



## **The Nottinghamshire Biodiversity Opportunity Mapping Project**

### **Gedling Borough**



**April 2021**

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## **Gedling Borough FINAL REPORT**

### **Credits:**

Report produced by Chris Jackson and Aimee Harvey (Nottinghamshire Biodiversity Action Group, Notts BAG), with mapping and data analysis undertaken by Chris Jackson, Aimee Harvey and Karen Taylor (Nottinghamshire County Council). The production of the Gedling BOM report was made possible due to funding by Gedling Borough Council.

Photo - Front Cover - View from Gedling Country Park towards Lambley Dumble.

## **1. Aim of the Project**

The aim of this project is to produce a Biodiversity Opportunity Map (BOM) for Gedling Borough. This work was undertaken to support the work of Gedling Borough Council but also to help to underpin the wider work of the Nottinghamshire Biodiversity Action Group (BAG), the Local Biodiversity Action Plan (LBAP) partnership for Nottinghamshire.

## **2. Background and context to the Project**

In 2008 the Nottinghamshire BAG resolved to produce a Biodiversity Opportunity Map for the County, in order to:

- Help us have a better understanding of the current distribution of biodiversity in the County
- Provide a spatial vision for how partners want the biodiversity of the County to look in the long and medium term
- Identify the most effective way to re-create habitat networks at a landscape-scale
- Help to focus partners' resources on optimising biodiversity gain
- Help to deliver our contribution to the [25 Year Environment Plan](#)
- Underpin the Local Nature Recovery Strategies and Nature Recovery Networks
- Inform spatial planning, including the delivery of Green Infrastructure
- Inform agri-environment targeting
- Underpin Biodiversity Net Gain
- Help guide the work of the local and sub-regional partnerships
- Inform a wide range of other strategies, such as for climate change and ecosystem services
- Provide a robust case for developing funding bids
- Influence policy makers, landowners and land managers

Initially, the BAG intended to adapt the Regional BOM (which was under development at the time) into a County model, but over the next two years it became clear that for technical reasons this was not possible. Partners resolved to develop our own model that would best suit our needs in Nottinghamshire and would draw widely on best practice from around the UK. The availability of funds to progress the work was, however, a seriously limiting factor, particularly as the County Phase 1 mapping was only available as a hard copy and has never been digitised (due to cost).

A task and finish group of the BAG was established - the BOM Working Group (see Appendix 1) - to determine the best approach on behalf of partners, and after reviewing several models from other counties, a decision was made in 2012 to utilise the Habitat Network Model developed in the National Forest, as this was most closely correlated to what we aimed to achieve and could be run on the computer software (MapInfo) available to the partners. The National Forest Company team was willing to share both their Habitat Network Model and their considerable staff expertise, having developed their model in-house.

The opportunity then arose to bid for funds from various sources to begin the BOM process on discrete parts of the county. Initially this work took place in Sherwood during 2012/3 and this work was funded by Natural England. Subsequently funding was attained from a variety of organisations including, Ashfield District Council, Broxtowe Borough Council, Rushcliffe Borough Council, the Environment Agency and the Trent Vale Landscape Partnership Scheme. This funding was used to create BOM reports for various parts of Nottinghamshire and these are listed below.

Trent Valley BOM - Sept 2013

Broxtowe BOM - March 2014

Rushcliffe BOM - July 2015

Sherwood BOM - Sept 2016

Ashfield BOM - Nov 2016

Bassetlaw and Idle Valley BOM - March 2017

### **3. Methodology**

The following methodology has been used in undertaking the BOM process, which has been agreed by the BOM Working Group and the BAG:

- Geo-rectification of 1997-8 Phase 1 habitat map image files within MapInfo
- Digitisation of the Phase 1 habitat maps using MapInfo
- Updating of the Phase 1 habitat maps using aerial photography interpretation (2007, 2009, 2013 and 2016 flights), BAG LBAP habitat mapping data, and latest Local Wildlife Site knowledge from the Nottinghamshire Biological and Geological Records Centre (NBGRC).
- Assigning relevant habitats to one of the four broad habitat types - woodland, acid grassland & heathland, other grassland, and wetland (see Appendix 2 for details of which habitats make up the four broad habitat types).
- Data cleaning within MapInfo to ensure that there were no gaps or overlaps in the mapped data
- Running of the Habitat Network Modelling (see below for further details of the model)
- Online stakeholder workshops to annotate the Habitat Network maps (see below) based on the four broad habitat types (woodland, acid grassland & heathland, other grassland and wetland)
- Collation and digitisation of the workshop outputs to produce Biodiversity Opportunity Maps for the four broad habitat types
- Production of draft report for comment
- Amendment of Biodiversity Opportunity Maps following feedback and production of final report

#### **4. The Habitat Network Model**

The Habitat Network Model developed by the National Forest Company is based on the permeability of different habitats to the movement of species. It uses a generic ‘focal’ species to represent each of the four habitat networks (i.e. woodland, heathland and acid grassland, other grassland and wetland), and every Phase 1 habitat that is mapped is assigned a permeability value for each of the four generic species. The permeability values are based on the work of Roger Catchpole at Natural England and have been slightly modified to reflect Nottinghamshire circumstances (see Appendix 3).

The Model then uses “least cost analysis” to calculate how far the focal species can move from its core habitat, with species moving further through more permeable habitats than through less permeable ones; for example, the woodland focal species can move well through habitats that are similar to woodland, such as scrub, but not through habitats which are very different to woodland, such as arable farmland or grassland. Therefore, core habitats that are surrounded by more permeable habitats will allow for stronger networks than those separated by impermeable ones. Where areas of core habitat become linked, these are referred to as Habitat Networks. To assist in the interpretation of this data, Habitat Networks have been placed into different categories depending on their size (which is the size of the Habitat Network, not the size of the core habitat contained within the Habitat Network), so that large Habitat Networks (containing areas of well connected habitats) can be distinguished from small Habitat Networks (representing isolated and fragmented areas of habitat).

#### **5. Workshops**

A series of six stakeholder workshops were held during the process of gathering the information to go into this report. The workshops were held online between Monday 23<sup>rd</sup> November 2020 and Friday 4<sup>th</sup> December 2020. The workshops were attended by 35 individuals representing 23 organisations.

Appendix 4 provides a list of attendees for the online workshops.

During the workshops, participants were asked to identify opportunities within the Habitat Network maps for each of the four broad habitat types, for two timescales - a long term 50-year period, and a shorter term 10-year period. They were asked to resist the temptation to necessarily link together all the Habitat Networks, and to think about the size and scale of habitats to be created, and where these might be best located within the landscape. Participants were also asked to follow the principles set out in ‘Making Space for Nature’ - Better, Bigger, More, Connected, using the following definitions:

**Better:** *Areas of existing, but degraded habitat, which need their condition improved, e.g. scrubby heathland or mixed woodland with a high proportion of non-natives. This particularly relates to those sites that are in (very) poor condition.*

- Bigger:** *Areas onto which existing habitat can be expanded, e.g. adjacent areas of conifer plantation or arable land, which help make existing areas larger and buffer them from other land uses. For the purposes of this workshop, an arbitrary limit will be used whereby 'bigger' can be up to doubling of the site (after which time it becomes 'more').*
- More:** *New areas of habitat to increase the overall resource - e.g. creation of new heathland or woodland on arable land, in areas that do not abut existing habitat that can be made 'bigger' (or where the size of an existing site is more than doubled).*
- Connected:** *Enhancing existing, and creating new, connections between existing/planned areas of habitat, either through continuous corridors or by using stepping stones, so that currently isolated habitat blocks are linked up. Obviously 'bigger' and 'more' may result in the creation of new connections anyway, and 'better' may result in the enhancement of existing connections, so this relates particularly to things like narrow, linear linking strips of habitat (along road verges or disused railway lines) or very small patches of habitat that will act as stepping stones which on their own don't deliver substantial areas of new habitat.*

A range of other data was available to workshop participants to help assist in determining where activities to best deliver these principles should be located. This was:

- Environment Agency Flood Maps (Zone 2 and Zone 3)
- Environmental Stewardship and English Woodland Grant Scheme agreements
- Land owned by BAG partners (Forestry England, Nottinghamshire County Council, Nottinghamshire Wildlife Trust and the Woodland Trust)
- Locally designated site boundaries, including Local Nature Reserves and Local Wildlife Sites (previously known as Sites of Importance for Nature Conservation)
- Phase 1 habitat maps
- Statutorily designated site boundaries (Sites of Special Scientific Interest)
- Wetland Vision map (for reedbed and floodplain grazing marsh)

## **6. Outputs**

The Gedling BOM Project has four mapping outputs:

- a) “*The Basemap*” (Appendix 5), which shows all habitats across 183.4 sq km within the project area (including a 250m buffer), based on the digitised 1997-8 Phase 1 survey, updated with reference to aerial photography, the BAG's LBAP habitat mapping data, and knowledge of Local Wildlife Sites from the Nottinghamshire Biological and Geological Record Centre (NBGRC).

- b) *“The Habitat Network Maps”* (Appendix 6), which have been produced in MapInfo using the National Forest’s Habitat Network Model, for each of the four broad habitat types (woodland, grassland, wetland and heathland/acid grassland).
- c) The *“Biodiversity Opportunity Maps”* (see Section 9 - Maps and tables), which incorporate (i) the *“Long Term 50 Year Opportunities”* and (ii) the *“Short Term 10 Year Opportunities”*. The former are BAG partners’ shared vision and aspirations for what might be achieved over a 50-year time frame, based on the assumptions of a sympathetic funding and planning climate and guided by the current distribution of habitats and their potential for extension based primarily on geology, soils and hydrology. This map also includes details of the longer-term landscape scale visions and targets of BAG partners where they are already in place but is moderated by permanent constraints such as large settlements and roads. The latter, which overlay the Long Term 50 Year Opportunities, show shorter-term aspirations based upon current or proposed projects and known constraints such as substantial approved development sites, new planned infrastructure and areas of highest value farmland. Each area on the maps is numbered, with a description of the opportunity contained in the accompanying table.
- d) The *“Focal Area Maps”* (see Section 9 - Maps and tables), identifying locations where there appears to be a concentration of opportunities, which may be for the same habitat type or across different habitat types. These can be used to prioritise activities so that they have the maximum benefit.

## **7. What the BOM shows**

The following conclusions have been drawn as a result of discussions during the online workshops and the production of the Biodiversity Opportunity Maps:

### *i. Priority habitats*

The BOM maps indicate that Gedling Borough is a particularly important area for its biodiversity and that this part of Nottinghamshire supports a diverse range of habitat types. All four of the broad habitats are represented within the district and concentrations of opportunities for each of these have been identified as part of the BOM process.

Woodland (see Map 1, page 13) - Opportunities for woodland are widespread across Gedling Borough. The BOM identifies that the greatest concentrations of existing woodland are in the northern part of the Borough. It is worth noting that the presence of ancient woodland is very limited within Gedling Borough, but it should be noted that many of the steep sided ‘dumbles’ within Gedling Borough show good examples of this resource. Within Gedling Borough there are good examples of sites supporting veteran trees such as at Haywood Oaks and Lowdham Grange. Opportunities in the north of Gedling Borough 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 Gedling Borough, the existing woodland resource is much less widespread and greatly fragmented. Through the BOM process, opportunities to improve woodland connectivity (by creating new woodland) were identified in the southern part of Gedling Borough. Where possible these opportunities would create better links between some of the remaining areas of fragmented woodland. Improved woodland links would not necessarily be reliant on the planting of new woodlands but could also be enhanced through more innovative measures such as the creation/restoration of related habitats such as parkland, orchards and hedgerows. In the Trent Valley the woodland resource is minimal, however woodland creation may not be appropriate in this part of the borough, as the Trent Valley is naturally a more open environment in which grassland and wetland habitats are more typical.

Heathland & Acid Grassland (see Map 2, page 17) - Acid grassland and heathland habitat are limited to the northern half of Gedling Borough due to the influence of the underlying geology (Sherwood Sandstone). As a result, all the opportunities for this important broad habitat type are restricted to the north of Gedling Borough with clusters of opportunities identified around Bestwood, Calverton, Newstead and Ravenshead. Opportunities seek to maintain and enhance the limited amount of fragmented heath/acid grassland that remains in Gedling. However, most opportunities seek to identify the best locations to increase this resource and where possible doing this in locations that link existing heath and acid grassland habitat patches. In the north of Gedling Borough, gorse/whin heaths are a characteristic feature, offering an important and often over-looked resource. Many of these gorse/whin heaths have developed on ex-colliery land and opportunities exist to retain and expand this resource. In addition, several post-industrial sites have developed important areas of lichen heath.

Other Grassland (see Map 3, page 20) - Grassland opportunities tend to be spread across Gedling Borough. This reflects the fragmented nature of the existing grassland resource. There are clusters of existing grassland habitat that are present in the River Leen catchment and in areas surrounding Lambley and Burton Joyce. These offer opportunities to maintain and reconnect this resource. There are also good localised patches of grassland located at the four main ex-colliery sites in Gedling Borough; Bestwood, Calverton, Gedling and Newstead. The Trent valley offers a great opportunity to both enhance and creating new areas of grassland habitat.

Wetland (see Map 4, page 24) - As to be expected, the wetland opportunities identified in the Gedling BOM 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 ponds.



## *ii. Focal Areas*

The BOM maps show that there are several areas where existing habitats and associated opportunities are concentrated, referred to here as 'Focal Areas'. The input of the participants at the workshops has shown that there are substantial opportunities in both the short and long term to enhance and expand these habitats, to buffer them and to link them up to create a stronger habitat network across a landscape scale. These Focal Areas, shown on Map 5 in section 9, are:

1. **Leen Catchment:** this focal area extends throughout the north west of Gedling Borough from Newstead (North) to Bestwood (South) and from Hucknall (West) to the A60 (East). The area currently supports some quality areas of woodland, grassland and wetland habitat, both along the River Leen corridor and its tributaries but beyond into the wider catchment. The area has the potential for improving biodiversity by enhancing these existing habitats and by reconnecting this resource by the creation of important habitat links. By creating an improved habitat network in the Leen catchment this will help to facilitate species dispersal in this focal area. The Leen Catchment focal area extends beyond Gedling Borough into Ashfield District (to the west) and Nottingham City (to the south).
2. **Sherwood South:** this focal area is centred around Calverton, Blidworth and Lindhurst. The area covers several woodland blocks that are managed by Forestry England as well as former colliery land at Blidworth and Calverton. The area has a large amount of potential for the creation, restoration and enhancement of acid grassland/ heathland and broadleaf woodland.
3. **Burton Joyce/ Lambley and the Cocker Beck:** this focal area stretches between Dorket Head, Lambley and Burton Joyce and then along the Cocker Beck to Lowdham in the east. The area supports good quality but very fragmented areas of neutral grassland and woodland. The main opportunities seek to link these existing biodiversity resources and where appropriate creating new woodlands and species rich grasslands.
4. **Trent Valley (Lady Bay to Gunthorpe):** this focal area follows the Trent Valley between Lady Bay to Gunthorpe, including the network of existing wetland/grassland sites within the Colwick, Holme Pierrepont and Netherfield triangle. The BOM identifies opportunities for maintaining, enhancing and buffering existing sites (particularly wetland and grassland sites). There are also many opportunities identified to improve habitat connectivity and to create new areas of grassland and wetland within this focal area.

## *iii. Wider Landscape*

It is significant that the BOM identifies many smaller habitat clusters, scattered throughout Gedling Borough, but it also appears to indicate that there are parts of Gedling Borough where there are no opportunities. However, in these areas, opportunities do exist: 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. Although not specifically picked out in the BOM, such opportunities can be delivered through agri-environment schemes and by inclusion within Forest Design Plans. It should also be noted that the BOM picks out 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 Gedling Borough.

#### *iv. Conflicts and other considerations*

It is evident that some areas are appropriate for the creation of more than one type of habitat. In such instances, it may be possible to incorporate both (or all) habitats into a single location through careful planning; alternatively, it may be that one habitat is deemed to be more important than another. In some circumstances it may be appropriate to create habitats that are beneficial for a range of broad habitat types. For example, creating wood pasture, parkland or orchards to benefit habitat connectivity between both wooded and open habitat types. Or perhaps creating areas of wet woodland to create benefits for both wooded and wetland habitat types. Similarly, there may be instances where habitat creation at one location will affect an adjacent area where habitat currently exists (or could be created). Such instances should be looked at on a case-by-case basis as and when opportunities arrive, with the help of specialist ecological input.

Mature Trees in the landscape provide a very important resource for wildlife but unfortunately due to the nature of the BOM and the scale of the resource, individual trees have not been picked up within the mapping. It is important that when using the BOM, management of existing sites should consider the importance of mature/veteran trees and include appropriate management of this resource. Similarly, any newly created habitat should, where possible and appropriate, include plans to create veteran trees for the future.

It should also be noted that these are ecological opportunities; no account has been taken at this time of other factors such as land ownership and current land use, or of other factors such as flood risk management or public access. These would, of course, need to be considered at the time that opportunities are taken forward.

A variety of invasive non-native species (INNS) are known to be present across the landscape within Gedling Borough, however it is not the purpose of the Gedling BOM to deal with the detail of preventing the spread and controlling the distribution of these species. It is assumed that work to control these species should be undertaken at a landscape scale and where feasible, projects that seek to enhance the biodiversity of an area (one of the focal areas perhaps) should also look to include control and eradication programmes for INNS species that are present within these areas.

#### *v. Opportunities for species*

The BOM focuses on habitats, but implicit within this is the expectation that works to make habitats better and bigger, to create more of them, and to ensure that they are

linked up, will also benefit the priority species<sup>1</sup> which use these habitats. The species which are likely to particularly benefit from the opportunities identified in this report are:

- 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
- Fungi and lichens

Examples of simple actions for some of these species, that were identified as part of the workshop and that could be undertaken within Gedling Borough included; the planting of sallow in woodlands as an early nectar source for moths and other inverts, ensuring that woodland rides are mown after late September so as not to damage the larvae and foodplants of lepidoptera, and the creation of ponds within school grounds and allotments. These are just a few examples of actions that could be undertaken that would have a widespread benefit to specific species groups.

## **8. Next steps**

The opportunities highlighted in this report will be quantified and used to estimate the scale of habitat creation and restoration that can be delivered across Gedling Borough and used as part of the next round of target setting for the Nottinghamshire Local Biodiversity Action plan (LBAP).

However, the report should be a living document that will be updated as better data becomes available or as new opportunities are identified.

