates the areas that have high levels (green) and low levels (red) of publicly accessible green and blue spaces in the Greater Nottingham Area (area outlined in red).

 ²⁸ <u>https://policy.friendsoftheearth.uk/insight/englands-green-space-gap?ga=2.177264101.135979643.1712563392-1457551052.1708508860</u>
 ²⁹ <u>https://www.nottinghamshirewildlife.org/sites/default/files/2022-</u>06/Transforming%20our%20towns%20and%20city%20for%20people%20and%20nature 1.pdf



Figure 4.5 - Access to green and blue space in the Greater Nottingham Area (per 1,000 people) (Nottinghamshire Wildlife Trust)

- 4.37. The map demonstrates that within Nottingham City, accessible green and blue spaces are scarce, and there are significantly less areas of accessible green and blue spaces in Nottingham City when compared to the other Greater Nottingham Authorities. This correlates with the analysis undertaken by Friends of the Earth. Additionally, the map shows that the suburbs within Broxtowe, Gedling and Rushcliffe that adjoin Nottingham City likewise have limited areas of accessible green and blue spaces.
- 4.38. Overall, Nottingham City and its suburbs have significantly low areas of accessible green and blue spaces, which can create an environment for poor mental and physical health. Poor health as a result of limited areas of green and blue space compounds the problems faced by residents of Nottingham City and its suburbs, as these areas are some of the most deprived in Greater Nottingham.
- 4.39. The evidence demonstrates a significant need for improved levels of biodiversity in the urban areas of Greater Nottingham, particularly within Nottingham City, to improve accessibility to green and blue spaces in line with the Government commitment in the Environment Improvement Plan. A policy requiring the delivery of up to 20% biodiversity net gain would significantly aid the improvement and delivery of green and blue spaces in the Greater Nottingham Area, particularly within Nottingham City and its suburbs where these areas are scarce.

Natural England Natural Capital Atlases

4.40. Natural England have developed atlases for each County or City region, which provide a natural capital evidence base that takes an in depth look at the distribution and condition of the natural assets in each location. Using the Natural England Natural Capital Indicators, the atlases illustrate through maps and tables the state of the natural capital in the areas and highlights how natural capital provides benefits to people.

Nottinghamshire Edition³⁰

- 4.41. The Nottinghamshire Atlas maps a series of indicators regarding the quantity, quality and location of natural assets in the County and the ecosystem services they support. This Strategy focuses on the quality of the natural assets in Nottinghamshire, which indicate where there could be areas of environmental degradation in Nottinghamshire, which an increased biodiversity net gain requirement could improve through additional enhancements and improvements.
- 4.42. Figure 4.6 shows the chemical and nutrient quality of Nottinghamshire's water bodies. The water bodies in Nottinghamshire have all achieved a WFD chemical status of good, bar one which achieved a WFD chemical status of fail. However, the map is based on the WFD 2016. In the WFD 2019 assessment of water bodies chemical status, the Environment Agency (who are the responsible body) stated that they have changed their assessment methods and increased their evidence base. These changes have led to the Environment Agency determining that all water bodies in England now have a chemical status of fail³¹. Additionally, the map of the nutrient status of water bodies in Nottinghamshire indicates that a majority achieve a moderate, poor or bad WFD status. This evidence suggests that the quality of water bodies in Nottinghamshire is failing to meet good standards with regards to their chemical and nutrient status and indicates that improvements are needed to recover their quality. A biodiversity net gain requirement above the statutory 10% can deliver additional benefits to the environment which can be used to secure improvements to Nottinghamshire's water bodies.

³⁰ https://publications.naturalengland.org.uk/file/4617557052227584

³¹ https://environment.data.gov.uk/catchment-planning/help/usage#chemical-status



Figure 4.6 – Chemical and Nutrient Status of Water Bodies (Natural England)

- 4.43. Figure 4.7 illustrates the naturalness of the biological assemblage in Nottinghamshire. The species composition of habitats influences the habitats' ability to provide ecosystem services and can subsequently impact the benefits received by society. The composition of plant and animal species present within a habitat reflects the degree of naturalness of that habitat.
- 4.44. The atlas highlights two key ecosystem services that can be assessed using the naturalness of biological assemblage indicator. Firstly, water quality, which underpins water supply, sustainable ecosystems, cultural services and health benefits, and secondly, biodiversity, which underpins all other services such as recreation, tourism, research and education, food and aquaculture.
- 4.45. In figure 4.7, the lighter hexagons indicate a low amount, and the darker hexagons indicate a higher amount of naturalness of biological assemblage. White hexagons have a value of zero. The map in figure 4.7 is light in colour, particularly in the west of Nottinghamshire in areas of Broxtowe, Rushcliffe and around Nottingham City, with limited darker hexagons across the County. This demonstrates poor naturalness of biological assemblage across Nottinghamshire, particularly in the west, meaning there is a poor composition of plant and animal species in the County.
- 4.46. Subsequently, this negatively impacts the two key ecosystem services water quality and biodiversity. As stated at paragraph 4.43, biodiversity underpins all other services, suggesting that the poor naturalness of biodiversity in

Nottinghamshire will reduce the benefits that nature can bring to Nottinghamshire residents.

