



## More and Better Woods Action Plan

June 2022

by

RDI Associates

on behalf of

Gateshead Council



## Authors

### RDI Associates:

- Will Richardson MICFor
- Martin Glynn FICFor

## Version Control

Project reference number:	1304	Project Title:	More and Better Woods Action Plan	
Client	Gateshead Council			
Date	Description	Revision	Author	Checked by
05/10/21	1st draft	1.1	WR	MG
24/05/22	2 <sup>nd</sup> draft	2.1	MG	WR
26/05/22	Draft Final	3.1	MG	WR
09/06/22	Final	4.1	WR	MG

## Acknowledgement

The authors wish to thank all those organisations and individuals who have contributed to this study. A list of organisations that contributed comments and observations is provided in Appendix 5.

## Disclaimer

Whilst we have taken reasonable steps to ensure that the information contained within this report is correct, it is not guaranteed or represented to be so (in either an express or implied way). The views expressed in this report are those of RDI Associates and are based in good faith on the specific information and data published in this report. We are unable to provide warranties for any third-party information provided, and any person makes use of this report at their own risk.

RDI Associates shall not be liable (whether in contract, tort (including negligence) or breach of statutory duty or otherwise) for any loss or damage suffered as a result of any use of the contents of this report including direct loss, business interruption, loss of production, profits, contracts, goodwill or anticipated savings, loss arising from third party claims or any indirect or consequential loss (whether or not foreseeable).

However, nothing in this disclaimer shall exclude or limit liability for death or personal injury resulting from the proven negligence of any person mentioned above or for fraud or any other liability, which may not be limited or excluded by law.

# Vision

This action plan sets out Gateshead Council's vision for More and Better Woods based on the six core themes of *our woods*, *carbon woods*, *wild woods*, *working woods*, *living woods* and *more woods*.

By 2050 the Council aims to have supported the creation of 250 hectares (>600 acres) of new woodland; and before this time have brought its existing woodland portfolio of 900 hectares (c. 2,224 acres) into positive, sustainable long-term management.

This will provide new and improved areas for recreation and leisure, carbon sequestration, provide valuable, diverse and resilient ecosystems and provide a positive contribution to the green economy.

## Table of Contents

<b>VISION</b>	<b>III</b>
<b>1. INTRODUCTION</b>	<b>1</b>
1.2 BACKGROUND	1
1.3 ACTION PLAN PURPOSE	1
1.4 SCOPE	1
<b>2. POLICY CONTEXT</b>	<b>2</b>
2.1 NATIONAL POLICY	2
2.2 LOCAL POLICY	3
2.3 UK FORESTRY STANDARD	4
<b>3. MORE WOODS, BETTER WOODS</b>	<b>7</b>
3.1 THEME 1: OUR WOODS (CURRENT WOODLAND PROVISION)	7
3.2 THEME 2: CARBON WOODS (WOODLANDS AND CLIMATE CHANGE)	10
3.3 THEME 3: WILD WOODS (WOODLANDS AND ENVIRONMENT)	12
3.4 THEME 4: WORKING WOODS (WOODLANDS AND SUSTAINABLE GROWTH)	14
3.5 THEME 5: LIVING WOODS (WOODLANDS & PEOPLE)	16
3.6 THEME 6: MORE WOODS (WOODLAND EXPANSION)	19
<b>4. MAKING MORE WOODS - PROPOSED WOODLAND CREATION SITES</b>	<b>20</b>
4.1 SCORING MATRIX FOR SITE SELECTION	21
4.2 SHORT LISTED SITES	21
4.3 INVESTING IN MORE AND BETTER WOODS	24
<b>5. PLAN IMPLEMENTATION</b>	<b>29</b>
5.1 WOODLAND CREATION ACTION PLAN TIMELINE	30
5.2 WOODLAND MANAGEMENT ACTION PLAN TIMELINE	31
5.3 PRIORITY ACTION TIMELINE	32
<b>6. CONCLUSION</b>	<b>33</b>
<b>APPENDICES</b>	<b>34</b>
<b>APPENDIX 1 - WOODLAND MANAGEMENT PLANNING AND COUNTRYSIDE STEWARDSHIP</b>	<b>356</b>
<b>APPENDIX 2 - WOODLAND CREATION LONG LIST</b>	<b>378</b>
<b>APPENDIX 3 - WOODLAND CREATION COSTS</b>	<b>534</b>
<b>APPENDIX 4 - WOODLAND CREATION SCORING</b>	<b>545</b>
<b>APPENDIX 5 - CONSULTEE REGISTER</b>	<b>60</b>
<b>APPENDIX 6 - GLOSSARY</b>	<b>601</b>