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<sup>1</sup> Species of Principal Importance for Conservation in England, as identified through Section 41 of the Natural Environment and Rural Communities Act (2006)

## **9. Maps and tables**

Map 1 Woodland Biodiversity Opportunity Map

Table 1 Biodiversity Opportunity table for Woodland (W)

Map 2 Heathland and Acid Grassland Biodiversity Opportunity Map

Table 2 Biodiversity Opportunity table for Heathland and Acid Grassland (H)

Map 3 Grassland Biodiversity Opportunity Map

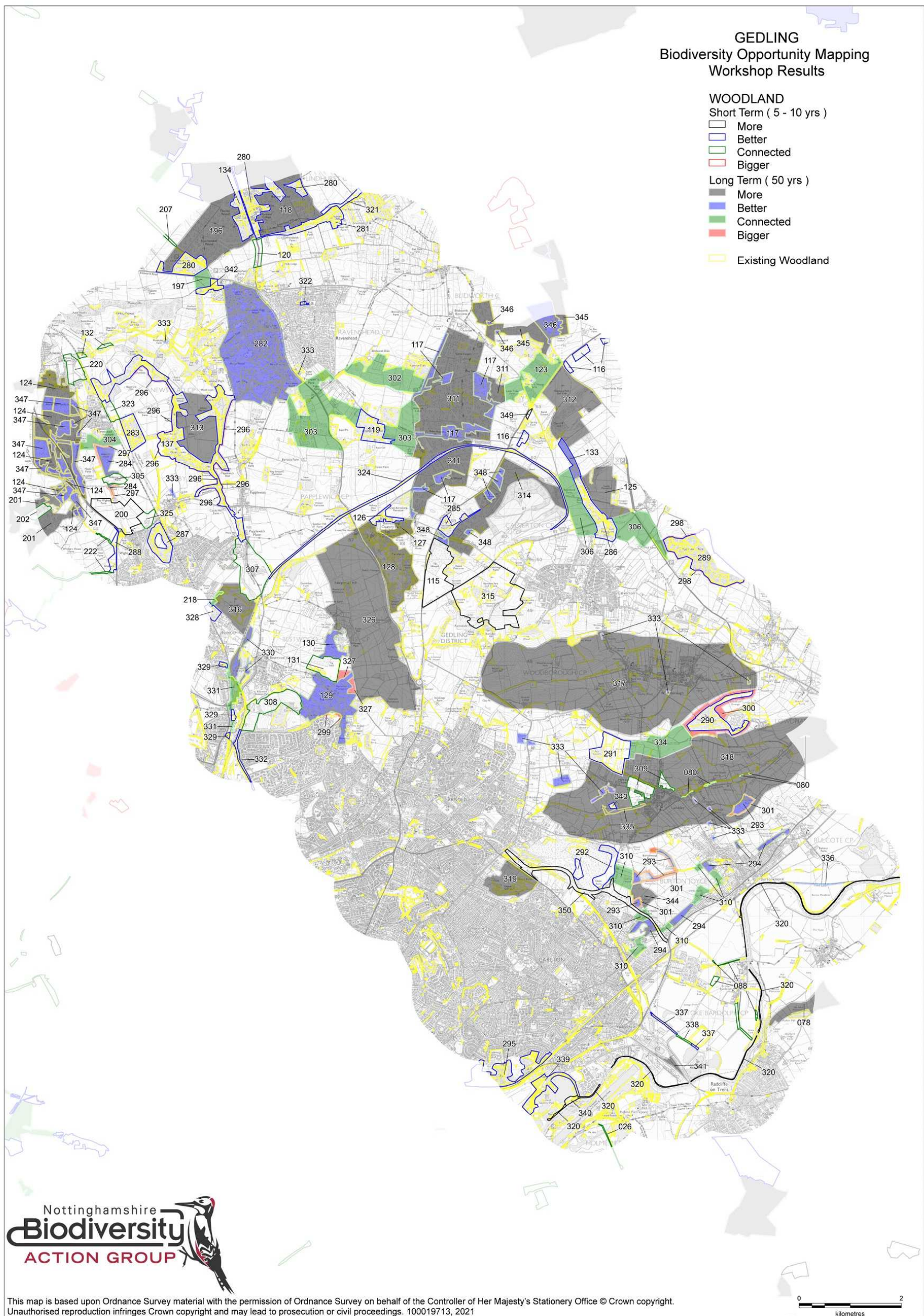
Table 3 Biodiversity Opportunity table for Grassland (G)

Map 4 Wetland Biodiversity Opportunity Map

Table 4 Biodiversity Opportunity table for Wetland (M)

Map 5 Focal Areas

Map 1 - Woodland Biodiversity Opportunity Map



**Table 1 - Biodiversity Opportunity table for Woodland (W)**

| Report ID | Map Display ID | Opportunity   | Opportunity Type | Projected Timespan |
|-----------|----------------|---|------------------|--------------------|
| RushWest  | 026            | Enhance existing hedgerow to connect woodlands. MGW   | Connected        | Short-term         |
| TNN-S     | 078            | Create woodland along the escarpment. JMB   | More             | Long-term          |
| TNN-S     | 080            | Cocker Beck. Connectivity to Lambley Dumbles, Ploughman Wood, Gedling Pit-top country park. JO  | Connected        | Long-term          |
| TNN-S     | 088            | Link Stoke Lock woodland to other woods in Stoke Bardolph via corridors (south Trent owned). RB   | Connected        | Short-term         |
| SHER-S    | 115            | Calverton Landfill - opportunities for woodland creation. Northern edge of site has been planted with broadleaf woodland. Still opportunities for more woodland planting across majority of the site. JMB, NC   | More             | Short-term         |
| SHER-S    | 116            | Planting along A614. NC   | Better           | Short-term         |
| SHER-S    | 117            | Maintain and enhance existing broadleaved woodland within Blidworth Wood and Sansom Wood. Manage areas containing veteran trees as wood pasture. CC, JMB, LH, PN  | Better           | Long-term          |
| SHER-S    | 118            | Buffer existing broadleaf woodland habitat and improve linkages between existing broadleaf woodland at this site. Through the Forestry Design Plan process. PN  | More             | Long-term          |
| SHER-S    | 119            | Longdale Lane Plantation - enhance broadleaved woodland. JMB  | Better           | Short-term         |
| SHER-S    | 120            | Woodland Shelter Belt - target project. Create woodland along either side of the A60, linking Thieves/Harlow Wood with private woodlands at Newstead Abbey Park. JMB, PN  | Connected        | Short-term         |
| SHER-S    | 123            | Linking woodland. Create woodland link between Blidworth Wood, Haywood Oaks, and Oakmere Golf Course. PN  | Connected        | Long-term          |
| SHER-S    | 124            | Annesley Plantation - Create new areas of broadleaved woodland within this FE plantation. Where veteran trees are present, manage as wood pasture (halo thinning). These opportunities should be built into the forest design plan. This site is at risk of destruction from HS2, there may be potential for mitigation to enhance remaining areas of woodland. CC, JMB, LH, PN   | More             | Long-term          |
| SHER-S    | 125            | Woodland re-creation.   | More             | Long-term          |
| SHER-S    | 126            | Nice area of Oak/Birch at Burntstump and alongside Ash Lane. Maintain and enhance existing area of woodland favouring veteran management of ancient trees. Interesting ground flora at site. NB: Burntstump is covered by a TPO. JR, LS, MCW  | Better           | Short-term         |
| SHER-S    | 127            | Area of Sycamore dominated wood around Burntstump (Gedling Borough Council). Could be restored to Oak/Birch. NB: Burntstump is covered by TPO. JR   | More             | Long-term          |
| SHER-S    | 128            | Enhance existing broadleaved woodland by species re-structuring and replanting and create new woodland. Some of land owned by Cockcliffe House Farm and some by Notts Police. JMB   | More             | Long-term          |
| SHER-S    | 129            | Bestwood Country Park - Big wood has good areas of Oak/Birch/Chestnut. Currently implementing a management plan and woodland grant scheme. Could enhance and buffer this core area with improvements to the Sycamore dominated areas. JR, LS, NC  | Better           | Long-term          |
| SHER-S    | 130            | Crimea Plantation - This area of even aged Sycamore woodland could be improved by re-structuring and increasing species diversity. RC   | Better           | Long-term          |
| SHER-S    | 131            | Plantation over landfill will develop into good woodland connection between Bestwood CP & Crimea Plantation. Opportunity to create woodland links between Crimea Plantation and Big Wood (Bestwood Country Park). Areas of birch scrub are developing on old sand quarry but need to ensure any link does not adversely affect the developing lichen heath. The restored landfill was originally planted with trees, needs further investigation. MCW | Connected        | Short-term         |
| SHER-S    | 132            | Strengthen corridors. Opportunity to plant linking woodland in the northwest corner of Newstead and Annesley CP. CE   | Connected        | Short-term         |
| SHER-S    | 133            | Connecting and buffering existing woodland along the Dover Beck. Maintain and enhance existing wet woodland at Oxtan Bogs and Thorndale plantation. MCW   | Better           | Long-term          |
| SHER-S    | 134            | Retain as woodland - Important moths associated with the Bilberry Star which grows under the tree cover here (i.e. moths needing Bilberry growing under trees). Maintain and enhance existing area of mature oak woodland. Plans in place to propagate Bilberry from NTU Masters students. JEO, JMB, MCW  | Better           | Short-term         |
| SHER-S    | 137            | Maintain and enhance these areas of broadleaved woodland that create a continual woodland edge alongside the River Leen catchment. This opportunity includes Moor Pond Wood, which is a potential funding opportunity for M2M. This area of wet woodland could be enhanced using natural flood management techniques/woody debris. JMB, PH  | Better           | Short-term         |
| Ashfield  | 196            | Thieves Wood: conversion of coniferous wood to broad-leaf wood: ongoing over 50 years on felling of crop. Improve broad-leaf linkages between existing coniferous compartments by planting broad-leaved trees or by maintaining regeneration trees along rides and woodland edges. DS, PN, MG   | More             | Long-term          |
| Ashfield  | 197            | Create connecting woodland habitat between Thieves Wood and Newstead Abbey Park. DS   | Connected        | Long-term          |
| Ashfield  | 200            | Top Wighay Farm Development - opportunity to create a woodland connection along A611 to Wighay Farm Wood. Potential to create woodland links between Dob Park, Annesley Wood, and Joe's Wood. JAR, NC, SMC  | More             | Short-term         |

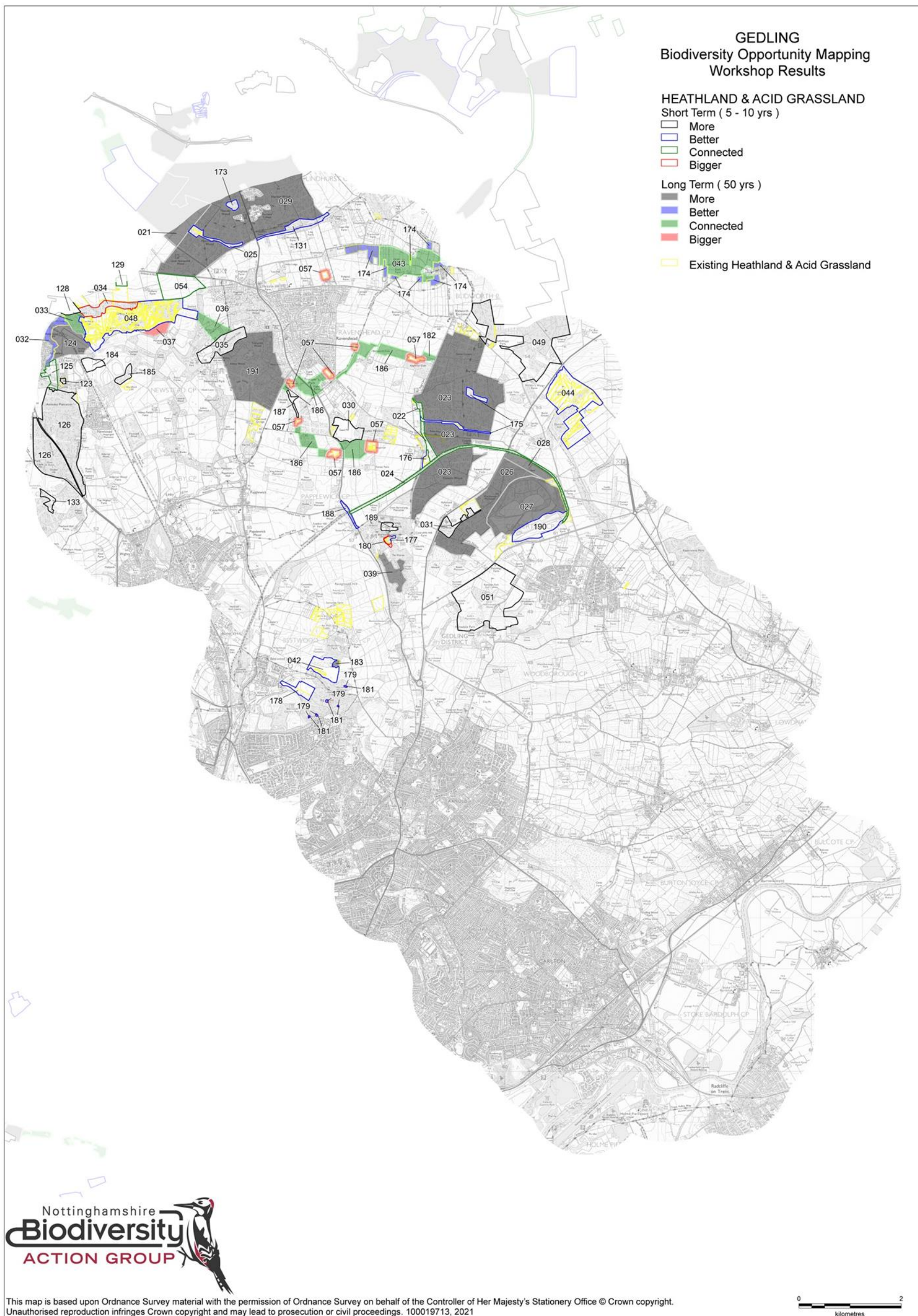
| Report ID | Map Display ID | Opportunity  | Opportunity Type | Projected Timespan |
|-----------|----------------|--|------------------|--------------------|
| Ashfield  | 201            | Park Forest - change from coniferous to broad-leaf on cropping trees. JAR  | More             | Long-term          |
| Ashfield  | 202            | Park Forest - create habitat connection between existing broad-leaf by creating broadleaf strips through coniferous sections. JAR  | Connected        | Short-term         |
| Ashfield  | 207            | Two Oaks sand quarry - roadside bunds already planted with woodland. DS  | Connected        | Short-term         |
| Ashfield  | 218            | Leen Valley Golf Course - link planted areas with woodland and hedgerows. LS   | Connected        | Long-term          |
| Ashfield  | 220            | Create link between Annesley Wood and Newstead & Annesley Pit Tip (by creating/improving hedgerows or planting woodland blocks). CE  | Connected        | Short-term         |
| Ashfield  | 222            | Riparian woodland planting in Baker Lane brook catchment, to help reduce flood risk to Hucknall. DJW   | Connected        | Short-term         |
| Gedling   | 280            | Maintain and enhance existing broadleaved woodland within Harlow Wood, Thieves Wood, Normanshill Wood, and Little Normanshill Wood. JMB, PN  | Better           | Short-term         |
| Gedling   | 281            | Maintain and enhance area of wet woodland. Sherwood catchment partnership have been working with the landowner to better maintain this site. Site is in higher level stewardship. JMB, RT                | Better           | Short-term         |
| Gedling   | 282            | Encourage privately owned deciduous woodlands to be managed for their biodiversity value. LH   | Better           | Long-term          |
| Gedling   | 283            | Maintain and enhance an area of plantation broadleaved woodland at Freckland Wood. NC  | Better           | Short-term         |
| Gedling   | 284            | Aldercarr Wood and Joe's Wood - Enhance the structure and tree species mix of these ancient woodlands. LH  | Better           | Long-term          |
| Gedling   | 285            | Fox Covert Plantation - Maintain and enhance existing areas of broadleaved woodland (owned by NWT). Parts of Fox Covert Plantation (The Emilys) to be managed as wood pasture. BD, JMB, MGW              | Better           | Short-term         |
| Gedling   | 286            | A series of wet woodlands alongside the Dover Beck, including Oxtan Bogs and Thorndale Plantation. Maintain and enhance these existing areas of wet woodland. PH   | Better           | Short-term         |
| Gedling   | 287            | Linby Ranges - Enhance broadleaved plantation by thinning and improving structure. NC  | Better           | Short-term         |
| Gedling   | 288            | Dob Park - Enhance broadleaved plantation through removal of Larch. NC   | Better           | Short-term         |
| Gedling   | 289            | Epperstone Park - Maintain and enhance existing large block of broadleaved woodland. PN  | Better           | Short-term         |
| Gedling   | 290            | Ploughman Wood - Continue to manage and enhance woodland. (owned by NWT). MGW  | Better           | Short-term         |
| Gedling   | 291            | Hungerhill Lane Plantation - Improve structure and species mix of this broadleaved plantation. MGW   | Better           | Short-term         |
| Gedling   | 292            | Gedling Country Park plantation woodlands - improve structure and species mix of this broadleaved plantation. JR   | Better           | Short-term         |
| Gedling   | 293            | Ancient woodlands close to Burton Joyce - Maintain and enhance existing areas of ancient woodland. LH  | Better           | Long-term          |
| Gedling   | 294            | Maintain and enhance a series of broadleaved woodlands between Gedling and Burton Joyce. LH  | Better           | Long-term          |
| Gedling   | 295            | Colwick Woods - Maintain and enhance areas of ancient woodland and neighbouring broadleaved plantations. EA  | Better           | Short-term         |
| Gedling   | 296            | River Leen Woodlands - Buffer existing areas of woodland by extending woodland edge into neighbouring arable land. JMB   | Bigger           | Long-term          |
| Gedling   | 297            | Buffer existing areas around Aldercarr wood. LH  | Bigger           | Long-term          |
| Gedling   | 298            | Buffer existing areas of woodland at Epperstone Park by extending woodland edge into neighbouring arable land. PN  | Bigger           | Long-term          |
| Gedling   | 299            | Opportunity to work with the Oakwood Academy to buffer the woodland at Bestwood Country Park within the school grounds. JR, NC   | Bigger           | Long-term          |
| Gedling   | 300            | Buffer existing areas of woodland at Ploughman Wood by extending woodland edge into neighbouring arable land. JMB, MGW   | Bigger           | Long-term          |
| Gedling   | 301            | Buffer existing areas of ancient woodland by extending woodland edge into neighbouring arable land. LH   | Bigger           | Long-term          |
| Gedling   | 302            | Link existing fragments of woodland into Blidworth Wood. JMB, PN   | Connected        | Long-term          |
| Gedling   | 303            | Seek to create woodland links between Newstead Abbey Woodlands and Blidworth Wood, through Longdale Plantation. Look at opportunities to create links through planning applications in this area. BD     | Connected        | Long-term          |
| Gedling   | 304            | Create links between Aldercarr Wood/Joe's Wood and neighbouring woodland blocks (Annesley Wood and Freckland Wood). LS   | Connected        | Long-term          |
| Gedling   | 305            | Create link between Aldercarr Wood and Joe's Wood. LH  | Connected        | Short-term         |
| Gedling   | 306            | Connect Epperstone Park and Oxtan Bogs through to the disused railway line between Calverton and Papplewick. JEO, LS   | Connected        | Long-term          |
| Gedling   | 307            | Seek to create woodland links along the Leen Valley, between Mill Lakes and Moor Pond Wood. (These may be small patches of woodland/hedgerow that create stepping-stones along the valley). LS, MCW, MJW | Connected        | Short-term         |
| Gedling   | 308            | Create woodland/hedgerow links between Big Wood (Bestwood Country Park) and the Leen Valley woodlands. JR, LS, MCW, NC   | Connected        | Short-term         |
| Gedling   | 309            | Create woodland/hedgerows around Lambley to link Lambley Dumble and the Cocker Beck. LH, LS  | Connected        | Short-term         |