4.47. A biodiversity net gain requirement above the statutory 10% would enable the delivery of additional improvements to the biodiversity of Nottinghamshire to provide habitats that support a diverse species composition and benefit the biological assemblage.





The evidence from Natural England's Nottinghamshire Natural Capital Atlas 4.48. suggests that the quality of natural capital in the County is poor. Water bodies are failing to meet a good chemical and nutrient WFD status and there is a low amount naturalness biological assemblage which both of of indicate that Nottinghamshire's environment is of a poor quality and does not provide habitats for biodiversity to thrive. A biodiversity net gain requirement of up to 20% would support the Councils efforts to improve the poor quality of the environment in Nottinghamshire.

Conclusions

4.49. The evidence demonstrates multiple reasons why the Greater Nottingham Area has a justification for a biodiversity net gain policy that requests a percentage above the statutory requirement of 10%. Principally, the condition of SSSIs in Nottinghamshire is poor. The SSSIs fail to meet the Government's targets to achieve favourable conditions, and when compared against the other Counties in the East Midlands, a larger percentage of Nottinghamshire's SSSIs are in unfavourable conditions. Similarly, the percentage of Local Sites in positive management in Nottinghamshire is low and they are lower than the average in England. Whilst a larger percentage of Local Sites in Nottingham City are in positive management, historically the percentage has been low, often below 50%.

- 4.50. Both pieces of evidence suggest that sites in Nottinghamshire that have been designated for their environmental value are in a poor condition and need support in order to safeguard the habitats and species they were designated to protect. This is supported by the report produced by the Environment Agency 'Addressing Environmental Inequalities to enable Sustainable Growth', which confirmed that the Greater Nottingham Authorities were either average or poor when compared against all English Authorities with regards to the environmental quality theme 'Breadth and Protection of Plants and Wildlife', reinforcing that biodiversity in Greater Nottingham is particularly poor in quality and would benefit from increased biodiversity net gain policy support.
- 4.51. The evidence produced by Friends of the Earth and Nottinghamshire Wildlife Trust demonstrated that Nottingham City and its suburbs have limited accessible blue and green spaces for residents. This is despite the Government committing to all people having accessible blue and green spaces within 15 minutes of their home. Limited access can impact upon resident's health, but also implies that blue and green spaces in the City and its suburbs are scarce, with more spaces needed to support the Government's commitments.
- 4.52. The Natural England Natural Capital Atlas for Nottinghamshire demonstrates that the quality of natural capital in the County is poor. Water bodies are failing to meet a good chemical and nutrient WFD standard and there is a low amount of naturalness of biological assemblage which both indicate that Nottinghamshire's environment is of a poor quality and does not offer habitats for biodiversity to thrive.
- 4.53. The local evidence provided in this chapter demonstrates that the environment in the Greater Nottingham Area is of particularly poor quality when compared to other Counties or Local Authorities, and that there is limited accessibility to blue and green spaces, particularly in Nottingham City and its suburbs. The Partnership are pursuing a policy requiring biodiversity net gain within the Strategic Plan in order to improve and increase the natural environment in the Greater Nottingham Area. They believe that the evidence in this chapter demonstrates a local need that justifies a policy requirement of up to 20% biodiversity net gain to help bolster the environment of Greater Nottingham beyond what could be achieved through the minimum statutory requirement of 10%.