## Table of Figures

Figure 1: Woodland Cover in Gateshead (Council and Non-Council Woodland) .....	7
Figure 2: Ancient Woodland in Gateshead .....	8
Figure 3: Woodland and Protected Sites (SSSI and LWS) in Gateshead .....	12
Figure 4: Wildlife Corridors in Gateshead .....	13
Figure 5: Woodland, Water Courses and River Catchments in Gateshead .....	14
Figure 6: Index of Multiple Deprivation (Health) in Gateshead .....	16
Figure 7: Public Rights of Way in Gateshead .....	188
Figure 8: Historic Environment in Gateshead .....	199
Figure 9: Woodland Expansion in Gateshead (Long List) .....	2020
Figure 10: Woodland Expansion in Gateshead (Short List) .....	233
Figure 11: Extract from FC Map Browser - Low-Risk Areas for Woodland Creation .....	244
Figure 12: Coniferous Standing Sales and Sawlog Price Indices for Great Britain .....	288

## Tables

Table 1: Woodland type Carbon Code examples .....	10
Table 2: Example PIUs .....	11
Table 3: Carbon stored in woodlands in Gateshead .....	11
Table 4: Annual carbon sequestration in Gateshead Council woodlands .....	11
Table 5: Site scoring matrix .....	211
Table 6: Woodland expansion short list sites .....	22
Table 7: Woodland creation - average cost per ha .....	255
Table 8: EWCO standard rates .....	266
Table 9: Potential income from timber for various felling types .....	28
Table 10: Woodland creation timeline .....	301
Table 11: Woodland management timeline .....	312
Table 12: Priority action timeline .....	323

# 1. Introduction

## 1.2 Background

Gateshead Council is committed to improving the lives of its residents, particularly the most vulnerable, and the role it can play in mitigating the impacts of human activity on the environment, including anthropogenic climate change. To this end the Council has developed this More and Better Woods Action Plan. The Action Plan establishes the Council's approach to supporting the creation of new and management of existing woodland across the borough. Woodland currently accounts for approximately 15% of the land cover within Gateshead or approximately 2,500ha out of 14,410ha. Of this, approximately 900ha is owned by the Council.

## 1.3 Action Plan purpose

The Action Plan forms the basis of the Council's woodland creation strategy for the next 10 years (from the date of this report) and identifies methods to better manage and utilise the Council's existing woodland resource. It helps address sequestration of the Council's carbon emissions, supports ecological recovery and delivers additional environmental and socio-economic benefits.

## 1.4 Scope

An informed, evidence led approach has been used to produce the More and Better Woods Action Plan. This is primarily an action plan for land under Gateshead Council ownership; with a focus on woodland creation, whilst providing an account of current woodland provision.

The Action Plan provides an appraisal of the existing Council woodland resource and makes recommendations for the future development of a Forestry Commission approved Woodland Management Plan.

It identifies and measures outputs specific to woodland creation on Council owned land, identifying opportunities and barriers to enabling the Council to realise its ambition of supporting a net increase in woodland cover of 2% (c. 250ha) in the borough from 15% to 17% by 2050.

This Action Plan will identify specific sites for woodland planting. It sets out key site specific and wider contextual factors that will influence the overarching objective of a sustainably managed new woodland resource within the borough. This new woodland resource will have combined carbon sequestration, nature conservation, amenity and economic value.