| Report ID | Map Display ID | Opportunity   | Opportunity Type | Projected Timespan |
|-----------|----------------|---|------------------|--------------------|
| Gedling   | 310            | Linking a series of woodlands around Burton Joyce to Gedling Wood. LH   | Connected        | Long-term          |
| Gedling   | 311            | Blidworth Wood and Sansom Wood - Create new areas of broadleaved woodland within this FE plantation. Where veteran trees are present, manage as wood pasture (halo thinning). These opportunities should be built into the forest design plan. CC, JMB, LH, PN  | More             | Long-term          |
| Gedling   | 312            | Examine opportunities to enhance existing woodland, convert coniferous plantation to broadleaved woodland, and create new woodland at Oakmere Golf Course. Woodland links should not include large areas of broadleaf plantation on this excellent area of acid grassland and heathland. MCW  | More             | Long-term          |
| Gedling   | 313            | Create new areas of broadleaved woodland to connect existing areas of core habitat. JMB   | More             | Long-term          |
| Gedling   | 314            | Watchwood Plantation - Create new areas of broadleaved woodland within this FE plantation. Where veteran trees are present, manage as wood pasture (halo thinning). These opportunities should be built into the forest design plan. CC, JMB, LH, PN  | More             | Long-term          |
| Gedling   | 315            | Link existing areas of woodland in Ramsdale Golf Course.  | More             | Short-term         |
| Gedling   | 316            | Opportunities to create woodland and enhance the existing woodland at Leen Valley Golf Course. LS   | More             | Long-term          |
| Gedling   | 317            | Create new woodland within the Dover Beck catchment to help with natural flood management. PH   | More             | Long-term          |
| Gedling   | 318            | Create new woodland within the Cocker Beck catchment to help with natural flood management. PH  | More             | Long-term          |
| Gedling   | 319            | Opportunities to create woodland and enhance the existing woodland at Mapperley Golf Course. JR   | More             | Long-term          |
| Gedling   | 320            | Opportunity to plant trees and small copses along the banks of the River Trent, to create fish spawning habitat. This includes opportunities to look for locations to plant native Black poplar. NC, PH   | More             | Short-term         |
| Gedling   | 321            | Maintain and enhance a recently planted area of broadleaved woodland. MCW   | Better           | Short-term         |
| Gedling   | 322            | Ravenshead C of E Primary School - Maintain and enhance area of existing broadleaved woodland. HH   | Better           | Short-term         |
| Gedling   | 323            | Create links between Freckland Wood and Newstead & Annesley Country Park. These could include enhancements such as improved hedgerows, hedgerow trees, or parkland trees. CH  | Connected        | Short-term         |
| Gedling   | 324            | Maintain woodland link along disused railway line between Moor Road, Bestwood Village, and Calverton Colliery. Ensure existing open habitats along the route are not lost at the expense of woodland. Owned by NCC. JEO   | Better           | Short-term         |
| Gedling   | 325            | Create links between Dob Park and Linby Ranges through to the Linby Trail. SMC  | Connected        | Short-term         |
| Gedling   | 326            | Create links between Crimea Plantation, Bestwood Duck Ponds, and A60 Woodlands by improving hedgerows, maintaining and planting hedgerow/in field trees, and creating small copses and areas of woodland/parkland. This area is excellent for its farmland birds, improve management of existing hedgerows and create new hedgerows. BD, RC | Connected        | Long-term          |
| Gedling   | 327            | Buffer north-eastern boundary of Big Wood with parkland (planting of in-field trees) within these two fields. Inappropriate to plant woodland in these interesting grasslands. RC   | Bigger           | Long-term          |
| Gedling   | 328            | Maintain and enhance this plantation woodland owned by NCC. LS, MCW, NC   | Better           | Short-term         |
| Gedling   | 329            | Some nice areas of existing woodland along the western side of the Leen Valley, between Butlers Hill and Moor Bridge. Maintain and enhance. LS, MCW   | Better           | Short-term         |
| Gedling   | 330            | Maintain and enhance plantation woodland at Mill Lakes, Bestwood Country Park. JR   | Better           | Long-term          |
| Gedling   | 331            | Create links between existing areas of woodland down the western side of the Leen Valley, at Bestwood Village. LS, MCW  | Connected        | Long-term          |
| Gedling   | 332            | Maintain and enhance this existing area of mature broadleaved woodland. EA  | Better           | Short-term         |
| Gedling   | 333            | Investigate these old orchard sites. Maintain and enhance. JO, LH, LS   | Better           | Long-term          |
| Gedling   | 334            | Investigate the restoration of the historic woodland along the ridge between Ploughman Wood and Hunger Hill. (MGW, NM)  | Connected        | Long-term          |
| Gedling   | 335            | Lambley Dumble - Maintain and enhance this area of ancient woodland. LH, LS   | Better           | Long-term          |
| Gedling   | 336            | Maintain and enhance this length of ancient hedgerow. JO  | Better           | Long-term          |
| Gedling   | 337            | Maintain and enhance existing woodland adjacent to the Ouse Dyke. The southern block is owned and managed by the Gedling Conservation Trust. MG, PS   | Better           | Short-term         |
| Gedling   | 338            | Create a wet woodland link along the Ouse Dyke between patches of existing broadleaf woodland. Favour Alder, Willow, and Black Poplar. MG, PS   | Connected        | Short-term         |
| Gedling   | 339            | Maintain and enhance the plantation woodlands at Colwick Country Park. EA   | Better           | Short-term         |
| Gedling   | 340            | As mitigation for the new fish pass around Colwick Sluice, opportunity for new woodland planting. EA  | More             | Short-term         |
| Gedling   | 341            | Leave this area of Open Mosaic Habitats to continue to develop. MG, PS  | More             | Long-term          |
| Gedling   | 342            | Newstead Priory Wood - Woodland Trust plantation woodland, maintain and enhance site. LH  | Better           | Short-term         |



| Report ID | Map Display ID | Opportunity  | Opportunity Type | Projected Timespan |
|-----------|----------------|--|------------------|--------------------|
| Gedling   | 343            | Bonney Doles - Woodland Trust plantation, maintain and enhance site. LH  | Better           | Short-term         |
| Gedling   | 344            | Gedling Wood - Restore this ancient woodland to its historical boundary. LH  | More             | Long-term          |
| Gedling   | 345            | Haywood Oaks - Create new areas of broadleaved woodland within this FE plantation. Where veteran trees are present, manage as wood pasture (halo thinning). These opportunities should be built into the forest design plan. CC, JMB, LH, PN | More             | Long-term          |
| Gedling   | 346            | Maintain and enhance existing broadleaved woodland within Hayward Oaks. Manage veteran trees as wood pasture. CC, JMB, LH, PN  | Better           | Long-term          |
| Gedling   | 347            | Maintain and enhance existing broadleaved woodland within Annesley Plantation. Manage areas containing veteran trees as wood pasture. CC, JMB, LH, PN  | Better           | Long-term          |
| Gedling   | 348            | Maintain and enhance existing broadleaved woodland within Watchwood Plantation. Manage areas containing veteran trees as wood pasture. CC, JMB, LH, PN   | Better           | Long-term          |
| Gedling   | 349            | Woodland Trust working with local landowner to plant up area alongside A614. LH  | More             | Short-term         |
| Gedling   | 350            | Woodland to be created as part of the Gedling access road. AS  | More             | Short-term         |

Map 2 - Heathland & Acid Grassland Biodiversity Opportunity Map

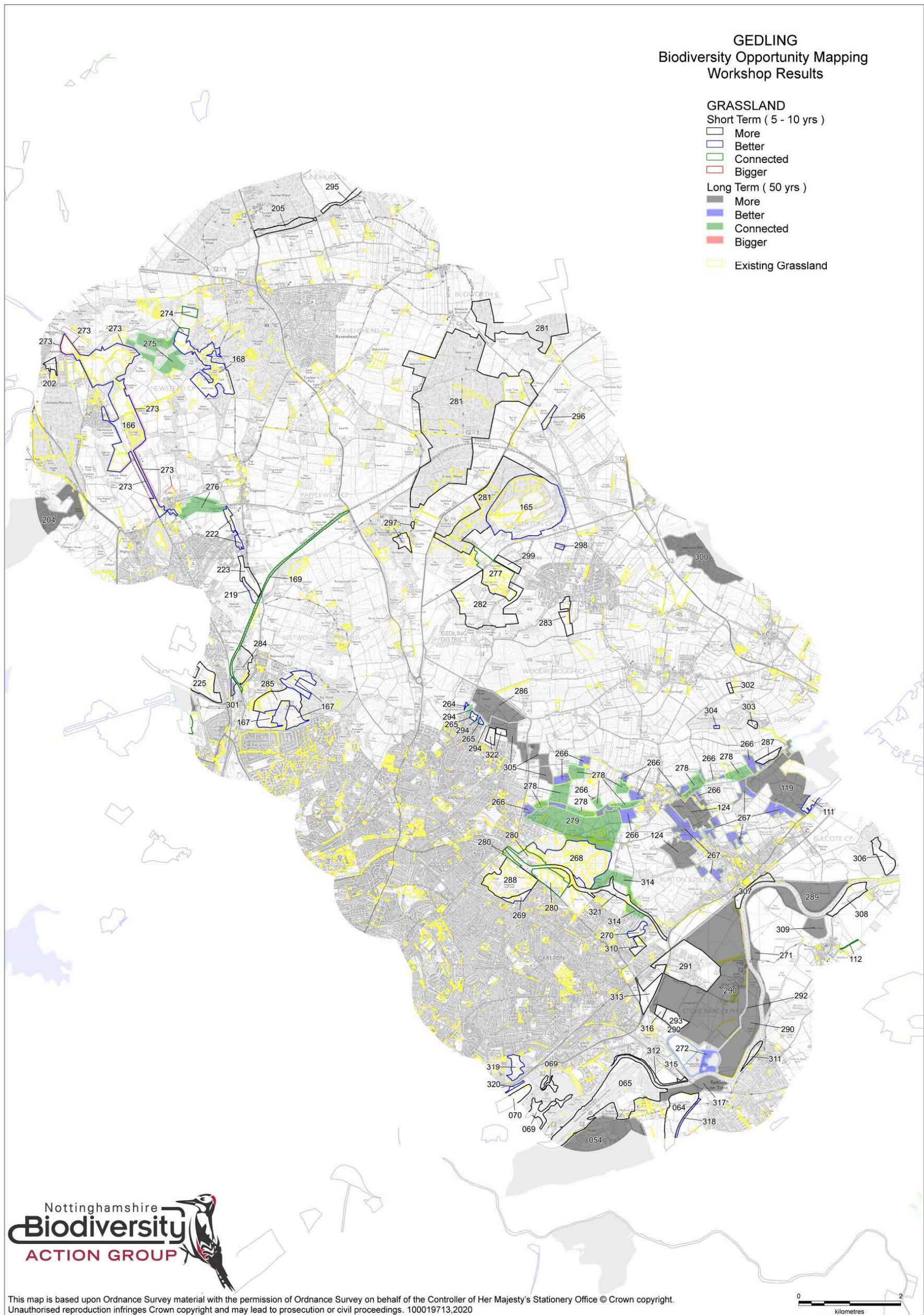


**Table 2 - Biodiversity Opportunity table for Heathland & Acid Grassland (H)**

| Report ID | Map Display ID | Opportunity  | Opportunity Type | Projected Timespan |
|-----------|----------------|--|------------------|--------------------|
| SHER-S    | 021            | Two Oaks Farm - Heathland restoration on mineral site. Opportunity to create wide headlands now to encourage colonisation by plants/inverts rather than 50 years from now. Approved restoration scheme for Two Oaks Farm quarry is to 50% heathland and grassland. But will be subject to a ROMP within the next 10 years, and this should secure 100% acid grassland and heathland. JMB | More             | Long-term          |
| SHER-S    | 022            | Blidworth Lodge - Heathland linkages. JMB  | Connected        | Short-term         |
| SHER-S    | 023            | Blidworth Wood and Sansom Woods - Potential restoration of a mixed mosaic of heathland & woodland. PN  | More             | Long-term          |
| SHER-S    | 024            | Restoration of colliery line through Sansom Wood - Link habitat heathland. JEO, NC, PN   | Connected        | Short-term         |
| SHER-S    | 025            | Open areas -acid grassland/heathland habitat needs improved management and expanding/linking with other heath/grassland habitats where possible. PN  | Better           | Short-term         |
| SHER-S    | 026            | Watchwood - better quality/restore mosaic of heath & woodland. PN  | More             | Long-term          |
| SHER-S    | 027            | Restoration to heath/acid grassland of Calverton Tip. PN   | More             | Long-term          |
| SHER-S    | 028            | Creation of heathland on arable land.  | More             | Long-term          |
| SHER-S    | 029            | Creation of heathland/acid grassland along rides and to replace some areas of conifer in Thieves and Harlow Woods. Be aware that Thieves Wood is a moth LWS. The moths in question are associated with bilberry growing in the shade of conifer and oak. Do not remove conifer and oak in these locations and plant more bilberry in similar locations. SW                               | More             | Long-term          |
| SHER-S    | 030            | Restoration of heathland on mineral land - Bestwood No.2. JMB  | More             | Short-term         |
| SHER-S    | 031            | Foxcovert Nature Reserve - Enhancement of heath/ wood pasture. BD, JMB, MGW  | More             | Short-term         |
| SHER-S    | 032            | Robin Hood Hills - Restore & Improve heathland habitat. Manage bracken and expand cover of Heather/Bilberry etc. Currently threatened by planning application by landfill, which would affect lizards, nightjar, woodlark and would fragment the LWS network. JMB, LS  | Better           | Long-term          |
| SHER-S    | 033            | Improve connectivity of heathland between Robin Hood Hills and Hollinwell. JMB, RT   | Connected        | Long-term          |
| SHER-S    | 034            | Restoration to heathland & broadleaved woodland. Opportunity to remove coniferous woodland in favour of acid grassland/heathland. LS   | Bigger           | Short-term         |
| SHER-S    | 035            | Newstead Swinecote Dale - Heathland restoration. EA  | More             | Short-term         |
| SHER-S    | 036            | Connectivity of heathland between Newstead Abbey and Hollinwell. JMB, RT   | Connected        | Long-term          |
| SHER-S    | 037            | Restoration to heathland from Arable.  | Bigger           | Long-term          |
| SHER-S    | 039            | Burnstump (south of) - Restore to acid grassland/heath. RT   | More             | Long-term          |
| SHER-S    | 042            | Bestwood - Restored sand quarry. Manage this area of developing heath. MCW   | Better           | Short-term         |
| SHER-S    | 043            | Blidworth Grasslands - This area of horse paddocks requires more detailed survey - this could lead to advice/better management. Identify a good mosaic of habitat. JMB, JR   | Connected        | Long-term          |
| SHER-S    | 044            | Oakmere Golf Club - heathland course has SFT management plan. An excellent area of acid grassland/heath. IM, MCW   | Better           | Short-term         |
| SHER-S    | 048            | Hollinwell Golf Course - Existing area of heath/acid grassland & Golf-course management. Poor management restricting habitat quality - heather but few heathland species - change regime at Coxmoor and Hollingwell. ADL   | Better           | Short-term         |
| SHER-S    | 049            | Restore conifer woodland to heathland, link with block to SW, Opportunity to remove coniferous woodland in favour of acid grassland. LS  | More             | Short-term         |
| SHER-S    | 051            | Investigate introduction of heathland areas to Ramsdale Golf Course. MCW   | More             | Short-term         |
| SHER-S    | 054            | Target landowner to encourage ELS etc application to create wildlife corridor & Link existing sites and Two Oaks Quarry, Coxmoor. Most habitat there of potential with quarry. Would involve only loss of small area of arable between Hollinwell and Thieves Wood. RJ   | Connected        | Short-term         |
| SHER-S    | 057            | All small scattered sites - What do we do with them? Increase patch size to minimise threshold?  | Bigger           | Long-term          |
| Ashfield  | 123            | Annesley Rows - owned by NCC and managed by Annesley Parish Council. Small, young plantation woodland could be felled to extend area of acid grassland. MGU  | More             | Short-term         |
| Ashfield  | 124            | Encourage sympathetic land management practices to enhance current habitat and provide connectivity. MGW   | More             | Long-term          |
| Ashfield  | 125            | Cemetery is existing LWS (Acid grassland). Steep upper slopes, potential for acid grassland creation for connecting habitat between Robin Hood Hills and Annesley Plantation. Site contains football pitches, play area and a skate park - Parish land. RJ, WK   | Connected        | Short-term         |
| Ashfield  | 126            | Create new Heathland/Grassland habitat through rides and possibly compartment management. Motte & Bailey and Byrons Walk are protected under schedule monument plan, and FE must upkeep these areas. LS, PN  | More             | Short-term         |

| Report ID | Map Display ID | Opportunity  | Opportunity Type | Projected Timespan |
|-----------|----------------|--|------------------|--------------------|
| Ashfield  | 128            | Grass field surrounding existing acid grassland/heath. Change of management? Could create/restore acid grassland. MGu  | More             | Short-term         |
| Ashfield  | 129            | Potential to connect areas of existing habitat. SM   | Connected        | Short-term         |
| Ashfield  | 131            | Enhance/restore wetlands and acid grassland. Requires better management/bracken control. ADL   | Better           | Short-term         |
| Ashfield  | 133            | Area of open habitat that could benefit from bracken control (Exact area unknown). MGu   | More             | Short-term         |
| Gedling   | 173            | Manage existing area of acidic habitat by scrub control and removal of encroaching conifer. JMB, PN  | Better           | Short-term         |
| Gedling   | 174            | Work with owners/managers of these areas of acid grassland/horse paddock close to Blidworth. Raise awareness of the value of these grasslands and try to encourage better management, reduce over stocking, better management of horse manure. JMB, JR | Better           | Long-term          |
| Gedling   | 175            | Improve management of areas of heath/acid grassland within Blidworth Wood. PN  | Better           | Short-term         |
| Gedling   | 176            | Manage area of existing heathland at Rigg Lane. NC   | Better           | Short-term         |
| Gedling   | 177            | Manage and enhance the small area of created heathland at Cockcliffe. JMB  | Better           | Short-term         |
| Gedling   | 178            | Bring areas of acid grassland, next to Bestwood Country Park, back into favourable management. JR, LS, SMC   | Better           | Short-term         |
| Gedling   | 179            | Manage and enhance existing small heathland areas at Bestwood Country Park. JR, LS, SMC  | Better           | Short-term         |
| Gedling   | 180            | Buffer the existing heathland site at Cockcliffe. JMB  | Bigger           | Short-term         |
| Gedling   | 181            | Enlarge the small areas of existing heathland at Bestwood Country Park. JR, SMC  | Bigger           | Long-term          |
| Gedling   | 182            | Connect nearest fragment of heathland to Blidworth Wood. JMB, NC   | Connected        | Long-term          |
| Gedling   | 183            | Bestwood - Restored sand quarry. Look for other opportunities to create heathland and acid grassland at this site. JR, SMC   | More             | Long-term          |
| Gedling   | 184            | Area previously trialed by EMEC as a heathland creation site. Potential area to create wet heathland. Ensure gorse scrub is maintained. CE, LS, MCW  | More             | Short-term         |
| Gedling   | 185            | Opportunities to create heathland by clearing areas of plantation woodland. CE, LS, MCW  | More             | Short-term         |
| Gedling   | 186            | Create connections between small areas of fragmented heathland in between Ravenshead and Papplewick. NC  | Connected        | Long-term          |
| Gedling   | 187            | Opportunity to create heath/acid grasslands within woodland rides at Gilletdale Wood. RC   | More             | Short-term         |
| Gedling   | 188            | Seven Mile Road Verge - Maintain and enhance good quality acid grassland. LS, RC   | Better           | Short-term         |
| Gedling   | 189            | Burnstump Country Park - Investigate the potential to create areas of acid grassland and heath in the open areas between the cricket pitch and pond. Potential to develop a local friend's group around this project. JR                               | More             | Short-term         |
| Gedling   | 190            | Calverton Colliery Yard- area developing into a good example of a lichen heath. MCW  | Better           | Short-term         |
| Gedling   | 191            | Investigate opportunities to create acid grassland heath in private land south of Swinecotte Dale at Newstead Abbey Park. JMB, RT  | More             | Long-term          |