5. Local Opportunities for Biodiversity Net Gain

- 5.1. The biodiversity net gain planning practice guidance states that in order to justify a policy that seeks a higher percentage than the statutory objective of 10% biodiversity net gain, plan makers must provide evidence of local opportunities to accommodate the higher percentage.
- 5.2. This Strategy provides evidence to justify the Partnership including a policy within the Strategic Plan that requires the delivery of up to 20% biodiversity net gain. It is expected that developers will deliver biodiversity net gain in accordance with the hierarchy set out in paragraph 1.7 of this Strategy and will therefore seek to deliver biodiversity net gain on site. Where that is not possible, it is expected that developers will then seek to deliver biodiversity gains off-site. Off-site biodiversity gains can be delivered on land owned by the developer that is located outside of the development site, or the developer can purchase off-site biodiversity units on the private market. As a last resort, developers can purchase biodiversity credits when off-site biodiversity gains cannot be secured.
- 5.3. The Partnership therefore expects that where a developer does not own land to deliver off-site biodiversity gains, the private market will provide local opportunities for developers to purchase land to deliver off-site biodiversity gains. However, biodiversity net gain has been in force since February 2024, and the private market has not had time to become properly established. As demand increases, it is anticipated that the private market will improve and provide sufficient local opportunities to aid the delivery of up to 20% biodiversity net gain within the Greater Nottingham Area.
- 5.4. In addition to this, work has been undertaken to support the private market in identifying local opportunities to deliver off-site biodiversity net gains in the Greater Nottingham Area, including biodiversity opportunity mapping for Broxtowe, Gedling and Rushcliffe and separately for Nottingham City, a call for sites for potential off-site biodiversity gain sites in the Greater Nottingham Area and research undertaken by the Councils.

Biodiversity Opportunity Mapping³² (Broxtowe, Rushcliffe and Gedling Borough Councils)

5.5. The Nottinghamshire Biodiversity Action Group has produced Biodiversity Opportunity Maps for all of Nottinghamshire, including the local authority areas of Broxtowe, Gedling and Rushcliffe. The maps created enable a better understanding of the current distribution of biodiversity within the authority areas and help to identify the most effective way to re-create habitat networks at a landscape-scale. Habitat network strength maps have been prepared which can be used to demonstrate where new habitat creation would add most value to link habitats and strengthen the network.

³² <u>https://nottsbag.org.uk/publications/</u>

- 5.6. The Biodiversity Action Group drew conclusions from the maps created regarding five matters:
 - Priority habitats
 - Focal areas (an area within which there are concentrations of existing habitats and opportunities)
 - Wider landscape
 - Conflicts
 - Opportunities for species
- 5.7. The biodiversity opportunity mapping underpins work on biodiversity net gain as it highlights local opportunities in Broxtowe, Gedling and Rushcliffe for developers to direct resources towards in order for them to best optimise biodiversity net gain.

Broxtowe Biodiversity Opportunity Mapping Report

- 5.8. When looking at priority habitats, the biodiversity opportunity maps for Broxtowe indicated significant opportunities for wetland, predominantly within the Erewash Valley where potential was identified for extensive enhancement, enlargement, creation and reconnection of wetland habitats along the River Erewash and its tributaries, with further opportunities along the River Trent.
- 5.9. The mapping also identified substantial concentrations of existing grasslands between Strelley, Cossall and Trowell, an area of land to the south of the A610 south of Kimberley and Eastwood, and around the upper reaches of the Giltbrook, which provide opportunities to improve, extend and link the grassland habitats.
- 5.10. Woodland, acid grassland and heathland were identified as limited in distribution in Broxtowe. Where concentrations of woodland occurred, the report identified opportunities to create, enhance and enlarge the woodlands to improve connectivity. However, for acid grassland and heathland, the maps identified limited opportunities as the habitats require a specific substrate to grow. However, the limited opportunities to improve acid grassland and heathland underlines the local importance of these two habitats.
- 5.11. Six focal areas in Broxtowe were identified from the biodiversity opportunity mapping. The focal areas indicate where existing habitats and associated opportunities are concentrated in the short and long term to enhance and expand the habitats to buffer and connect them to create a stronger habitat network. The focal areas are listed below:
 - Erewash Valley (along its whole length), its main tributaries and canals, and the River Trent
 - The Bramcote Ridge through from Nottingham City through to and including Stapleford Wood