**Map 3 - Grassland Biodiversity Opportunity Map**



**Table 3 - Biodiversity Opportunity table for Grassland (G)**

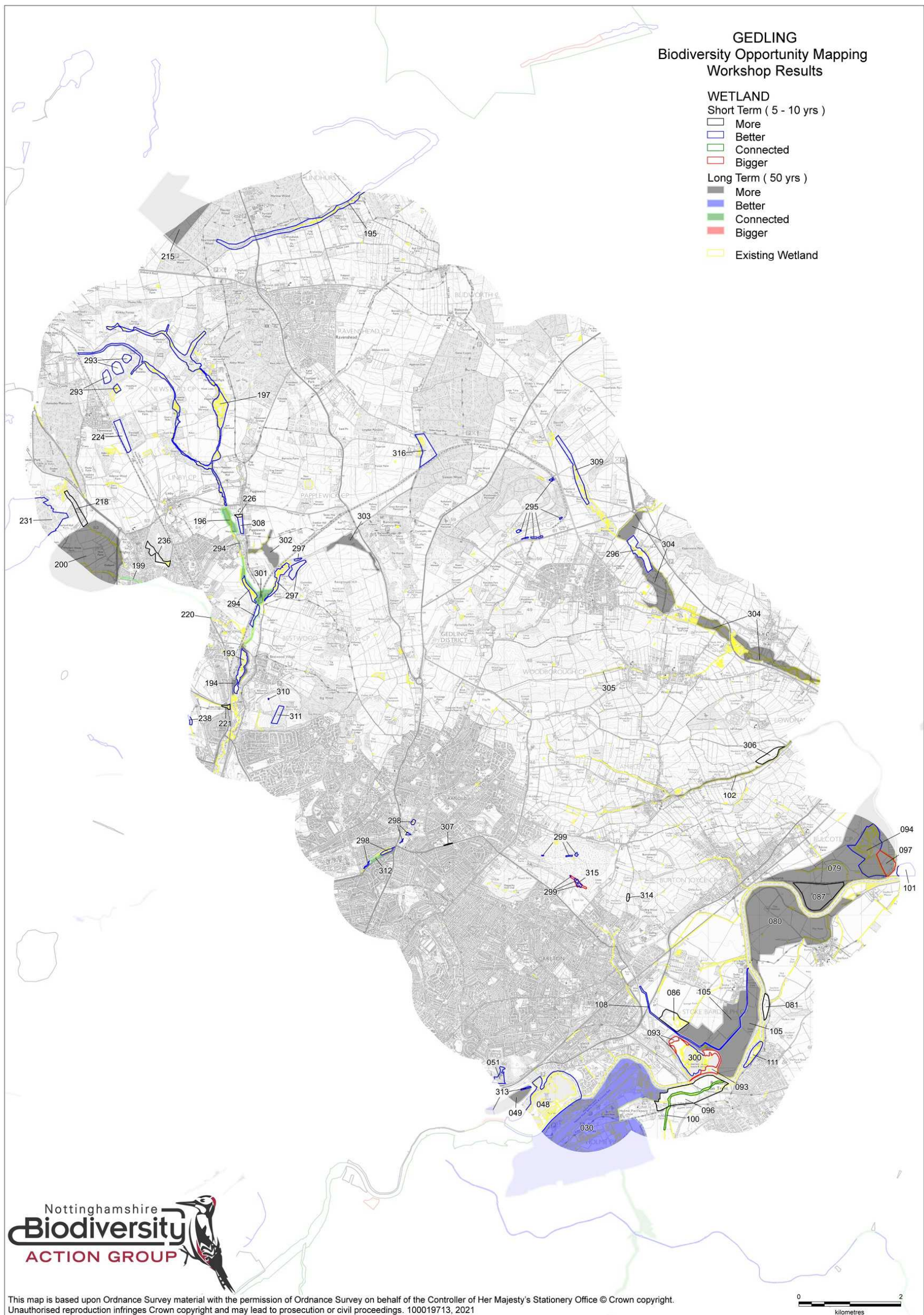
| Report ID | Map Display ID | Opportunity  | Opportunity Type | Projected Timespan |
|-----------|----------------|--|------------------|--------------------|
| RushWest  | 54             | Grassland improvements within the Holme Lakes complex including C/P. GD  | More             | Long-term          |
| RushWest  | 64             | Revert recent arable land back to species rich grassland. NC   | More             | Short-term         |
| RushWest  | 65             | Improvements to grassland management around rowing course. NC  | More             | Short-term         |
| RushWest  | 69             | Colwick Country Park, room for better grassland management, enhance diversity of site. EA, FA  | More             | Short-term         |
| RushWest  | 70             | Nottingham Racecourse, semi-improved grassland, room for improved management. EA, FA   | More             | Short-term         |
| TNN-S     | 111            | A612 steep grassland. Improve botanical diversity. NC  | Better           | Short-term         |
| TNN-S     | 112            | Farm track with grassland fringes possible for improvement and links to woodland.  | Connected        | Short-term         |
| TNN-S     | 119            | Recreate grassland on steeper slopes to link existing block. JMB   | More             | Long-term          |
| TNN-S     | 124            | Check status of existing habitat - recreate grassland across a wide area. JMB  | More             | Long-term          |
| SHER-S    | 165            | Neutral grassland enhancement IF acid grassland not achievable. NC   | Better           | Short-term         |
| SHER-S    | 166            | Newstead & Annesley CP, Freckland Wood, Newstead Old Coal Stocking Yard & Linby Trail Area - Neutral grassland & calcareous grassland enhancement. NC  | Better           | Short-term         |
| SHER-S    | 167            | Bestwood Country Park grasslands - developing neutral grasslands on the old Pit Top site, and existing grasslands at parkside pastures. Maintain and enhance. Potential to modify existing management regimes to improve biodiversity. JR, NC              | Better           | Short-term         |
| SHER-S    | 168            | Newstead Abbey - Meadow/Pasture, improve Newstead Abbey Conservation Management Plan. BD, EA, JMB  | Better           | Short-term         |
| SHER-S    | 169            | Calverton Branch Line (NCC) - Recently acquired. NCC applying for funding. Verges/embankment as neutral grassland by clearing & preventing open areas from scrubbing over. NC  | Connected        | Short-term         |
| Ashfield  | 202            | Create/restore grassland in pony fields and land owned by Annesley and Felley Parish Council. Overgrown, possible grass snake presence. PO   | More             | Short-term         |
| Ashfield  | 204            | Potential for increasing open habitats long term within Forest Design Plan. MG   | More             | Long-term          |
| Ashfield  | 205            | Create grassland buffer on the slope down to Rainworth Water. RT   | More             | Short-term         |
| Ashfield  | 219            | Improve wet grassland along the Leen and adjacent to the golf course by creating additional wetland/scrape features. Site important for waders in winter, such as snipe and amphibians. LS   | Better           | Short-term         |
| Ashfield  | 222            | Bring relatively species rich grasslands into management - regular mowing and/or grazing required. LS  | Better           | Short-term         |
| Ashfield  | 223            | Opportunities for habitat development/creation along the Leen corridor with management/creation of sites owned or managed by ADC and Friends of Moor Pond Wood. Extend habitat corridor into fields adjacent to Leen Ponds, these are currently arable. LS | More             | Short-term         |
| Ashfield  | 225            | Broomhill farm. Bring wider grassland area into management. The northeastern part of this opportunity is currently part of a planning application that gives potential to create species rich grassland links through the new development. MGU, MJW        | More             | Short-term         |
| Gedling   | 264            | Calverton Road Nature Reserve and Hobbocks (managed by local group). JR  | Better           | Short-term         |
| Gedling   | 265            | Fields around The Hobbocks. JR, MCW  | Better           | Short-term         |
| Gedling   | 266            | Cocker Beck catchment grasslands - enhance quality of existing grasslands. NC, LS  | Better           | Long-term          |
| Gedling   | 267            | Burton Joyce/Lambley semi-improved grasslands - maintain and enhance the existing resource. MGW  | Better           | Long-term          |
| Gedling   | 268            | Gedling Country Park (pit tip). Enhance existing grasslands by grazing/ taking for hay. JR   | Better           | Short-term         |
| Gedling   | 269            | Digby Park - improve the management for this grassland site. Introduce leas intensive mowing regimes to appropriate areas of the grassland. JR   | Better           | Short-term         |
| Gedling   | 270            | Gedling Park Wood grasslands - Maintain and enhance. PS  | Better           | Short-term         |
| Gedling   | 271            | Holmes meander loop - improve grassland quality. JMB, MG, MGW, PS  | Better           | Long-term          |
| Gedling   | 272            | Netherfield Lagoons Grasslands - maintain and enhance. NC  | Better           | Long-term          |
| Gedling   | 273            | Look to buffer existing areas of grassland between Linby and Newstead by managing field headlands in the neighbouring arable land in a more favourable way. CH, LS   | Bigger           | Long-term          |
| Gedling   | 274            | Strengthen connectivity within the existing Newstead Abbey block by creating habitat links to areas of grassland north of the core area. EA  | Connected        | Short-term         |
| Gedling   | 275            | Create grassland links between the Newstead Abbey and Newstead & Annesley Country Park to create a stronger and larger connected grassland block. NC, RT   | Connected        | Long-term          |
| Gedling   | 276            | Improve grassland connectivity between River Leen at Papplewick and Linby (Linby Trail etc.). CH   | Connected        | Long-term          |

| Report ID | Map Display ID | Opportunity   | Opportunity Type | Projected Timespan |
|-----------|----------------|---|------------------|--------------------|
| Gedling   | 277            | Improve grassland connectivity between existing grassland patches at Ramsdale Golf Course and create connections into the Calverton Pit Tip grasslands  | Connected        | Short-term         |
| Gedling   | 278            | Improve grassland links between existing grassland fields adjacent to the Cocker Beck. JMB  | Connected        | Long-term          |
| Gedling   | 279            | Create grassland links between Gedling Country Park and the Cocker Beck Grasslands  | Connected        | Long-term          |
| Gedling   | 280            | Create grassland links between Digby Park/Mapperley Golf Course to Gedling Country Park. JR   | Connected        | Short-term         |
| Gedling   | 281            | Haywood Oaks, Blidworth Wood, Samsons Wood and Watchood Plantation - Increase number of grassland glades and improve the management of the woodland rides to enhance the grassland habitat network in all FC woodlands. Where possible, favour acid grassland or heath when creating open areas. PN | More             | Short-term         |
| Gedling   | 282            | Create and manage areas of species rich grassland within Ramsdale Golf Course. SMc  | More             | Short-term         |
| Gedling   | 283            | Land recently acquired by Calverton Parish Council, opportunity to create areas of species rich grassland. GF   | More             | Short-term         |
| Gedling   | 284            | Create species rich grasslands and change management of existing amenity grasslands around Mill Lakes, Bestwood CP. JR  | More             | Short-term         |
| Gedling   | 285            | Currently an area of improved grassland on northern slopes of Bestwood Pit Tip, improve grassland quality by better management. JR, SMc   | More             | Short-term         |
| Gedling   | 286            | Dorket Head Quarry to be restored to grassland. BD, GF, JMB   | More             | Long-term          |
| Gedling   | 287            | Hunters Hill farm, Cocker Beck. Create new grassland. PH  | More             | Short-term         |
| Gedling   | 288            | Create and manage areas of species rich grassland within Mapperley Golf Course. JR  | More             | Short-term         |
| Gedling   | 289            | Burton Meadows - wet grassland creation. NC   | More             | Long-term          |
| Gedling   | 290            | Severn Trent Water Stoke Bardolph Estate - work with STW to identify opportunities to create new areas of species rich grassland. BD, JMB   | More             | Long-term          |
| Gedling   | 291            | NWT have created management plan for the grasslands within STW sewage works at Stoke Bardolph. BD, JMB  | More             | Short-term         |
| Gedling   | 292            | Opportunities to create species rich grassland/wet grassland either side of the Ouse Dyke. The existing improved grassland is intensively managed, and this could be relaxed. MG, PH, PS  | More             | Long-term          |
| Gedling   | 293            | New habitat, including species rich grassland, associated with the Ecology Park (as mitigation for the Teal Close development). JR, MG, PS  | More             | Short-term         |
| Gedling   | 294            | Connect grasslands between The Hobbocks and Calverton Road Nature Reserve. JR   | Connected        | Long-term          |
| Gedling   | 295            | Within the recently created plantation, seek to create glades incorporating areas of wet grassland in areas neighbouring Rainworth Water. PH  | More             | Short-term         |
| Gedling   | 296            | Oxton Tithe Green Burial Ground - An area of created grassland. Continue to manage and enhance where appropriate. SMc   | Better           | Short-term         |
| Gedling   | 297            | Opportunities to create and improve grassland at the Rugby Club and nearby School. SMc  | More             | Short-term         |
| Gedling   | 298            | Existing grassland, ownership to be investigated. SMc   | Better           | Short-term         |
| Gedling   | 299            | Opportunities to create new areas of species rich grassland between Calverton Colliery and Ramsdale Golf Course. SMc  | More             | Short-term         |
| Gedling   | 300            | Epperstone Park - Create areas of species rich grassland as part of the existing ride network, while also looking at opportunities to create glades. PN   | More             | Long-term          |
| Gedling   | 301            | Work with owners of horses that graze these paddocks to improve quality of grassland. LS, SMc   | Better           | Short-term         |
| Gedling   | 302            | Create species rich grassland at site. MGW  | More             | Short-term         |
| Gedling   | 303            | Current project underway to create wildflower meadow on old cricket pitch. JEO  | More             | Short-term         |
| Gedling   | 304            | Maintain and enhance grassland around the pond at Ploughman Wood. MGW   | Better           | Short-term         |
| Gedling   | 305            | Investigate the possibility of creating species rich grassland links between the restored clay pit at Dorket Head and existing semi-natural grasslands in the Lambley Dumble. CH, JR, LS  | More             | Long-term          |
| Gedling   | 306            | Gunthorpe Gravel Pits - Create and manage species rich grassland. Good area for owl and small mammal populations. MGW   | More             | Short-term         |
| Gedling   | 307            | Create species rich grassland. MGW  | More             | Short-term         |
| Gedling   | 308            | Create area of good quality wet grassland opposite of Burton Meadows. PH, RT  | More             | Short-term         |
| Gedling   | 309            | The Hams - Investigate the possibility of reverting this area to wet meadow. NM   | More             | Long-term          |
| Gedling   | 310            | Carlton le Willow School - speak with school about changing mowing regime. PS   | More             | Short-term         |
| Gedling   | 311            | Maintain and enhance areas of wet grassland within the Lily Ponds, Radcliffe OT. BD   | More             | Short-term         |
| Gedling   | 312            | Enhance existing strip of improved grassland alongside the River Trent by increasing species diversity and altering management regime. Already a good grassland link. MGW   | More             | Short-term         |
| Gedling   | 313            | Opportunities to create species rich grassland as part of the future development on this site. BD   | More             | Short-term         |

| Report ID | Map Display ID | Opportunity  | Opportunity Type | Projected Timespan |
|-----------|----------------|--|------------------|--------------------|
| Gedling   | 314            | Create grassland links (perhaps through parkland or orchard creation) between Gedling Country Park and Gedling House Wood either side of the new Gedling access road. MCW                    | Connected        | Long-term          |
| Gedling   | 315            | Owned by Canal and Rivers Trust, potential to improve by creating species rich grassland. IW   | More             | Short-term         |
| Gedling   | 316            | This space is to be developed as recreational land as part of the Teal Close development. Opportunities to create species rich grassland around the perimeter of this open space. JR, MG, PS | More             | Short-term         |
| Gedling   | 317            | Create species rich/wet grassland within the floodplain adjacent to the River Trent, on land that is regularly inundated. MG, MW, PS   | More             | Long-term          |
| Gedling   | 318            | Improve and maintain species rich grassland along this new cycle route (disused railway line). AS, LS  | Better           | Short-term         |
| Gedling   | 319            | Colwick Woods - Maintain existing areas of species rich grassland and improve management of other areas of grassland by relaxing mowing regimes. EA  | Better           | Short-term         |
| Gedling   | 320            | This area of good quality grassland on the edge of the racecourse requires scrub management to maintain its interest. However, maintain a good mix of scrub and grassland. MGW               | Better           | Short-term         |
| Gedling   | 321            | Grassland to be created as part of the Gedling access road. (AS)   | More             | Short-term         |
| Gedling   | 322            | Manage these old horse paddocks to increase their species diversity. (JR, MCW)   | More             | Short-term         |



Map 4 - Wetland Biodiversity Opportunity Map

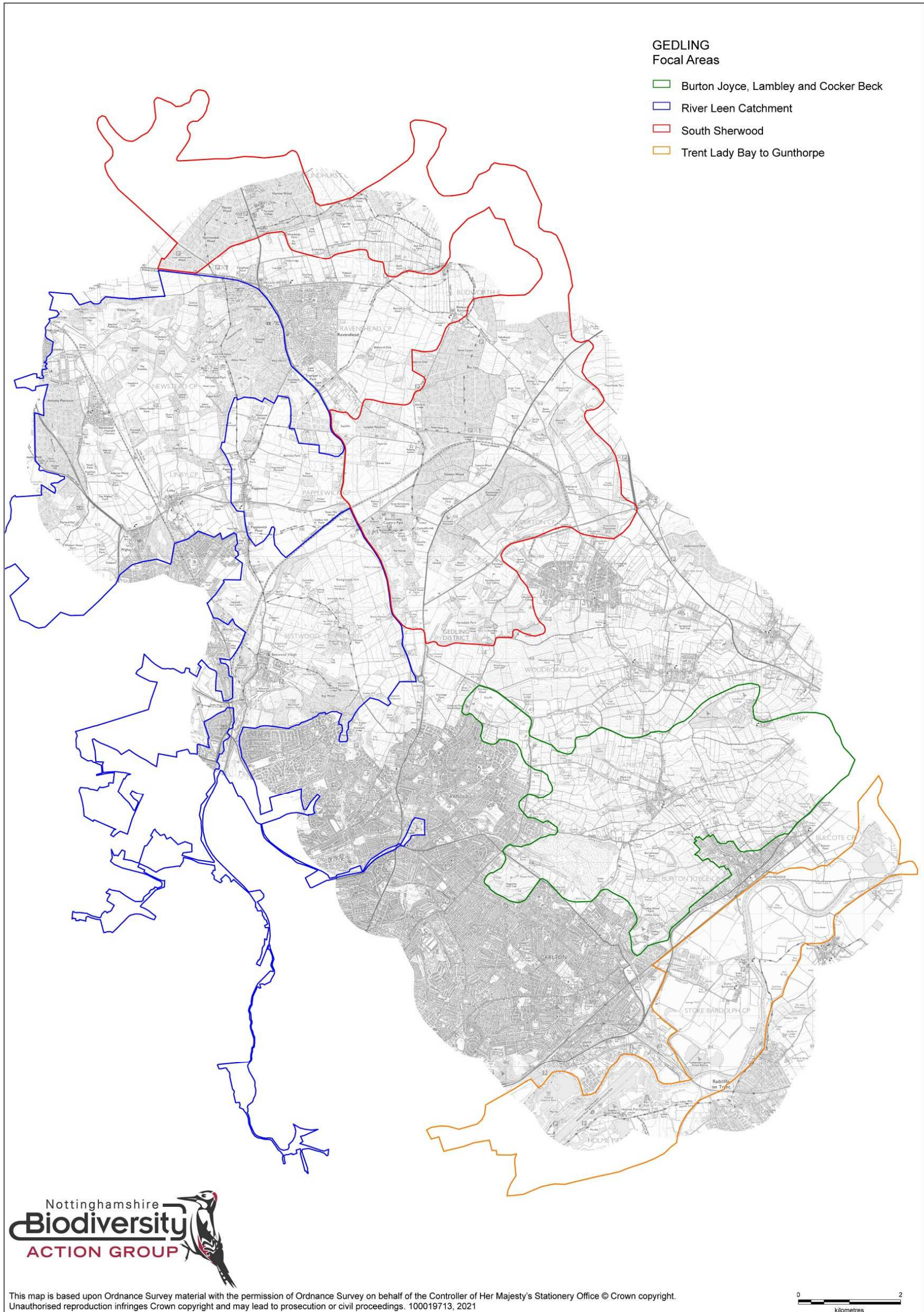


**Table 4 - Biodiversity Opportunity table for Wetland (M)**

| Report ID | Map Display ID | Opportunity   | Opportunity Type | Projected Timespan |
|-----------|----------------|---|------------------|--------------------|
| RushWest  | 030            | Improve wet habitats, lakeside margins, wet grassland, wet woodland. Important bat, reptile and amphibian populations. Breeding and wintering birds. Land to the south may be put into local development plan so funds may become available to enhance adjacent habitats. MGW   | Better           | Long-term          |
| RushWest  | 048            | Colwick Country Park - enhancements to wetland habitats at CCP. Existing wildlife lake surrounded by areas of wet woodland/ marsh areas. Possible 5-10 year project with volunteers. EA, FA   | Better           | Short-term         |
| RushWest  | 049            | Nottingham Racecourse - Potential scope for wetland creation to join 2 x existing LWS wetlands at either end of the racecourse. Site is often damp and racecourse leaseholders have problems with land drainage, possible reedbed/ attenuation pond. EA   | More             | Long-term          |
| TNN-S     | 051            | Colwick Wood: new pond created in 2005. Maintain existing wetland habitat. Potential for more wetland and improved marsh/wet woodland areas. EA, FA   | Better           | Short-term         |
| TNN-S     | 079            | Potential flood alleviation scheme which could provide wetland habitat. Delivery date is unknown as are the potential habitats. Can revise timescales at a later date. Mosaic of wetland habitats. DJW  | More             | Long-term          |
| TNN-S     | 080            | Large scale habitat creation-wet grassland and reedbed and river 'channel' re-branding or creation of back-channel. JMB   | More             | Long-term          |
| TNN-S     | 081            | Tall ruderal floodplain with potential for scrapes, mires and wet grassland. GD   | More             | Short-term         |
| TNN-S     | 086            | Teal close development proposed ecology park with ponds and wetland scrapes. GC   | More             | Short-term         |
| TNN-S     | 087            | Reinstatement of flooded pool at Burton Meadows. JEO  | More             | Short-term         |
| TNN-S     | 093            | Netherfield Lagoons. Enhance existing margins and wet grassland. Create reedbed and wader scrapes. MGW  | Bigger           | Short-term         |
| TNN-S     | 094            | Habitat enhancement of existing wetlands. Reshape margins; reedbeds. JMB  | Better           | Short-term         |
| TNN-S     | 096            | Bleasby and Holme Pierrepont. Management to consider local grass snake and amphibian populations. JEO   | More             | Short-term         |
| TNN-S     | 097            | Habitat creation: wet grassland as part of Gunthorpe flood remediation scheme. JMB  | Bigger           | Short-term         |
| TNN-S     | 100            | Polser Brook - Connecting stream out past Skylarks into Rushcliffe (potential route of canal). GD   | Connected        | Short-term         |
| TNN-S     | 101            | Gunthorpe Gravel Pits. Management to consider significant toad, frog and smooth newt population. JEO  | Better           | Short-term         |
| TNN-S     | 102            | Cocker Beck - Improve wetland connectivity along Cocker Beck from River Trent to Lambley Dumbles, Ploughman Wood, Gedling Country Park. JEO   | More             | Long-term          |
| TNN-S     | 105            | Land north of Netherfield Lagoons and either side of the Ouse Dyke - potential to create wet grasslands (scrapes and ponds) and improve existing ditches. GD  | More             | Long-term          |
| TNN-S     | 108            | Ouse dyke - Enhance dyke. Improve/naturalise channel by creating meanders and where possible create wetlands alongside. GC, PH  | Better           | Short-term         |
| SHER-S    | 111            | Lily ponds, Radcliffe on Trent. Acquired by Radcliffe on Trent parish council from angling club. Now managed as a Nature Reserve (following management plan). Enhance and maintain existing wetland. PP   | Better           | Short-term         |
| SHER-S    | 193            | Enhance Bestwood Mill Lakes, including Bestwood reedbed. JR, SMC  | Better           | Short-term         |
| SHER-S    | 194            | Potential to create more wetland habitat adjacent to Mill lakes. JR, SMC  | More             | Long-term          |
| SHER-S    | 195            | Wetland habitat restoration & enhancement. Improve Rainworth water tributary through Thieves Wood. The landowner has undertaken habitat improvement work in partnership with the Sherwood Catchment Partnership. DS, JMB  | Better           | Short-term         |
| SHER-S    | 196            | Potential to create diverse wetland. LS, MJW  | Connected        | Long-term          |
| Ashfield  | 197            | Enhance existing wetland in Upper Leen catchment. CE, EA, LS, MCW   | Better           | Short-term         |
| Ashfield  | 199            | Improve Baker Lane Brook through removal of culverts along its length as and when new development opportunities come forward. Could be delivered through Green Infrastructure. DJW  | Connected        | Long-term          |
| Ashfield  | 200            | Wetland habitat creation - farmland ponds, debris, dams and marshy areas to help slow flows and reduce flood risk to Hucknall. Catchment area may be larger than shown. Potential for habitat creation in order to create flood relief for the Hucknall Town Centre Improvements/ also creation of compensatory habitat for proposed developments in this area. DJW, KM | More             | Long-term          |
| Ashfield  | 215            | Inclusion of new ponds and wetland in restoration at Two Oaks quarry. DS  | More             | Long-term          |
| Ashfield  | 218            | Enhance Wighay Brook from Big Pond - remove conifers from brook side, create marsh/flood storage, halt acidification. Potential to undertake Natural Flood Management/woody debris etc. JAR, PH   | More             | Short-term         |
| Ashfield  | 220            | De-culvert Baker Lane Brook (At Porchester Close Plantation). LS, MGU   | Connected        | Long-term          |
| Ashfield  | 221            | Farleys brook/ Hucknall. Create siltation pond that can be cleaned out and/or reedbed filter area to reduce-prevent polluted urban-grey water and sewage from the Hucknall system entering the main Leen. LS, MGU   | More             | Short-term         |

| Report ID | Map Display ID | Opportunity   | Opportunity Type | Projected Timespan |
|-----------|----------------|---|------------------|--------------------|
| Ashfield  | 224            | Newstead stocking yard - increase number and depth of wet scrapes so that they hold water for longer in Spring/Summer. MGu  | Better           | Short-term         |
| Ashfield  | 226            | Extend pond north of Moor Pond Wood boundary by deepening and connect pond with that in Dam Banks. LS   | More             | Short-term         |
| Ashfield  | 231            | Park Forest - manage existing Ponds and wetlands to encourage GCN to move across site - open up canopy (Sycamore). Western side of Park Forest will be adversely affected by development of HS2. Potential to seek compensatory wetland habitat (scrapes and ponds). ADL, JMB | Better           | Short-term         |
| Ashfield  | 236            | Potential for habitat creation, in order to create flood relief for the Hucknall Town Centre Improvements. KM   | More             | Short-term         |
| Ashfield  | 238            | Control/removal of signal crayfish from fishing ponds to prevent degradation of good wetland habitats both within the ponds themselves and more widely across the Leen catchment. KM  | Better           | Short-term         |
| Gedling   | 293            | Newstead & Annesley Country Park - enhance existing wetland (considering schedule 1 species that are present on this site). CA  | Better           | Short-term         |
| Gedling   | 294            | Maintain and enhance existing areas of wet grassland/marsh and ponds in the Leen Valley (between Papplewick and Bestwood). LS, MJW  | Better           | Short-term         |
| Gedling   | 295            | Maintain and enhance the existing wetland at Calverton Colliery (old colliery settling lagoons). JEO  | Better           | Short-term         |
| Gedling   | 296            | Maintain and enhance existing areas of wet grassland and marsh on the Dover Beck. LS, PH, RT  | Better           | Short-term         |
| Gedling   | 297            | Work with Nottinghamshire Anglers to enhance the Bestwood Duck Ponds. LS  | Better           | Short-term         |
| Gedling   | 298            | Maintain and enhance existing areas of wetland adjacent to the Daybrook. (Thackerays La Rec, Valley Road Washlands, Fiveways, Arnot Hill Flood Ponds, Arnot Hill Park). EA, JR  | Better           | Short-term         |
| Gedling   | 299            | Maintain and enhance the existing wetlands at Gedling Country Park. JR  | Better           | Short-term         |
| Gedling   | 300            | Maintain and enhance the existing wetlands at Netherfield Lagoons. MG, PS   | Better           | Short-term         |
| Gedling   | 301            | Create wetland habitat to form better habitat continuity along the River Leen between existing wetland habitat patches. Possible site for M2M funding? JMB  | Connected        | Long-term          |
| Gedling   | 302            | Opportunity to work with landowners to create wetland habitats in the flood zone on Papplewick Moor? LS, MCW  | More             | Long-term          |
| Gedling   | 303            | Opportunity to create wetlands adjacent to the stream (tributary of the River Leen) upstream of Bestwood Duck Ponds. RC   | More             | Long-term          |
| Gedling   | 304            | Opportunities to create areas of new wetland in the flood zone adjacent to the Dover Beck (between Oxton Brook and Epperstone). PH, RT  | More             | Long-term          |
| Gedling   | 305            | Opportunities to enhance the biodiversity of Woodborough Dumble with Natural Flood Management enhancements (upstream of Woodborough). PH  | More             | Long-term          |
| Gedling   | 306            | Opportunity to create more wetland as part of Natural Flood Management Project near Hunters Hill Farm. PH   | More             | Short-term         |
| Gedling   | 307            | Opportunity to enhance existing stream at Arno Vale Recreation Ground. JR   | More             | Short-term         |
| Gedling   | 308            | Maintain and enhance the mill pond at the southern end of Moor Pond Wood. CH, LS  | Better           | Short-term         |
| Gedling   | 309            | Maintain and enhance existing wetlands at Oxton Bogs. Enhance area for common toads, perhaps through creation of more woodland ponds and scrapes, hibernacula, extra planting, permanent rough grassland margins etc. (BD, JEO, MCW)  | Better           | Short-term         |
| Gedling   | 310            | Maintain and enhance area of developing marsh. SMc  | Better           | Short-term         |
| Gedling   | 311            | Maintain existing wetlands on top of Bestwood Pit Tip by removing encroaching scrub. SMc  | Better           | Short-term         |
| Gedling   | 312            | Opportunities to create improved wetland links between Valley Road reedbed and the new channel at Fiveways. EA  | Connected        | Long-term          |
| Gedling   | 313            | Maintain and enhance these ditches and ponds at the racecourse. EA, MGW   | Better           | Short-term         |
| Gedling   | 314            | Opportunities to create new wetlands (including new ponds) as part of the Gedling Access Road development. AS, NC   | More             | Short-term         |
| Gedling   | 315            | Existing ponds to be buffered with new wetland, including two additional ponds, as part of the Gedling Access Road development. AS, NC  | Bigger           | Short-term         |
| Gedling   | 316            | Maintain and enhance the SUDS Ponds at the junction of Longdale Lane and Rigg Lane (perhaps through creation of more woodland ponds and scrapes, hibernacula, extra planting, permanent rough grassland margins etc). BD  | Better           | Short-term         |

Map 5 - Focal Areas



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## **Appendix 1 - BOM Working Group**

Nottinghamshire County Council

Nottinghamshire Wildlife Trust

Nottinghamshire Biological and Geological Records Centre

Environment Agency

Royal Society for the Protection of Birds

The National Forest Company

## Appendix 2 - Composition of broad habitat types

The following table indicates the phase 1 habitats that form the four broad habitat types.

|  |  |
|--|--|
| <b>Broad habitat type - WOODLAND</b>                       |  |
| PBW  | Broadleaved woodland - plantation          |
| BW   | Broadleaved woodland - semi-natural        |
| PMW  | Mixed woodland - plantation                |
| MW   | Mixed woodland - semi-natural              |
| <b>Broad habitat type - HEATHLAND &amp; ACID GRASSLAND</b> |  |
| SAG  | Acid grassland - semi-improved             |
| AG   | Acid grassland - unimproved                |
| ADH  | Dry dwarf shrub heath - acid               |
| BDH  | Dry dwarf shrub heath - basic              |
| DGM  | Dry heath/acid grassland mosaic            |
| WH   | Wet dwarf shrub heath                      |
| WGM  | Wet heath/acid grassland mosaic            |
| <b>Broad habitat type - OTHER GRASSLAND</b>                |  |
| SCG  | Calcareous grassland - semi-improved       |
| CG   | Calcareous grassland - unimproved          |
| SNG  | Neutral grassland - semi-improved          |
| NG   | Neutral grassland - unimproved             |
| SBW  | Parkland and scattered trees - broadleaved |
| Orchard  | Parkland and scattered trees - broadleaved |
| SCW  | Parkland and scattered trees - coniferous  |
| SMW  | Parkland and scattered trees - mixed       |
| <b>Broad habitat type - WETLAND</b>                        |  |
| BB   | Blanket bog                                |
| DB   | Dry modified bog                           |
| BM   | Fen - basin mire                           |
| FPM  | Fen - flood plain mire                     |
| VM   | Fen - valley mire                          |
| AF   | Flush and spring - acid/neutral flush      |
| BF   | Flush and spring - basic flush             |
| IV   | Marginal/inundation - inundation           |
| MV   | Marginal/inundation - marginal             |
| MG   | Marsh/marshy grassland                     |
| RB   | Raised bog                                 |
| Reedbed  | Reedbed                                    |
| RW   | Running water                              |
| RWB  | Running water - brackish                   |
| RWD  | Running water - dystrophic                 |
| RWE  | Running water - eutrophic                  |
| RWC  | Running water - marl                       |
| RWM  | Running water - mesotrophic                |
| RWO  | Running water - oligotrophic               |
| SW   | Standing water                             |
| SWB  | Standing water - brackish                  |
| SWD  | Standing water - dystrophic                |
| SWE  | Standing water - eutrophic                 |
| SWC  | Standing water - marl                      |
| SWM  | Standing water - mesotrophic               |
| SWO  | Standing water - oligotrophic              |
| SP   | Swamp                                      |
| WB   | Wet modified bog                           |
|  |  |

### **Appendix 3 - Permeability values**

The following four tables provide a list of Phase 1 habitats and the permeability scores assigned to each of these Phase 1 habitats. The four tables correspond to one of the four broad habitat types (woodland, heathland & acid grassland, other grassland and wetland), and the permeability scores listed indicate how permeable each Phase 1 habitat is to the relevant generic 'focal' species associated with the broad habitat type in question.

The permeability score given for each Phase 1 habitat falls between 1 and 50. A score of 1 indicates that the habitat is a core/source habitat for the broad habitat type. A low score above 1 indicates a habitat that is very permeable to the generic focal species associated with the broad habitat type in question, whilst a score of 50 indicates that the habitat is very impermeable for that focal species.

The final column in each table indicates the source of the information. Where the source is given as JNCC the information has come directly from work by Natural England (Catchpole 2010). Where the source is given as NFC the information has come from the habitat network modelling work undertaken by the National Forest Company. The data from NFC principally relates to a variety of urban habitats not listed in the Phase 1 habitat survey handbook, such as roads, tracks, buildings, airports, railways, suburbs, gardens etc. The exception to this is orchards for which a permeability value has been given based on a similar Phase 1 habitat type (in this case parkland/scattered trees).

In addition, some of the permeability scores devised by Catchpole have been altered to best serve local biodiversity conditions, and some additional habitats have been added to the list of habitats and assigned a permeability score based on similarly structured/functioning habitats. In this case the source of the data is given as NCC. These local amendments are highlighted below:

- To reflect the importance of Open Mosaic Habitat on Previously Developed Land in Nottinghamshire this habitat has been assigned its own Phase 1 habitat code. The permeability scores have been based on similar open habitat types.
- To identify the importance of Reedbed restoration work within Nottinghamshire this habitat was assigned its own Phase 1 habitat code. The permeability scores have been based on similar habitat types.