- The area covering Strelley across to Cossall and Trowell
- The Giltbrook corridor between Moorgreen and Watnall
- The Beauvale area, running along the north-eastern boundary of Broxtowe
- A corridor running to the south of the A610 between the River Erewash at Kimberley and Eastwood
- 5.12. As well as the focal areas, the mapping identified a limited number of smaller habitat cluster areas scattered throughout Broxtowe. However, there were also large parts of Broxtowe where there were no known opportunities identified by the maps. The report stated that whilst no opportunities were identified, opportunities do still exist in these areas, for example the improvement of hedgerow networks and shelterbelts can be used to improve linkages between woodlands; grassland strips around fields and along roads can help link up isolated grassland sites; and the improved management of ditches and other watercourses can link up wetland sites. It was specifically noted that the River Erewash is a key feature in Broxtowe which can be used to improve connectivity along the whole Erewash Valley, with other rivers and streams likely to provide similar opportunities.
- 5.13. Whilst the biodiversity opportunity mapping focuses on habitats, the report also recognised species which are likely to benefit from the opportunities identified in the report. The species include:
 - Mammals, including bats, water vole and harvest mouse;
 - Herpetofauna, including common frog, common toad and grass snake;
 - Fish, including brown trout, salmon, bullhead and spined loach;
 - Lepidoptera, including habitat-specialist butterflies and moths;
 - Birds, such as breeding waders and wintering wildfowl (using wet grassland), reedbed specialists (such as bittern), and scrub species such as willow tit and turtle dove; and
 - Invertebrates, such as white-clawed crayfish and dingy skipper.
- 5.14. In terms of conflicts, the report recognised that some areas of Broxtowe will be appropriate for the creation of more than one type of habitat. Where this occurs, the report recommends that situations are dealt with on a case-by-case basis with specialist ecological input to reach an appropriate solution.

Rushcliffe Biodiversity Opportunity Mapping Report

5.15. The mapping undertaken for Rushcliffe indicated that for priority habitats, there are a number of opportunities for wetland habitats, predominantly within the floodplain of the Trent Valley, Soar Valley, Fairham Brook and the Devon/Smite river catchments and their tributaries. This potential has been identified for enhancement, enlargement, creation and reconnection of wetland habitats along

these river corridors. The mapping identified that there are good opportunities to improve, extend and link grassland habitats in the West Leake Hills, the Gotham Hills, between Stanford and East Leake, south of Keyworth and in the Soar Valley by Sutton Bonington. Woodland within Rushcliffe is limited, but is concentrated around Gotham and West Leake Hills, along the ridgeline between East Leake and Bunny and in Cotgrave Forest. In these locations there are opportunities to create areas of new woodland to improve connectivity and enlarge the existing woodlands.

- 5.16. Nine focal areas in Rushcliffe were identified from the biodiversity opportunity mapping. The focal areas indicate where existing habitats and associated opportunities are concentrated in the short and long term to enhance and expand the habitats to buffer and connect them to create a stronger habitat network. The focal areas are listed below:
 - Cotgrave Forest
 - East Leake/Stanford Hall
 - Fairham Brook
 - Gotham Hill, West Leake to Bunny ridgeline
 - River Smite Corridor
 - Soar Valley
 - Rushcliffe pondscape
 - Trent Valley (Lady Bay to Stoke Bardolph)
 - Trent Valley (Wilford to Thrumpton)
- 5.17. As well as the focal areas, the opportunity mapping identified a limited number of smaller habitat cluster areas scattered throughout the Borough, as well as large parts of the Borough where there are no known opportunities. However, in these areas, the report stated that opportunities do still exist. Improved hedgerow networks and shelterbelts can be used to improve linkages between woodlands; grassland strips around fields, alongside ditches and roads can help link up isolated grassland sites, and the improved management of ditches, including the creation of buffer strips alongside streams and water courses can serve the dual purpose of linking up wetland sites as well as reducing diffuse pollution. The report identified an existing network of live and disused railway lines which offer specific opportunities in Rushcliffe for improving the connectivity between habitats. The opportunity mapping also recognised certain rivers such as the Fairham Brook, River Soar, River Smite, and River Trent as key features which can be used to improve habitat connectivity in east Rushcliffe.
- 5.18. Whilst the biodiversity opportunity mapping focuses on habitats, the report also recognised species which are likely to benefit from the opportunities identified in the report. The species include:

- Mammals, including bats, water vole, otter and harvest mouse;
- Herpetofauna, including great crested newt, common frog, common toad and grass snake;
- Fish, including brown trout, salmon, bullhead and spined loach;
- Lepidoptera, including habitat-specialist butterflies (grizzled skipper and green hairstreak) and moths; and
- Woodland and wetland birds.
- 5.19. In terms of conflicts, the report recognised that some areas of Rushcliffe will be appropriate for the creation of more than one type of habitat. Where this occurs, the report recommends that situations are dealt with on a case-by-case basis with specialist ecological input to reach an appropriate solution.