### **Reference**

Catchpole, R. (2010) England Habitat Network (EHN 2.0) – Metadata. *Natural England*

# GRASSLAND

| GRASSLAND    |   |                |                   |
|--------------|---|----------------|-------------------|
| Phase 1 Code | Phase 1 Habitat Name                                  | Grassland Cost | Definition Source |
| ROAD         | A or B road   | 50             | NFC               |
| SAG          | Acid grassland - semi-improved                        | 2              | NCC               |
| AG           | Acid grassland - unimproved                           | 2              | NCC               |
| RUNWAY       | Airport runway  | 50             | NFC               |
| BG           | Bare ground   | 20             | JNCC              |
| P            | Bare peat   | 5              | JNCC              |
| BB           | Blanket bog   | 20             | JNCC              |
| X            | Boundary removed                                      | 0              | JNCC              |
| CB           | Bracken - continuous                                  | 10             | JNCC              |
| SB           | Bracken - scattered                                   | 10             | JNCC              |
| PBW          | Broadleaved woodland - plantation                     | 20             | JNCC              |
| BW           | Broadleaved woodland - semi-natural                   | 20             | JNCC              |
| BUILD        | Buildings   | 20             | NFC               |
| Building     | Buildings   | 20             | NFC               |
| Buildings    | Buildings   | 20             | NFC               |
| SCG          | Calcareous grassland - semi-improved                  | 1              | JNCC              |
| CG           | Calcareous grassland - unimproved                     | 1              | JNCC              |
| CS           | Caravan site  | 0              | JNCC              |
| CA           | Cave  | 50             | JNCC              |
| PCW          | Coniferous woodland - plantation                      | 20             | JNCC              |
| CW           | Coniferous woodland - semi-natural                    | 20             | JNCC              |
| AM           | Cultivated/disturbed land - amenity grassland         | 50             | JNCC              |
| A            | Cultivated/disturbed land - arable                    | 50             | JNCC              |
| ESP          | Cultivated/disturbed land - ephemeral/short perennial | 5              | JNCC              |
| DD           | Dry ditch   | 0              | JNCC              |
| ADH          | Dry dwarf shrub heath - acid                          | 10             | JNCC              |
| BDH          | Dry dwarf shrub heath - basic                         | 10             | JNCC              |
| DGM          | Dry heath/acid grassland mosaic                       | 2              | JNCC              |
| DB           | Dry modified bog                                      | 20             | JNCC              |
| EB           | Earth bank  | 0              | JNCC              |
| BM           | Fen - basin mire                                      | 5              | JNCC              |
| FPM          | Fen - flood plain mire                                | 5              | JNCC              |
| VM           | Fen - valley mire                                     | 5              | JNCC              |
| F            | Fence   | 0              | JNCC              |
| AF           | Flush and spring - acid/neutral flush                 | 5              | JNCC              |
| BF           | Flush and spring - basic flush                        | 5              | JNCC              |
| PH-          | Hedges - defunct - species-poor                       | 20             | JNCC              |
| RH-          | Hedges - defunct - species-rich                       | 20             | JNCC              |
| PH           | Hedges - intact - species-poor                        | 20             | JNCC              |
| RH           | Hedges - intact - species-rich                        | 20             | JNCC              |
| PHT          | Hedges - with trees - species-poor                    | 20             | JNCC              |
| RHT          | Hedges - with trees - species-rich                    | 20             | JNCC              |
| I            | Improved grassland                                    | 50             | JNCC              |
| AC           | Inland cliff - acid/neutral                           | 50             | JNCC              |
| BC           | Inland cliff - basic                                  | 50             | JNCC              |
| IS           | Introduced shrub                                      | 20             | JNCC              |
| LH           | Lichen/bryophyte heath                                | 15             | JNCC              |
| LP           | Limestone pavement                                    | 50             | JNCC              |
| IV           | Marginal/inundation - inundation                      | 20             | JNCC              |
| MV           | Marginal/inundation - marginal                        | 20             | JNCC              |
| MG           | Marsh/marshy grassland                                | 5              | JNCC              |
| MI           | Mine  | 20             | JNCC              |
| PMW          | Mixed woodland - plantation                           | 20             | JNCC              |
| MW           | Mixed woodland - semi-natural                         | 20             | JNCC              |
| MH           | Montane heath/dwarf herb                              | 15             | JNCC              |
| MWAY         | Motorway or major dual carriageway                    | 50             | NFC               |
| SNG          | Neutral grassland - semi-improved                     | 1              | JNCC              |
| NG           | Neutral grassland - unimproved                        | 1              | JNCC              |
| NR           | Non-ruderal   | 10             | JNCC              |
| OMHOPDL      | Open Mosaic Habitat                                   | 5              | NCC               |
| AR           | Other exposure - acid/neutral                         | 50             | JNCC              |
| BR           | Other exposure - basic                                | 50             | JNCC              |
| SBW          | Parkland and scattered trees - broadleaved            | 1              | JNCC              |
| Orchard      | Parkland and scattered trees - broadleaved            | 1              | NFC               |
| SCW          | Parkland and scattered trees - coniferous             | 1              | JNCC              |
| SMW          | Parkland and scattered trees - mixed                  | 1              | JNCC              |
| SI           | Poor semi-improved grassland                          | 2              | JNCC              |
| Q            | Quarry  | 50             | JNCC              |
| RAIL         | Railway line  | 50             | NFC               |
| RB           | Raised bog  | 20             | JNCC              |
| FB           | Recently felled woodland - broadleaved                | 20             | JNCC              |
| FC           | Recently felled woodland - coniferous                 | 20             | JNCC              |
| FM           | Recently felled woodland - mixed                      | 20             | JNCC              |
| Reedbed      | Reedbed   | 20             | NCC               |
| R            | Refuse tip  | 20             | JNCC              |
| RW           | Running water   | 50             | JNCC              |
| RWB          | Running water - brackish                              | 50             | JNCC              |
| RWD          | Running water - dystrophic                            | 50             | JNCC              |
| RWE          | Running water - eutrophic                             | 50             | JNCC              |
| RWC          | Running water - marl                                  | 50             | JNCC              |
| RWM          | Running water - mesotrophic                           | 50             | JNCC              |
| RWO          | Running water - oligotrophic                          | 50             | JNCC              |
| AS           | Scree - acid/neutral                                  | 50             | JNCC              |
| BS           | Scree - basic   | 50             | JNCC              |
| DS           | Scrub - dense/continuous                              | 20             | JNCC              |
| SS           | Scrub - scattered                                     | 20             | JNCC              |
| SWALL        | Sea wall  | 0              | JNCC              |
| S            | Spoil   | 20             | JNCC              |
| SW           | Standing water  | 50             | JNCC              |
| SWB          | Standing water - brackish                             | 50             | JNCC              |
| SWD          | Standing water - dystrophic                           | 50             | JNCC              |
| SWE          | Standing water - eutrophic                            | 50             | JNCC              |
| SWC          | Standing water - marl                                 | 50             | JNCC              |
| SWM          | Standing water - mesotrophic                          | 50             | JNCC              |
| SWO          | Standing water - oligotrophic                         | 50             | JNCC              |
| SUBURB       | Suburban/rural development                            | 10             | NFC               |
| Gardens      | Suburban/rural development                            | 10             | NFC               |
| Paved        | Suburban/rural development                            | 50             | NFC               |
| SP           | Swamp   | 20             | JNCC              |
| TR           | Tall ruderal  | 10             | JNCC              |
| TRACK        | Track or minor access road                            | 50             | NFC               |
| Path         | Track or minor access road                            | 50             | NFC               |
| ?            | Unknown   | 50             | NFC               |
| INDUST       | Urban industrial development                          | 30             | NFC               |
| URBAN        | Urban residential/commercial development              | 20             | NFC               |
| W            | Wall  | 0              | JNCC              |
| WH           | Wet dwarf shrub heath                                 | 10             | JNCC              |
| WGM          | Wet heath/acid grassland mosaic                       | 2              | JNCC              |
| WB           | Wet modified bog                                      | 20             | JNCC              |



# HEATHLAND & ACID GRASSLAND

| HEATHLAND & ACID GRASSLAND |   |                                 |                   |
|----------------------------|---|---------------------------------|-------------------|
| Phase 1 Code               | Phase 1 Habitat Name                                  | Heathland & Acid Grassland Cost | Definition Source |
| ROAD                       | A or B road   | 50                              | NFC               |
| SAG                        | Acid grassland - semi-improved                        | 1                               | NCC               |
| AG                         | Acid grassland - unimproved                           | 1                               | NCC               |
| RUNWAY                     | Airport runway  | 50                              | NFC               |
| BG                         | Bare ground   | 30                              | JNCC              |
| P                          | Bare peat   | 20                              | JNCC              |
| BB                         | Blanket bog   | 3                               | JNCC              |
| X                          | Boundary removed                                      | 0                               | JNCC              |
| CB                         | Bracken - continuous                                  | 20                              | JNCC              |
| SB                         | Bracken - scattered                                   | 20                              | JNCC              |
| PBW                        | Broadleaved woodland - plantation                     | 35                              | JNCC              |
| BW                         | Broadleaved woodland - semi-natural                   | 35                              | JNCC              |
| BUILD                      | Buildings   | 50                              | NFC               |
| Building                   | Buildings   | 50                              | NFC               |
| Buildings                  | Buildings   | 50                              | NFC               |
| SCG                        | Calcareous grassland - semi-improved                  | 50                              | JNCC              |
| CG                         | Calcareous grassland - unimproved                     | 40                              | JNCC              |
| CS                         | Caravan site  | 0                               | JNCC              |
| CA                         | Cave  | 50                              | JNCC              |
| PCW                        | Coniferous woodland - plantation                      | 20                              | JNCC              |
| CW                         | Coniferous woodland - semi-natural                    | 20                              | JNCC              |
| AM                         | Cultivated/disturbed land - amenity grassland         | 50                              | JNCC              |
| A                          | Cultivated/disturbed land - arable                    | 50                              | JNCC              |
| ESP                        | Cultivated/disturbed land - ephemeral/short perennial | 50                              | JNCC              |
| DD                         | Dry ditch   | 0                               | JNCC              |
| ADH                        | Dry dwarf shrub heath - acid                          | 1                               | JNCC              |
| BDH                        | Dry dwarf shrub heath - basic                         | 1                               | JNCC              |
| DGM                        | Dry heath/acid grassland mosaic                       | 1                               | JNCC              |
| DB                         | Dry modified bog                                      | 3                               | JNCC              |
| EB                         | Earth bank  | 0                               | JNCC              |
| BM                         | Fen - basin mire                                      | 30                              | JNCC              |
| FPM                        | Fen - flood plain mire                                | 30                              | JNCC              |
| VM                         | Fen - valley mire                                     | 30                              | JNCC              |
| F                          | Fence   | 0                               | JNCC              |
| AF                         | Flush and spring - acid/neutral flush                 | 30                              | JNCC              |
| BF                         | Flush and spring - basic flush                        | 30                              | JNCC              |
| PH-                        | Hedges - defunct - species-poor                       | 10                              | JNCC              |
| RH-                        | Hedges - defunct - species-rich                       | 10                              | JNCC              |
| PH                         | Hedges - intact - species-poor                        | 10                              | JNCC              |
| RH                         | Hedges - intact - species-rich                        | 10                              | JNCC              |
| PHT                        | Hedges - with trees - species-poor                    | 10                              | JNCC              |
| RHT                        | Hedges - with trees - species-rich                    | 10                              | JNCC              |
| I                          | Improved grassland                                    | 50                              | JNCC              |
| AC                         | Inland cliff - acid/neutral                           | 50                              | JNCC              |
| BC                         | Inland cliff - basic                                  | 50                              | JNCC              |
| IS                         | Introduced shrub                                      | 10                              | JNCC              |
| LH                         | Lichen/bryophyte heath                                | 10                              | JNCC              |
| LP                         | Limestone pavement                                    | 50                              | JNCC              |
| IV                         | Marginal/inundation - inundation                      | 40                              | JNCC              |
| MV                         | Marginal/inundation - marginal                        | 40                              | JNCC              |
| MG                         | Marsh/marshy grassland                                | 30                              | JNCC              |
| MI                         | Mine  | 30                              | JNCC              |
| PMW                        | Mixed woodland - plantation                           | 35                              | JNCC              |
| MW                         | Mixed woodland - semi-natural                         | 35                              | JNCC              |
| MH                         | Montane heath/dwarf herb                              | 10                              | JNCC              |
| MWAY                       | Motorway or major dual carriageway                    | 50                              | NFC               |
| SNG                        | Neutral grassland - semi-improved                     | 30                              | JNCC              |
| NG                         | Neutral grassland - unimproved                        | 30                              | JNCC              |
| NR                         | Non-ruderal   | 20                              | JNCC              |
| OMHOPDL                    | Open Mosaic Habitat                                   | 10                              | NCC               |
| AR                         | Other exposure - acid/neutral                         | 50                              | JNCC              |
| BR                         | Other exposure - basic                                | 50                              | JNCC              |
| SBW                        | Parkland and scattered trees - broadleaved            | 30                              | JNCC              |
| Orchard                    | Parkland and scattered trees - broadleaved            | 30                              | NFC               |
| SCW                        | Parkland and scattered trees - coniferous             | 30                              | JNCC              |
| SMW                        | Parkland and scattered trees - mixed                  | 30                              | JNCC              |
| SI                         | Poor semi-improved grassland                          | 30                              | JNCC              |
| Q                          | Quarry  | 50                              | JNCC              |
| RAIL                       | Railway line  | 50                              | NFC               |
| RB                         | Raised bog  | 3                               | JNCC              |
| FB                         | Recently felled woodland - broadleaved                | 10                              | JNCC              |
| FC                         | Recently felled woodland - coniferous                 | 10                              | JNCC              |
| FM                         | Recently felled woodland - mixed                      | 10                              | JNCC              |
| Reedbed                    | Reedbed   | 40                              | NCC               |
| R                          | Refuse tip  | 30                              | JNCC              |
| RW                         | Running water   | 50                              | JNCC              |
| RWB                        | Running water - brackish                              | 50                              | JNCC              |
| RWD                        | Running water - dystrophic                            | 50                              | JNCC              |
| RWE                        | Running water - eutrophic                             | 50                              | JNCC              |
| RWC                        | Running water - marl                                  | 50                              | JNCC              |
| RWM                        | Running water - mesotrophic                           | 50                              | JNCC              |
| RWO                        | Running water - oligotrophic                          | 50                              | JNCC              |
| AS                         | Scree - acid/neutral                                  | 50                              | JNCC              |
| BS                         | Scree - basic   | 50                              | JNCC              |
| DS                         | Scrub - dense/continuous                              | 10                              | JNCC              |
| SS                         | Scrub - scattered                                     | 10                              | JNCC              |
| SWALL                      | Sea wall  | 0                               | JNCC              |
| S                          | Spoil   | 30                              | JNCC              |
| SW                         | Standing water  | 50                              | JNCC              |
| SWB                        | Standing water - brackish                             | 50                              | JNCC              |
| SWD                        | Standing water - dystrophic                           | 50                              | JNCC              |
| SWE                        | Standing water - eutrophic                            | 50                              | JNCC              |
| SWC                        | Standing water - marl                                 | 50                              | JNCC              |
| SWM                        | Standing water - mesotrophic                          | 50                              | JNCC              |
| SWO                        | Standing water - oligotrophic                         | 50                              | JNCC              |
| SUBURB                     | Suburban/rural development                            | 50                              | NFC               |
| Gardens                    | Suburban/rural development                            | 50                              | NFC               |
| Paved                      | Suburban/rural development                            | 50                              | NFC               |
| SP                         | Swamp   | 40                              | JNCC              |
| TR                         | Tall ruderal  | 20                              | JNCC              |
| TRACK                      | Track or minor access road                            | 50                              | NFC               |
| Path                       | Track or minor access road                            | 50                              | NFC               |
| ?                          | Unknown   | 50                              | NFC               |
| INDUST                     | Urban industrial development                          | 50                              | NFC               |
| URBAN                      | Urban residential/commercial development              | 50                              | NFC               |
| W                          | Wall  | 0                               | JNCC              |
| WH                         | Wet dwarf shrub heath                                 | 1                               | JNCC              |
| WGM                        | Wet heath/acid grassland mosaic                       | 1                               | JNCC              |
| WB                         | Wet modified bog                                      | 3                               | JNCC              |

# WETLAND

| WETLAND      |   |              |                   |
|--------------|---|--------------|-------------------|
| Phase 1 Code | Phase 1 Habitat Name                                  | Wetland Cost | Definition Source |
| ROAD         | A or B road   | 50           | NFC               |
| SAG          | Acid grassland - semi-improved                        | 20           | NCC               |
| AG           | Acid grassland - unimproved                           | 20           | NCC               |
| RUNWAY       | Airport runway  | 50           | NFC               |
| BG           | Bare ground   | 40           | JNCC              |
| P            | Bare peat   | 20           | JNCC              |
| BB           | Blanket bog   | 1            | JNCC              |
| X            | Boundary removed                                      | 0            | JNCC              |
| CB           | Bracken - continuous                                  | 30           | JNCC              |
| SB           | Bracken - scattered                                   | 30           | JNCC              |
| PBW          | Broadleaved woodland - plantation                     | 50           | JNCC              |
| BW           | Broadleaved woodland - semi-natural                   | 50           | JNCC              |
| BUILD        | Buildings   | 50           | NFC               |
| Building     | Buildings   | 50           | NFC               |
| Buildings    | Buildings   | 50           | NFC               |
| SCG          | Calcareous grassland - semi-improved                  | 40           | JNCC              |
| CG           | Calcareous grassland - unimproved                     | 50           | JNCC              |
| CS           | Caravan site  | 0            | JNCC              |
| CA           | Cave  | 50           | JNCC              |
| PCW          | Coniferous woodland - plantation                      | 40           | JNCC              |
| CW           | Coniferous woodland - semi-natural                    | 40           | JNCC              |
| AM           | Cultivated/disturbed land - amenity grassland         | 50           | JNCC              |
| A            | Cultivated/disturbed land - arable                    | 50           | JNCC              |
| ESP          | Cultivated/disturbed land - ephemeral/short perennial | 40           | JNCC              |
| DD           | Dry ditch   | 0            | JNCC              |
| ADH          | Dry dwarf shrub heath - acid                          | 5            | JNCC              |
| BDH          | Dry dwarf shrub heath - basic                         | 5            | JNCC              |
| DGM          | Dry heath/acid grassland mosaic                       | 5            | JNCC              |
| DB           | Dry modified bog                                      | 1            | JNCC              |
| EB           | Earth bank  | 0            | JNCC              |
| BM           | Fen - basin mire                                      | 1            | JNCC              |
| FPM          | Fen - flood plain mire                                | 1            | JNCC              |
| VM           | Fen - valley mire                                     | 1            | JNCC              |
| F            | Fence   | 0            | JNCC              |
| AF           | Flush and spring - acid/neutral flush                 | 1            | JNCC              |
| BF           | Flush and spring - basic flush                        | 1            | JNCC              |
| PH-          | Hedges - defunct - species-poor                       | 30           | JNCC              |
| RH-          | Hedges - defunct - species-rich                       | 30           | JNCC              |
| PH           | Hedges - intact - species-poor                        | 30           | JNCC              |
| RH           | Hedges - intact - species-rich                        | 30           | JNCC              |
| PHT          | Hedges - with trees - species-poor                    | 30           | JNCC              |
| RHT          | Hedges - with trees - species-rich                    | 30           | JNCC              |
| I            | Improved grassland                                    | 50           | JNCC              |
| AC           | Inland cliff - acid/neutral                           | 50           | JNCC              |
| BC           | Inland cliff - basic                                  | 50           | JNCC              |
| IS           | Introduced shrub                                      | 30           | JNCC              |
| LH           | Lichen/bryophyte heath                                | 20           | JNCC              |
| LP           | Limestone pavement                                    | 50           | JNCC              |
| IV           | Marginal/inundation - inundation                      | 1            | JNCC              |
| MV           | Marginal/inundation - marginal                        | 1            | JNCC              |
| MG           | Marsh/marshy grassland                                | 1            | JNCC              |
| MI           | Mine  | 40           | JNCC              |
| PMW          | Mixed woodland - plantation                           | 50           | JNCC              |
| MW           | Mixed woodland - semi-natural                         | 50           | JNCC              |
| MH           | Montane heath/dwarf herb                              | 20           | JNCC              |
| MWAY         | Motorway or major dual carriageway                    | 50           | NFC               |
| SNG          | Neutral grassland - semi-improved                     | 30           | JNCC              |
| NG           | Neutral grassland - unimproved                        | 20           | JNCC              |
| NR           | Non-ruderal   | 30           | JNCC              |
| OMHOPDL      | Open Mosaic Habitat                                   | 20           | NCC               |
| AR           | Other exposure - acid/neutral                         | 50           | JNCC              |
| BR           | Other exposure - basic                                | 50           | JNCC              |
| SBW          | Parkland and scattered trees - broadleaved            | 30           | JNCC              |
| Orchard      | Parkland and scattered trees - broadleaved            | 30           | NFC               |
| SCW          | Parkland and scattered trees - coniferous             | 30           | JNCC              |
| SMW          | Parkland and scattered trees - mixed                  | 30           | JNCC              |
| SI           | Poor semi-improved grassland                          | 30           | JNCC              |
| Q            | Quarry  | 50           | JNCC              |
| RAIL         | Railway line  | 50           | NFC               |
| RB           | Raised bog  | 1            | JNCC              |
| FB           | Recently felled woodland - broadleaved                | 20           | JNCC              |
| FC           | Recently felled woodland - coniferous                 | 20           | JNCC              |
| FM           | Recently felled woodland - mixed                      | 20           | JNCC              |
| Reedbed      | Reedbed   | 1            | NCC               |
| R            | Refuse tip  | 40           | JNCC              |
| RW           | Running water   | 1            | NCC               |
| RWB          | Running water - brackish                              | 1            | NCC               |
| RWD          | Running water - dystrophic                            | 1            | NCC               |
| RWE          | Running water - eutrophic                             | 1            | NCC               |
| RWC          | Running water - marl                                  | 1            | NCC               |
| RWM          | Running water - mesotrophic                           | 1            | NCC               |
| RWO          | Running water - oligotrophic                          | 1            | NCC               |
| AS           | Scree - acid/neutral                                  | 50           | JNCC              |
| BS           | Scree - basic   | 50           | JNCC              |
| DS           | Scrub - dense/continuous                              | 30           | JNCC              |
| SS           | Scrub - scattered                                     | 30           | JNCC              |
| SWALL        | Sea wall  | 0            | JNCC              |
| S            | Spoil   | 40           | JNCC              |
| SW           | Standing water  | 1            | NCC               |
| SWB          | Standing water - brackish                             | 1            | NCC               |
| SWD          | Standing water - dystrophic                           | 1            | NCC               |
| SWE          | Standing water - eutrophic                            | 1            | JNCC              |
| SWC          | Standing water - marl                                 | 1            | JNCC              |
| SWM          | Standing water - mesotrophic                          | 1            | JNCC              |
| SWO          | Standing water - oligotrophic                         | 1            | JNCC              |
| SUBURB       | Suburban/rural development                            | 50           | NFC               |
| Gardens      | Suburban/rural development                            | 50           | NFC               |
| Paved        | Suburban/rural development                            | 50           | NFC               |
| SP           | Swamp   | 1            | JNCC              |
| TR           | Tall ruderal  | 30           | JNCC              |
| TRACK        | Track or minor access road                            | 50           | NFC               |
| Path         | Track or minor access road                            | 50           | NFC               |
| ?            | Unknown   | 50           | NFC               |
| INDUST       | Urban industrial development                          | 50           | NFC               |
| URBAN        | Urban residential/commercial development              | 50           | NFC               |
| W            | Wall  | 0            | JNCC              |
| WH           | Wet dwarf shrub heath                                 | 5            | JNCC              |
| WGM          | Wet heath/acid grassland mosaic                       | 5            | JNCC              |
| WB           | Wet modified bog                                      | 1            | JNCC              |