Gedling Biodiversity Opportunity Mapping Report

- 5.20. The biodiversity opportunity mapping for Gedling indicated that the Borough is an important area for biodiversity as it supports a diverse range of habitat types. Focusing on priority habitats, opportunities for woodland are widespread across the Borough, with the greatest concentrations of existing woodland in the north. Opportunities in the north have been identified to enhance the existing areas of broadleaf woodland and buffer these where possible. There are also many opportunities identified to create better connections between existing woodland patches. In the south of the Borough, the existing woodland resource is much less widespread and greatly fragmented. The mapping identified opportunities to improve woodland connectivity by creating new woodland in the south to create links between some of the remaining areas of fragmented woodland. However, the report suggested that links between woodland could also be enhanced through more innovative measures such as the creation/restoration of related habitats such as parkland, orchards and hedgerows.
- 5.21. Acid grassland and heathland habitat are limited to the northern half of Gedling due to the influence of the underlying geology (Sherwood Sandstone). As a result, all opportunities are restricted to the north with clusters of opportunities identified around Bestwood, Calverton, Newstead and Ravenshead. Most opportunities identified on the mapping recognise the best locations to increase acid grassland and heathland and where possible do this in locations that link existing heath and acid grassland habitat patches. In the north of the Borough, gorse/whin heaths are a characteristic feature, offering an important resource. Many gorse/whin heaths have developed on ex-colliery land and opportunities exist to retain and expand this habitat. In addition, several post-industrial sites have developed important areas of lichen heath.
- 5.22. Grassland opportunities tend to be spread across the Borough, reflecting the fragmented nature of the existing grassland. There are clusters of existing

grassland habitat in the River Leen catchment and in areas surrounding Lambley and Burton Joyce, presenting opportunities to maintain and reconnect. There are also good, localised patches of grassland located at the four main ex-colliery sites; Bestwood, Calverton, Gedling and Newstead. The Trent valley provides opportunities to both enhance and create new areas of grassland habitat.

- 5.23. The wetland opportunities identified as part of the mapping are associated with the main river catchments within the Borough. These include the short section of the River Trent (between Gunthorpe and Netherfield), the River Leen (including the Daybrook), Cocker Beck, Dover Beck, Rainworth Water and the Ouse Dyke. There are also areas of wetland associated with some areas of restored or previously worked land within which there may be the potential to build on existing pond/wetland networks that could be enhanced through the creation of localised pondscapes.
- 5.24. Four focal areas in Gedling were identified from the biodiversity opportunity mapping. The focal areas indicate where existing habitats and associated opportunities are concentrated in the short and long term to enhance and expand the habitats to buffer and connect them to create a stronger habitat network. The focal areas are listed below:
 - Leen Catchment throughout the north-west of Gedling Borough from Newstead (North) to Bestwood (South) and from Hucknall (West) to the A60 (East)
 - Sherwood South centred around Calverton, Blidworth and Lindhurst
 - Burton Joyce/Lambley and Cocker Beck
 - Trent Valley (Lady Bay to Gunthorpe)
- 5.25. The opportunity mapping additionally identified many smaller habitat clusters scattered throughout Gedling, as well as areas where there are no opportunities. However, in these areas the report stated that opportunities do exist, such as through improved hedgerow networks and shelterbelts can be used to improve linkages between woodlands; improving areas of commercial forestry through the creation of better links between blocks of existing broad-leaved woodland or glades; grassland strips around fields and along road verges can help link up isolated grassland sites; and the improved management of ditches and other watercourses can link up wetlands. The opportunity mapping specifically identified the River Valleys and their associated streams and ditches as key features within the landscape that can be used to improve connectivity throughout the whole of the Borough.
- 5.26. Whilst the biodiversity opportunity mapping focuses on habitats, the report also recognised species which are likely to benefit from the opportunities identified in the report. The species include:

- Birds, such as woodlark, nightjar and tree pipit. Breeding waders and wintering wildfowl (using wet grassland), and scrub species such as willow tit, turtle dove and grasshopper warbler;
- Mammals, including bats, water vole, water shrew and harvest mouse;
- Herpetofauna, including common frog, common toad, slow worm, common lizard and grass snake;
- Invertebrates, including white-clawed crayfish;
- Fish, including brown trout, bullhead and brook lamprey;
- Invertebrates Lepidoptera, including habitat-specialist butterflies and moths;
- Plants, including heathland and calcareous grassland specialists; and
- Fungi and lichens.
- 5.27. In terms of conflicts, the report recognised that some areas of Gedling will be appropriate for the creation of more than one type of habitat. Where this occurs, the report recommends that situations are dealt with on a case-by-case basis with specialist ecological input to reach an appropriate solution. Mature trees in the landscape provide an important resource for wildlife. The management of existing sites should consider the importance of mature/veteran trees and any newly created habitat should include plans to create veteran trees for the future.
- 5.28. A variety of invasive non-native species are known to be present within Gedling, however the report stated that it is not the purpose of the opportunity mapping to deal with the detail of preventing the spread and controlling the distribution of these species. The report assumed that work to control these species is undertaken at a landscape scale and where feasible, projects that seek to enhance the biodiversity of an area should also look to include control and eradication programmes for invasive non-native species that are present within these areas.

Biodiversity Opportunity Mapping (Nottingham City Council)33

- 5.29. Nottingham City commissioned Ecosulis to produce a report and GIS modelling of biodiversity opportunity within the City of Nottingham. The report details the technical methods for the GIS modelling and presents the results of the work, providing guidance on how the results may be interpreted.
- 5.30. Initial opportunities have been identified through a review of the modelled ecological network outputs. This review was undertaken during a workshop held with local specialists and stakeholders in March 2022. Opportunity identification was supplemented using secondary data that identifies both additional biodiversity

³³ https://www.nottinghaminsight.org.uk/Document-Library/Document-Library/63691

opportunities and constraints that restrict acting on some of the opportunities. The mapping identified four main opportunities:

- Core habitat expansion
- Intersection of urban networks and improved grassland
- Intersection with calcareous/acid geology and grassland
- Culvert daylighting opportunities
- 5.31. The mapping showed widespread opportunities to expand existing core habitats across all habitat networks if some natural spaces and gardens were managed to support greater biodiversity. The model outputs showed that natural surfaces offer the greatest opportunities, with the spatial distribution of those opportunities aligning closely with the distribution of each habitat group across the city. Wetland habitat expansion opportunities remain closely tied to the river networks whilst opportunities for grassland and woodland habitat expansion are spread throughout suburban Nottingham with more limited opportunities closer to the city centre where urban land uses dominate.
- 5.32. The mapping indicated that generally, opportunities adjoining core heathland and grassland habitats tended to be larger than those adjacent to core woodland and wetland habitats, yet there are many more opportunities for woodland expansion in grassland areas compared to the other opportunity habitat types. This is likely a result of the greater coverage of core woodland habitats across the city giving more opportunities for connection relative to other network types, particularly wetland habitats.
- 5.33. The mapping indicated that most culvert daylighting opportunities are concentrated in the north of the city. Specific opportunities are present in Broxtowe Country Park, east of Bulwell Cemetery, and in green space between Phoenix Park and the River Leen. It may only be a small sub-set of these locations at which culvert daylighting is feasible once a more detailed assessment is carried out.
- 5.34. The report stated that a final biodiversity opportunity mapping stage was carried out to identify which of the previously mapped opportunities fall upon certain types of land owned by Nottingham City Council, and therefore represent opportunities to enhance networks which may be more accessible in the short-term. Four types of land owned by Nottingham City Council were mapped, and included: education, housing, other and parks.
- 5.35. The mapping showed opportunities within the 'Housing' category, which is a reflection of the fact that these ownership parcels tend to be much smaller in area than 'Parks' and 'Education' property. The distribution of these opportunities broadly reflects the distribution of the modelled local networks, indicating that biodiversity opportunities on Nottingham City Council property are present throughout the city.

Call for Sites

- 5.36. Via East Midlands, commissioned by Nottinghamshire County Council, has undertaken a call for sites (see Appendix 2) to gather information on potential offsite biodiversity gain sites for delivery within Nottinghamshire and bordering districts.
- 5.37. The aim of the call for sites was to collate a free to join database of registered, upcoming and potential off-site biodiversity gain sites and/or biodiversity unit providers. The project is in the early stages of development.
- 5.38. When launched, the database will assist Local Planning Authorities, including those within the Partnership area, to identify potential off-site biodiversity net gain providers in the local area, which then can be informed to developers who require sites to deliver off-site biodiversity gains. The aim is for the database to be updated at intervals to find future opportunities as new landowners come forward.