# WOODLAND

| WOODLAND     |   |               |                   |
|--------------|---|---------------|-------------------|
| Phase 1 Code | Phase 1 Habitat Name                                  | Woodland Cost | Definition Source |
| ROAD         | A or B road   | 50            | NFC               |
| SAG          | Acid grassland - semi-improved                        | 30            | NCC               |
| AG           | Acid grassland - unimproved                           | 30            | NCC               |
| RUNWAY       | Airport runway  | 50            | NFC               |
| BG           | Bare ground   | 40            | JNCC              |
| P            | Bare peat   | 25            | JNCC              |
| BB           | Blanket bog   | 30            | JNCC              |
| X            | Boundary removed                                      | 0             | JNCC              |
| CB           | Bracken - continuous                                  | 20            | JNCC              |
| SB           | Bracken - scattered                                   | 20            | JNCC              |
| PBW          | Broadleaved woodland - plantation                     | 1             | JNCC              |
| BW           | Broadleaved woodland - semi-natural                   | 1             | JNCC              |
| BUILD        | Buildings   | 40            | NFC               |
| Building     | Buildings   | 40            | NFC               |
| Buildings    | Buildings   | 40            | NFC               |
| SCG          | Calcareous grassland - semi-improved                  | 30            | JNCC              |
| CG           | Calcareous grassland - unimproved                     | 30            | JNCC              |
| CS           | Caravan site  | 0             | JNCC              |
| CA           | Cave  | 50            | JNCC              |
| PCW          | Coniferous woodland - plantation                      | 20            | JNCC              |
| CW           | Coniferous woodland - semi-natural                    | 20            | JNCC              |
| AM           | Cultivated/disturbed land - amenity grassland         | 50            | JNCC              |
| A            | Cultivated/disturbed land - arable                    | 50            | JNCC              |
| ESP          | Cultivated/disturbed land - ephemeral/short perennial | 40            | JNCC              |
| DD           | Dry ditch   | 0             | JNCC              |
| ADH          | Dry dwarf shrub heath - acid                          | 25            | JNCC              |
| BDH          | Dry dwarf shrub heath - basic                         | 25            | JNCC              |
| DGM          | Dry heath/acid grassland mosaic                       | 25            | JNCC              |
| DB           | Dry modified bog                                      | 30            | JNCC              |
| EB           | Earth bank  | 0             | JNCC              |
| BM           | Fen - basin mire                                      | 20            | JNCC              |
| FPM          | Fen - flood plain mire                                | 20            | JNCC              |
| VM           | Fen - valley mire                                     | 20            | JNCC              |
| F            | Fence   | 0             | JNCC              |
| AF           | Flush and spring - acid/neutral flush                 | 20            | JNCC              |
| BF           | Flush and spring - basic flush                        | 20            | JNCC              |
| PH-          | Hedges - defunct - species-poor                       | 1             | JNCC              |
| RH-          | Hedges - defunct - species-rich                       | 1             | JNCC              |
| PH           | Hedges - intact - species-poor                        | 1             | JNCC              |
| RH           | Hedges - intact - species-rich                        | 1             | JNCC              |
| PHT          | Hedges - with trees - species-poor                    | 1             | JNCC              |
| RHT          | Hedges - with trees - species-rich                    | 1             | JNCC              |
| I            | Improved grassland                                    | 50            | JNCC              |
| AC           | Inland cliff - acid/neutral                           | 50            | JNCC              |
| BC           | Inland cliff - basic                                  | 50            | JNCC              |
| IS           | Introduced shrub                                      | 1             | JNCC              |
| LH           | Lichen/bryophyte heath                                | 40            | JNCC              |
| LP           | Limestone pavement                                    | 50            | JNCC              |
| IV           | Marginal/inundation - inundation                      | 20            | JNCC              |
| MV           | Marginal/inundation - marginal                        | 20            | JNCC              |
| MG           | Marsh/marshy grassland                                | 20            | JNCC              |
| MI           | Mine  | 40            | JNCC              |
| PMW          | Mixed woodland - plantation                           | 1             | JNCC              |
| MW           | Mixed woodland - semi-natural                         | 1             | JNCC              |
| MH           | Montane heath/dwarf herb                              | 40            | JNCC              |
| MWAY         | Motorway or major dual carriageway                    | 100           | NFC               |
| SNG          | Neutral grassland - semi-improved                     | 30            | JNCC              |
| NG           | Neutral grassland - unimproved                        | 30            | JNCC              |
| NR           | Non-ruderal   | 20            | JNCC              |
| OMHOPDL      | Open Mosaic Habitat                                   | 5             | NCC               |
| AR           | Other exposure - acid/neutral                         | 50            | JNCC              |
| BR           | Other exposure - basic                                | 50            | JNCC              |
| SBW          | Parkland and scattered trees - broadleaved            | 5             | JNCC              |
| Orchard      | Parkland and scattered trees - broadleaved            | 5             | NFC               |
| SCW          | Parkland and scattered trees - coniferous             | 30            | JNCC              |
| SMW          | Parkland and scattered trees - mixed                  | 5             | JNCC              |
| SI           | Poor semi-improved grassland                          | 30            | JNCC              |
| Q            | Quarry  | 50            | JNCC              |
| RAIL         | Railway line  | 50            | NFC               |
| RB           | Raised bog  | 30            | JNCC              |
| FB           | Recently felled woodland - broadleaved                | 5             | JNCC              |
| FC           | Recently felled woodland - coniferous                 | 5             | JNCC              |
| FM           | Recently felled woodland - mixed                      | 5             | JNCC              |
| Reedbed      | Reedbed   | 20            | NCC               |
| R            | Refuse tip  | 40            | JNCC              |
| RW           | Running water   | 50            | JNCC              |
| RWB          | Running water - brackish                              | 50            | JNCC              |
| RWD          | Running water - dystrophic                            | 50            | JNCC              |
| RWE          | Running water - eutrophic                             | 50            | JNCC              |
| RWC          | Running water - marl                                  | 50            | JNCC              |
| RWM          | Running water - mesotrophic                           | 50            | JNCC              |
| RWO          | Running water - oligotrophic                          | 50            | JNCC              |
| AS           | Scree - acid/neutral                                  | 50            | JNCC              |
| BS           | Scree - basic   | 50            | JNCC              |
| DS           | Scrub - dense/continuous                              | 1             | JNCC              |
| SS           | Scrub - scattered                                     | 1             | JNCC              |
| SWALL        | Sea wall  | 0             | JNCC              |
| S            | Spoil   | 40            | JNCC              |
| SW           | Standing water  | 50            | JNCC              |
| SWB          | Standing water - brackish                             | 50            | JNCC              |
| SWD          | Standing water - dystrophic                           | 50            | JNCC              |
| SWE          | Standing water - eutrophic                            | 50            | JNCC              |
| SWC          | Standing water - marl                                 | 50            | JNCC              |
| SWM          | Standing water - mesotrophic                          | 50            | JNCC              |
| SWO          | Standing water - oligotrophic                         | 50            | JNCC              |
| SUBURB       | Suburban/rural development                            | 25            | NFC               |
| Gardens      | Suburban/rural development                            | 25            | NFC               |
| Paved        | Suburban/rural development                            | 50            | NFC               |
| SP           | Swamp   | 20            | JNCC              |
| TR           | Tall ruderal  | 20            | JNCC              |
| TRACK        | Track or minor access road                            | 50            | NFC               |
| Path         | Track or minor access road                            | 50            | NFC               |
| ?            | Unknown   | 50            | NFC               |
| INDUST       | Urban industrial development                          | 50            | NFC               |
| URBAN        | Urban residential/commercial development              | 40            | NFC               |
| W            | Wall  | 0             | JNCC              |
| WH           | Wet dwarf shrub heath                                 | 25            | JNCC              |
| WGM          | Wet heath/acid grassland mosaic                       | 25            | JNCC              |
| WB           | Wet modified bog                                      | 30            | JNCC              |

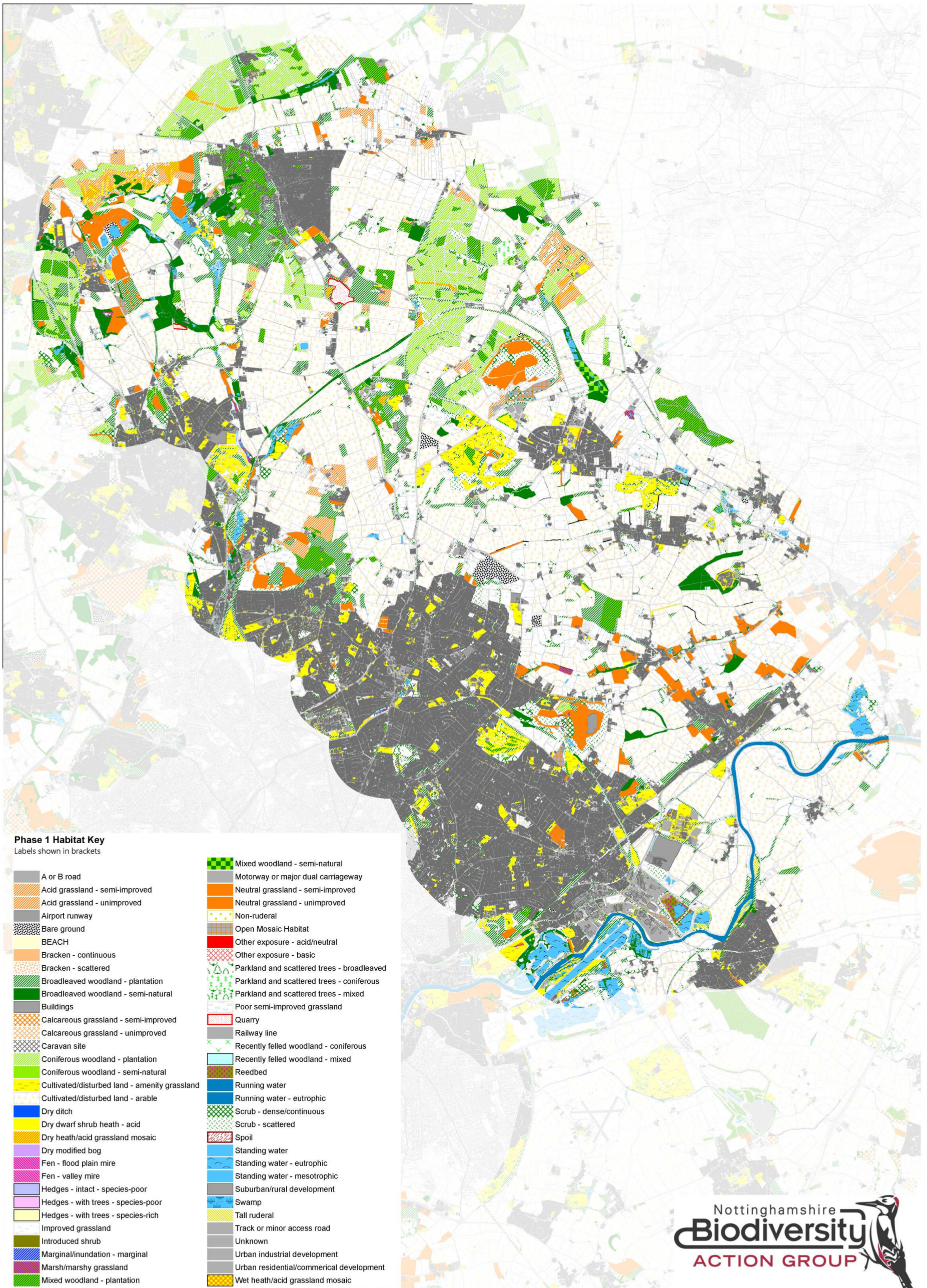
#### Appendix 4 - List of workshop attendees

| <b>Gedling BOM online workshop, Monday 23<sup>rd</sup> November - list of Attendees</b>  |                 |  |  |  |
|--|-----------------|--|--|--|
| <b>Name</b>  | <b>Initials</b> | <b>Organisation</b>  | <b>Position</b>                                    | <b>E-mail</b>                          |
| Janice Bradley   | JMB             | Nottinghamshire Wildlife Trust                               | Head of Nature Recovery (North)                    | Jbradley@nottswt.co.uk                 |
| Nick Crouch  | NC              | Nottinghamshire County Council                               | Senior Practitioner Nature Conservation            | nick.crouch@nottsc.gov.uk              |
| Graeme Foster  | GF              | Gedling Borough Council                                      | Principal Planning Officer                         | Graeme.Foster@gedling.gov.uk           |
| Aimee Harvey   | AH              | Notts BAG  | Conservation Intern                                | Aimee.Harvey@nottsc.gov.uk             |
| Peter Haynes   | PH              | Environment Agency   | Biodiversity Officer                               | Peter.haynes@environment-agency.gov.uk |
| Chris Jackson  | CJ              | Notts BAG  | Biodiversity Officer                               | chris.jackson@nottsc.gov.uk            |
| Ruth Tall  | RT              | Natural England  | Lead Adviser                                       | ruth.tall@naturalengland.org.uk        |
|  |                 |  |  |  |
| <b>Gedling BOM online workshop, Friday 27<sup>th</sup> November - list of Attendees</b>  |                 |  |  |  |
| <b>Name</b>  | <b>Initials</b> | <b>Organisation</b>  | <b>Position</b>                                    | <b>E-mail</b>                          |
| Cameron Evans  | CE              | Friends of Annesley & Newstead Country Park                  |  |  |
| Aimee Harvey   | AH              | Notts BAG  | Conservation Intern                                | Aimee.Harvey@nottsc.gov.uk             |
| Chris Jackson  | CJ              | Notts BAG  | Biodiversity Officer                               | chris.jackson@nottsc.gov.uk            |
| Nick Molyneux  | NM              | Robin Hood Allotment Association                             |  |  |
| Lee Scudder  | LS              | Nottinghamshire County Council                               | Countryside Management Officer                     | Lee.scudder@nottsc.gov.uk              |
| Imogen Wilde   | IW              | Canal & River Trust (CRT)                                    | Ecologist  | Imogen.Wilde@canalrivertrust.org.uk    |
| Mark Woods   | MCW             | Botanical Society of Britain and Ireland (BSBI)              | County Recorder                                    | mark.woods705@gmail.com                |
|  |                 |  |  |  |
| <b>Gedling BOM online workshop, Monday 30<sup>th</sup> November - list of Attendees</b>  |                 |  |  |  |
| <b>Name</b>  | <b>Initials</b> | <b>Organisation</b>  | <b>Position</b>                                    | <b>E-mail</b>                          |
| Rob Carlyle  | RC              | Friends of Bestwood Country Park                             | Chair  |  |
| Ben Driver   | BD              | Nottinghamshire Wildlife Trust                               | Senior Conservation Officer (South)                | BDriver@nottswt.co.uk                  |
| Aimee Harvey   | AH              | Notts BAG  | Conservation Intern                                | Aimee.Harvey@nottsc.gov.uk             |
| Helen Hunt   | HH              | Gedling Grove Allotment Association                          |  |  |
| Chris Jackson  | CJ              | Notts BAG  | Biodiversity Officer                               | chris.jackson@nottsc.gov.uk            |
| Paul Nunns   | PN              | Forestry England   | Ecology and Planning Support Officer               | paul.nunns@forestryengland.uk          |
| Jane Richardson  | JR              | Gedling Borough Council                                      | Parks Development Officer                          | Jane.Richardson@gedling.gov.uk         |
|  |                 |  |  |  |
| <b>Gedling BOM online workshop, Tuesday 1<sup>st</sup> December - list of Attendees</b>  |                 |  |  |  |
| <b>Name</b>  | <b>Initials</b> | <b>Organisation</b>  | <b>Position</b>                                    | <b>E-mail</b>                          |
| Emily Aron   | EA              | Nottingham City Council                                      | Biodiversity & Greenspace Policy Officer           | Emily.Aron@nottinghamcity.gov.uk       |
| Carl Cornish   | CC              | RSPB   | Conservation Officer (Sherwood Priority Landscape) | Carl.Cornish@rspb.org.uk               |
| Claire Hardstaff   | CH              | Friends of Moor Pond Wood                                    |  |  |
| Aimee Harvey   | AH              | Notts BAG  | Conservation Intern                                | Aimee.Harvey@nottsc.gov.uk             |
| Chris Jackson  | CJ              | Notts BAG  | Biodiversity Officer                               | chris.jackson@nottsc.gov.uk            |
| John Osborne   | JEO             |  | County Herpetile Recorder                          | jeosborne@btinternet.com               |
| Paul Sergent   | PS              | Friends of Gedling House Woods                               |  |  |
|  |                 |  |  |  |
| <b>Gedling BOM online workshop, Thursday 3<sup>rd</sup> December - list of Attendees</b> |                 |  |  |  |
| <b>Name</b>  | <b>Initials</b> | <b>Organisation</b>  | <b>Position</b>                                    | <b>E-mail</b>                          |
| Lorna Griffith   | LG              |  | Ecologist  |  |
| Louise Hackett   | LH              | The Woodland Trust   | Treescape Development Lead                         | louisehackett@woodlandtrust.org.uk     |
| Aimee Harvey   | AH              | Notts BAG  | Conservation Intern                                | Aimee.Harvey@nottsc.gov.uk             |
| Chris Jackson  | CJ              | Notts BAG  | Biodiversity Officer                               | chris.jackson@nottsc.gov.uk            |
| Sue McDonald   | SM              | Nottinghamshire County Council                               | Community Liaison Officer - Green Spaces           | sue.mcdonald@nottsc.gov.uk             |
| John Rattray   | JR              | Nottinghamshire Wildlife Trust                               | Head of Nature Recovery (South)                    | JRattray@nottswt.co.uk                 |
| Alison Stuart  | AS              | Via East Midlands  | Landscape Architect                                | alison.stuart@viaem.co.uk              |
| Amy Tose   | AT              | Via East Midlands  | Ecological Consultant                              | amy.tose@viaem.co.uk                   |
| Michael Walker   | MGW             | Nottinghamshire Wildlife Trust/<br>Nottinghamshire Bat Group | Reserve Management and Monitoring Officer          | mwalker@nottswt.co.uk                  |
|  |                 |  |  |  |
| <b>Gedling BOM online workshop, Friday 4<sup>th</sup> December - list of Attendees</b>   |                 |  |  |  |
| <b>Name</b>  | <b>Initials</b> | <b>Organisation</b>  | <b>Position</b>                                    | <b>E-mail</b>                          |
| Mark Glover  |                 | Gedling Conservation Trust                                   | Trustee  |  |
| Joanna Gray  | JG              | Gedling Borough Council                                      | Service Manager - Planning Policy                  | Joanna.Gray@gedling.gov.uk             |
| Aimee Harvey   | AH              | Notts BAG  | Conservation Intern                                | Aimee.Harvey@nottsc.gov.uk             |
| Chris Jackson  | CJ              | Notts BAG  | Biodiversity Officer                               | chris.jackson@nottsc.gov.uk            |
| Kim Jennings   | KJ              | Trent Rivers Trust   | Senior Catchment Manager (East)                    | kim@trentriverstrust.org               |
| Elizabeth Mayfield   | EM              | Gedling Grove Allotment Association                          |  |  |
| Pete Smith   |                 | Gedling Conservation Trust                                   | Trustee  |  |
| Melanie Wheelwright  | MJW             | Ashfield District Council                                    | Landscape Policy Officer                           | M.Wheelwright@ashfield-dc.gov.uk       |
|  |                 |  |  |  |