Partnership Local Opportunities

- 5.39. The Partnership have looked into how they can aid the provision of local opportunities. Broxtowe have limited knowledge on local opportunities, given the early stage of the Local Nature Recovery Strategy and the recent introduction of biodiversity net gain. However, they do note that there is open land in the Borough that could be available to provide local opportunities for off-site biodiversity gains. Broxtowe are also producing an updated Blue and Green Infrastructure Strategy which will include identifying potential local opportunities for biodiversity gains. Similarly, Gedling has limited knowledge, but has a list of potential sites to be included as part of the Local Nature Recovery Strategy that could dual as appropriate opportunities for off-site biodiversity gains. Rushcliffe recognise they are the largest Local Planning Authority within the Partnership area, and are predominantly rural in nature, so anticipate there being more opportunities within the Borough compared to Broxtowe, Gedling and Nottingham City. Rushcliffe is in early discussions with a number of potential providers to secure the delivery of local off-site biodiversity units.
- 5.40. Nottingham City has commissioned a study to assess the economic feasibility of the City Council using its landholdings to become a habitat bank. The main aims were to investigate the potential ecological value of sites owned by Nottingham City Council and the uplift they could provide in terms of biodiversity units. This information, along with the financial predictions of maintenance, was used to assess the economic feasibility over the lifetime of a potential habitat bank. Early conclusions suggested that the production of a large scale habitat bank could be a viable project, however there is a lot of upfront work which would be required to make the project possible which could take a number of years to achieve.

Conclusions

5.41. As biodiversity net gain is a relatively new requirement, offsite mechanisms to deliver it locally are at an early stage of development. Achieving 20% biodiversity net gain is likely to only possible if provided on site. However, in due course it is anticipated that the private market will deliver sufficient local opportunities for offsite biodiversity net gain. Work by the Partnership, Via East Midlands and the biodiversity opportunity mapping can assist the private market in ensuring there are sufficient local opportunities for off-site biodiversity net gain to enable the delivery of up to 20% biodiversity net gain in the Greater Nottingham Area.

6. Viability

- 6.1. The planning practice guidance requires the impacts on viability for development be understood in order to justify a biodiversity net gain requirement higher than the statutory 10%.
- 6.2. The Strategic Plan Viability Assessment tested the cumulative impact of the emerging Strategic Plan policy requirements. This tested the requirement for a 10% net increase in biodiversity, which would be managed for at least 30 years. The Government estimates that this will impact direct development costs, which is applied in the viability testing. The estimates of costs are based on a Government Impact Assessment³⁴ for Scenario 3, off-site biodiversity credits (the most expensive of the three tested scenarios).
 - Greenfield: £1,000 per unit; and
 - Brownfield: £450 per unit.
- 6.3. The Viability Assessment also tested the requirement for a 20% net increase in biodiversity, which would be managed for at least 30 years. The Government Impact Assessment analysed the impact of increasing the level of requirement to 20%, and estimated an increase costs to developers of 19% more than the cost for meeting 10% biodiversity net gain. The tested development costs for 20% biodiversity net gain are estimated to cost as follows on the already included 10% biodiversity net gain:
 - Greenfield: £200 per unit; and
 - Brownfield: £100 per unit.
- 6.4. For non-residential development, the Government Impact Assessment estimated the cost of meeting the national requirement of 10% biodiversity net gain to be £15,000 per ha pro-rata. An approximate additional cost of £3,000 per ha was therefore applied within the viability testing to take account of a policy requirement of 20% biodiversity net gain.
- 6.5. The Viability Assessment concluded that residential development in the higher value areas of Greater Nottingham are likely to have headroom for additional site mitigation including the delivery of 20% biodiversity net gain. However, residential development in the lower value areas of Greater Nottingham were found to have little headroom for any other site mitigation or policy requirements such as 20% biodiversity net gain. Residential flatted developments were found to struggle to remain viable when including standard policy and affordable housing requirements, although it was recognised that this will mainly impact Nottingham City.
- 6.6. Older persons accommodation was found to be largely unviable with any affordable housing requirement across most of the Greater Nottingham area, and therefore no ability to accommodate additional policy requirements. Retirement homes were found to have a healthy headroom within the higher values area in Nottingham City, where 20% affordable housing would be achievable, and in

³⁴ https://www.gov.uk/government/consultations/biodiversity-net-gain-updating-planning-requirements

Broxtowe and Rushcliffe, where the national minimum of 10% affordable housing was found viable with some headroom for meeting a requirement for 20% biodiversity net gain.

- 6.7. Student accommodation in Nottingham City were found to be viable with significant residual headroom for meeting other mitigation and policy requirements, including meeting a requirement for 20% biodiversity net gain.
- 6.8. The Viability Assessment found that for non-residential uses the results were mixed. The smaller industrial, large strategic warehousing, convenience retail and retail comparison warehouses were all likely to be viable. However, other uses, such as offices and small comparison retail stores were not considered viable, at least not through speculative developments under current market conditions.
- 6.9. Overall, the Viability Assessment demonstrated mixed results for residential and non-residential uses when including a policy requirement of 20% biodiversity net gain. Following these results, the Partnership have decided that Rushcliffe would pursue up to a 20% biodiversity net gain requirement as they had the most headroom to accommodate the additional requirement, along with other factors as set out in the conclusions. Broxtowe, Gedling and Nottingham City will apply the statutory 10% biodiversity net gain requirement so as to not comprise the viability of future development sites coming forward. However, this will be revisited as part of the Partnership's subsequent Local Plans.