## **Appendix 5 - The Basemap**

Map 1 - Phase 1 Habitat map for Gedling (includes 250m buffer)

Map 1 - Phase 1 Habitat Map for Gedling



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## **Appendix 6 - Habitat Network maps**

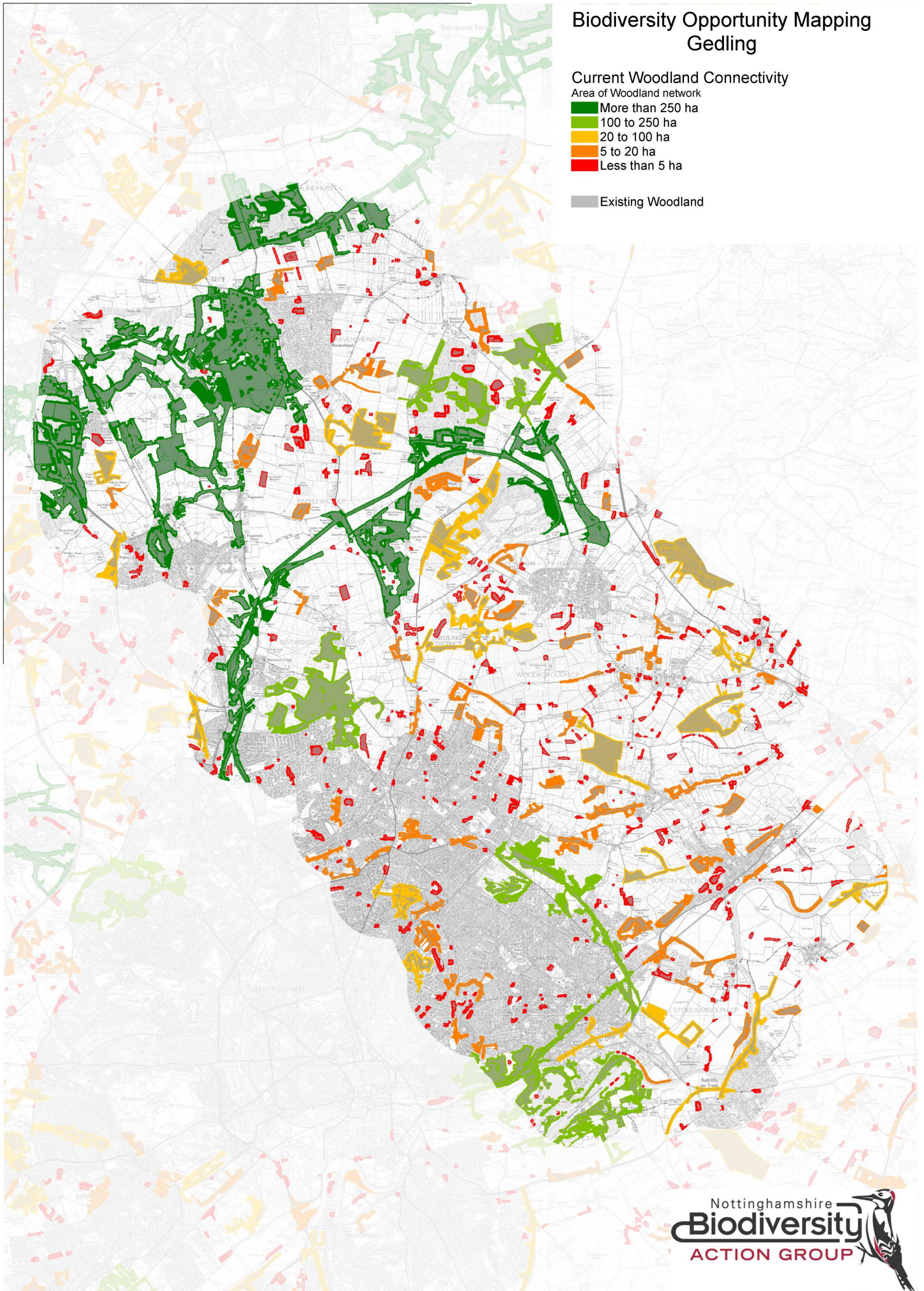
Map 1 Current Woodland Connectivity

Map 2 Current Heathland & Acid Grassland Connectivity

Map 3 Current Grassland Connectivity

Map 4 Current Wetland Connectivity

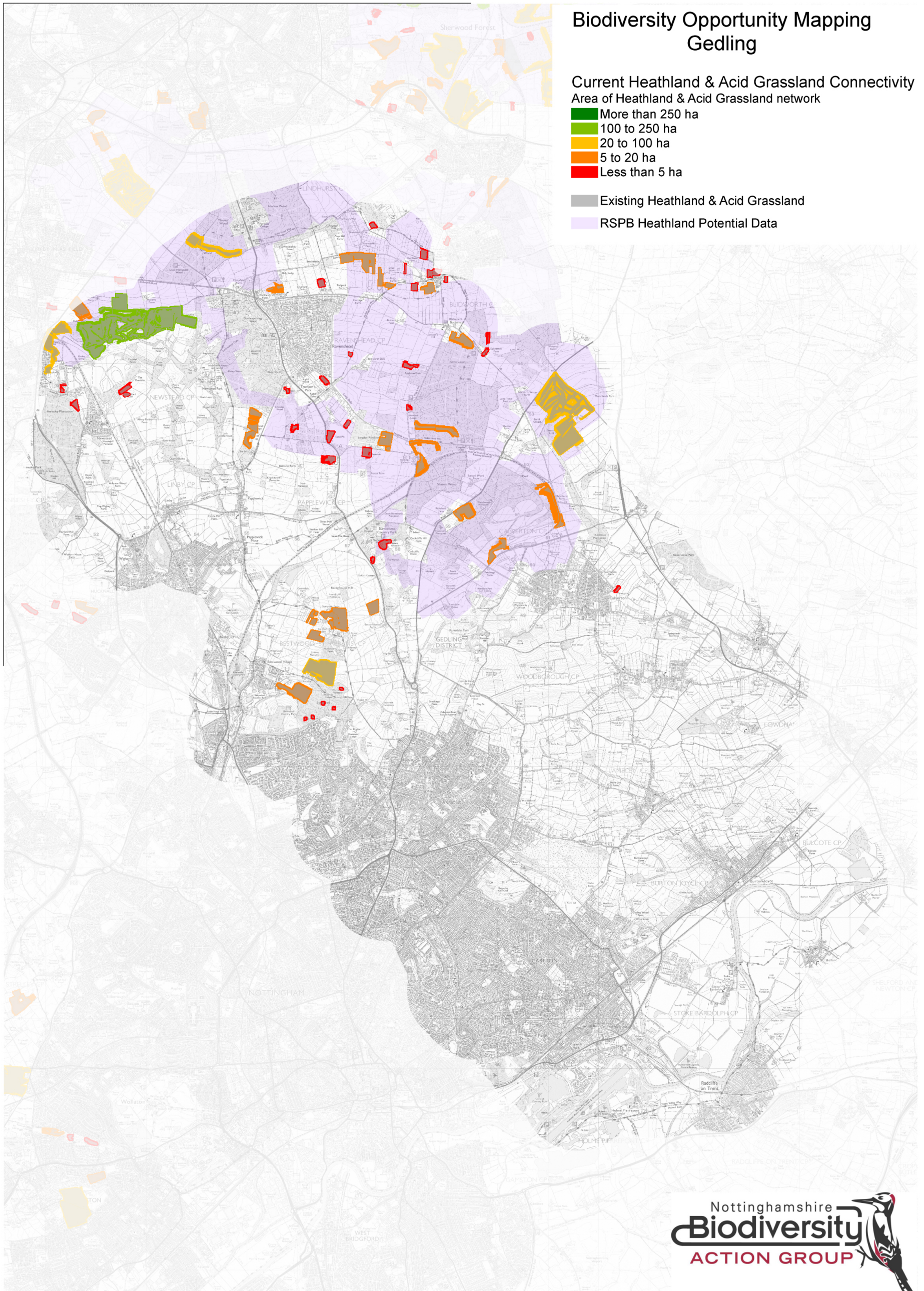
Map 1 - Current Woodland Connectivity



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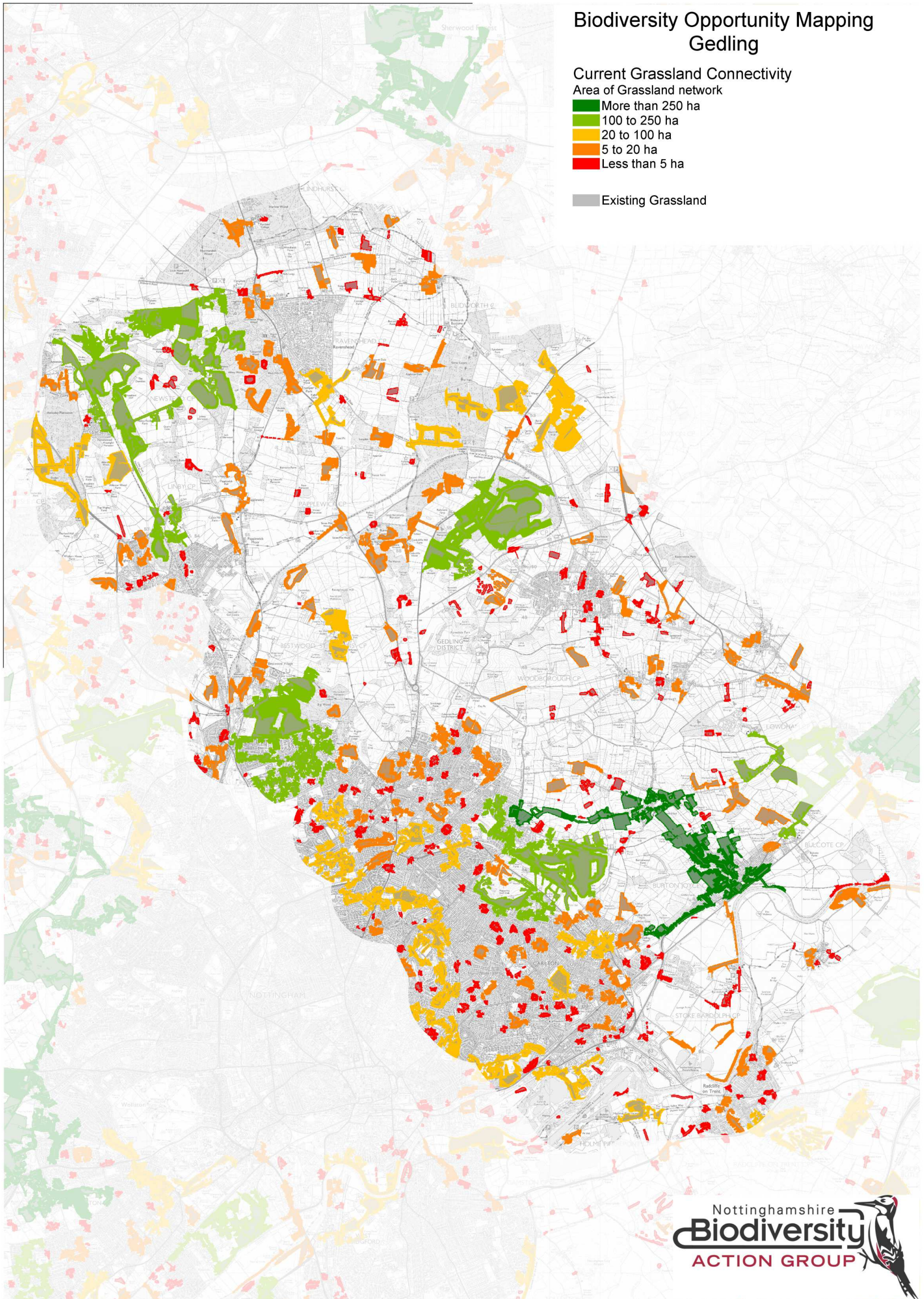
Map 2 - Current Heathland and Acid Grassland Connectivity



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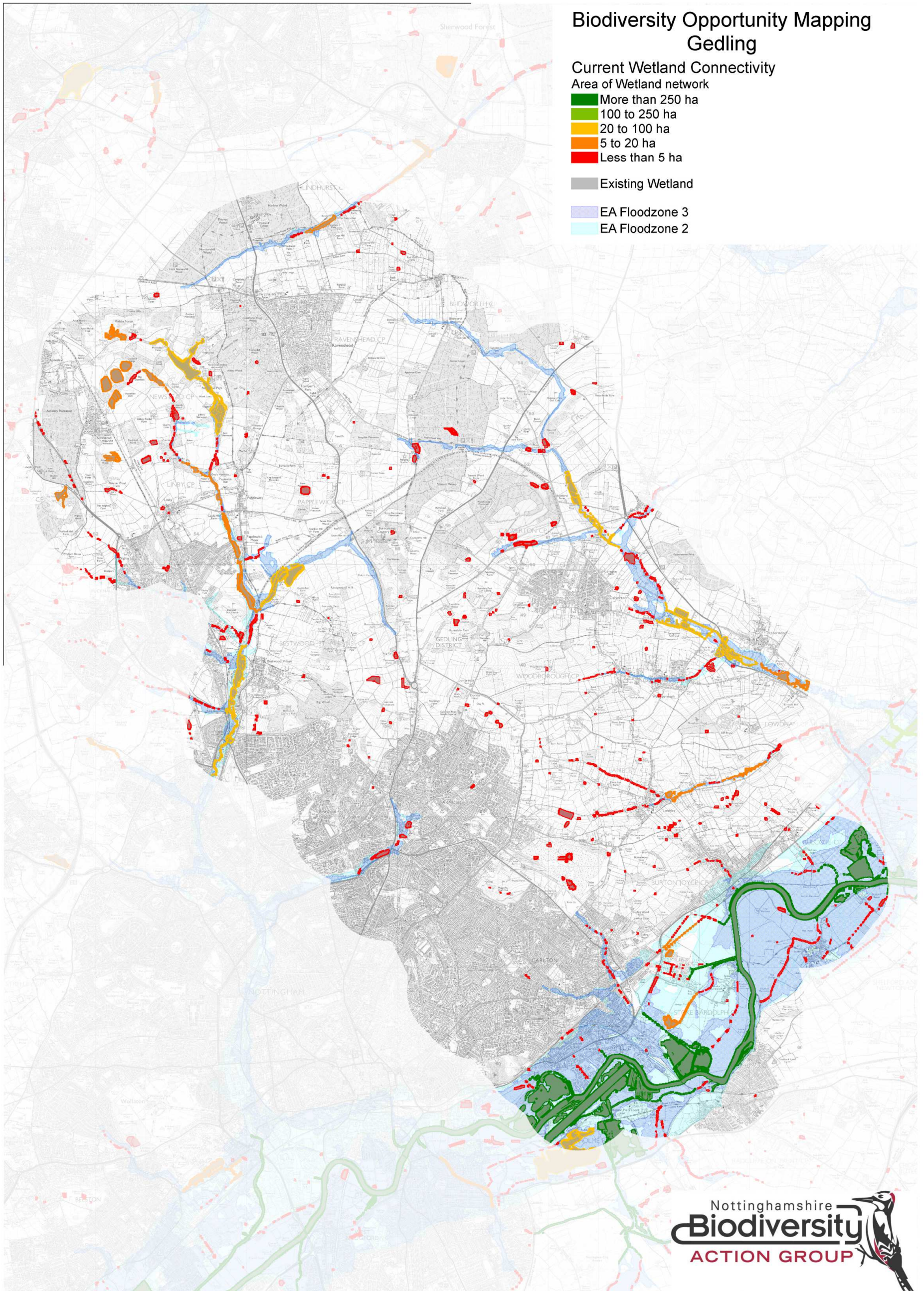


Map 3 - Current Grassland Connectivity



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Map 4 - Current Wetland Connectivity



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