7. Conclusions

- 7.1. The Partnership wish to see biodiversity gains maximised in the Greater Nottingham Area, which has led to the exploration of a policy requirement above the statutory 10% biodiversity net gain. The Publication version of the Strategic Plan recognises the need for greater biodiversity to accompany future development, and this is just as vital where housing delivery is incremental as opposed to larger sites.
- 7.2. The evidence presented in this Strategy demonstrates that the Greater Nottingham Area is disproportionately nature-depleted compared to national data, and so it is necessary that more biodiversity net gain should be delivered in this area, both to meet national nature targets but also to achieve social equity for local residents through the health and wellbeing benefits from access to nature.
- 7.3. It is expected that local opportunities to accommodate for a higher biodiversity net gain requirement off-site would be met by the private market. However, Chapter 5 provides additional information that demonstrates the ways in which the private market will be assisted to ensure there are sufficient local opportunities for off-site biodiversity net gain. It was recognised that Rushcliffe is the largest Local Planning Authority within the Partnership area, and being rural by nature, is likely to have increased local opportunities compared to Broxtowe, Gedling and Nottingham City.
- 7.4. The Strategic Plan Viability Assessment demonstrated mixed results for residential and non-residential uses when including a policy requirement of 20% biodiversity net gain. Out of the four Local Planning Authorities that make up the Partnership, the Viability Assessment demonstrated that Rushcliffe had the most headroom to accommodate the increased requirement of 20% biodiversity net gain.
- 7.5. The Partnership have considered the results of the local evidence, local opportunities and the viability assessment and have concluded that Rushcliffe will pursue up to a 20% biodiversity net gain requirement as they have the most headroom and the potential for more local opportunities to accommodate the increased requirement of 20%. Broxtowe, Gedling and Nottingham City will apply a statutory 10% biodiversity net gain requirement so as to not comprise the viability of future development sites coming forward. This decision may be revisited as part of the Partnership's subsequent Local Plans.

8. Appendix 1 – SSSI conditions in the East Midlands

8.1. Nottinghamshire



8.2. Derbyshire



* A minimal amount of SSSI units were identified as partially destroyed, destroyed or not recorded, so do not appear when numbers are rounded

8.3. Leicestershire



* A minimal amount of SSSI units were identified as destroyed so do not appear when numbers are rounded





8.5. Lincolnshire



Appendix 2 – Via East Midlands Call for Sites 9.



Via East Midlands 6,466 followers

+ Follow ···

CALL FOR SITES' - OFFSITE BIODIVERSITY GAIN SITES IN NOTTINGHAMSHIRE

Via East Midlands have been commissioned by Nottinghamshire County Council to gather information on potential offsite biodiversity gain sites for the delivery of Biodiversity Net Gain, within Nottinghamshire and bordering districts.

The aim of the project is to collate a free-to-join database of registered, upcoming and potential offsite biodiversity gain sites and/or Biodiversity Unit providers.

We are planning to use this GDPR compliant data for:

1. Assisting Local Planning Authorities and developers in Nottinghamshire to find offsite biodiversity gain sites to ensure they can achieve a minimum of 10% Biodiversity Net Gain.

2. Informing the Local Nature Recovery Strategy for Nottinghamshire and helping establish offsite biodiversity gain sites which provide the best outcomes for the County's biodiversity and nature recovery.

If you are a landowner, land owning organisation, land agent, consultancy or habitat broker working for yourself or your client to secure biodiversity gain sites, we would very much like to hear from you!

Please contact steven.weber@viaem.co.uk or beth.hewes@viaem.co.uk for an informal initial discussion.

This is an early-stage search for possible biodiversity gain sites and will not commit your or your client's land for BNG. Contact details and/or land can be removed from the database at any time if use for BNG offsetting no longer meets the needs of your or your client's business.

Please share this post far and wide!!!

>>> This project is funded by the Nottinghamshire LNRS for and on behalf the County's Planning Authorities <<<

#biodiversity #bng #biodiversitynetgain #biodiversitygainsites #biodiversity units #Inrs #planning #development

@NottinghamshireCountyCouncil @NottsWildlifeTrust