## 2. Policy Context

### 2.1 National Policy

The Action Plan is written against a backdrop of both national and local policy. The 25 Year Environment Plan<sup>1</sup> sets out goals for improving the environment within a generation and leaving it in a better state than it was found in. The Plan sets the target of protecting and improving nature and to increase woodland cover in England to 12% by 2060. Furthermore, the UK government has committed to cut carbon emissions by 78% by 2035. This is based on The Climate Change Committee land use policies for a Net Zero<sup>2</sup> UK and recommends significantly increasing tree planting by around 30,000ha each year to grow UK forest cover from 13% to at least 17% by 2050 as part of that process.

In the England Trees Action Plan (ETAP) 2021-2024<sup>3</sup>, the UK Government pledges to turn around nature loss and sets out how biodiversity and climate change will be tackled, how trees and woodlands have a vital role in delivering net zero greenhouse gas emissions by 2050 and achieving the goals of the 25 Year Environment Plan including how the UK will increase tree planting to 30,000ha per year by the end of the Parliament. A significant proportion of the Nature for Climate Fund<sup>4</sup> will be spent on trees and woodlands in England between 2020 and 2025. The ETAP sets out a vision that England will have at least 12% woodland cover by the mid-century contributing to net zero greenhouse gas emissions. Existing woodlands will be managed for biodiversity and other environmental benefits, along with providing sustainable sources of timber and woody products which can act as effective carbon stores. The plan aims to see current planting trends for majority native broadleaf woodlands continue as these provide additional benefits for nature and people. The plan builds on the ambitions outlined in the 25 Year Environment Plan and focuses on:

**Nature recovery** – woodlands will form a core part of the Nature Recovery Network<sup>5</sup>, providing important habitats as well as connecting other wildlife rich habitats. This will contribute to the Government's commitment to protect 30% of land by 2030.

**Trees and woodlands for climate change mitigation** – to drive forward a step change in tree planting to help the UK meet Net Zero ambitions.

**Levelling up through a thriving forest economy** – to encourage demand for UK grown timber which can reduce carbon footprints especially where timber can be used to replace carbon-intensive materials. Trees and woodland contributing to business opportunities, particularly in neglected parts of the country.

**Trees and woodlands for water and soil** - to maximise the benefits that tree planting can have, through the principle of the right tree in the right place, on soils and water.

**Trees and woodlands for people in town and country** – the important role that trees and woodlands play in improving wellbeing and mental health, especially where trees and woodlands are close to where people live, work and play.

---

<sup>1</sup> <https://www.gov.uk/government/publications/25-year-environment-plan>

<sup>2</sup> When the amount of carbon dioxide emissions released on an annual basis is zero or negative.

<sup>3</sup> <https://www.gov.uk/government/publications/england-trees-action-plan-2021-to-2024>

<sup>4</sup> <https://www.gov.uk/government/publications/ealrt-23-march-2021-more-on-nature-for-climate-fund>

<sup>5</sup> <https://www.gov.uk/government/publications/nature-recovery-network>

**Heritage and landscape** – to encourage greater landscape scale planning which will enhance and transform landscape character and protect and conserve heritage assets.

**Trees outside woodlands** – continue to protect and enhance trees throughout the environment.

**Healthy, resilient trees and woodlands** – help trees and woodland adapt to the threats posed by climate change, to enhance their resilience to stresses and reduce risk and encourage greater diversity.

The More and Better Woods Action plan applies these principles to the creation of new and the management of existing woodlands.

## 2.2 Local Policy

### The Climate Emergency

The Climate Change Strategy Document 2010<sup>6</sup> provides the direction and identified priorities to meet the needs of those who live or work in, or visit, Gateshead. This strategic overview focuses on mitigation, how to reduce carbon emissions; and adaptation, how to adjust to the changing climate and protect communities from the effects of climate change. Since the plan was introduced, measured carbon emissions have reduced by 55%<sup>7</sup>.

Gateshead Council declared a Climate Emergency at its Council meeting on 23 May 2019 and The Climate Emergency Action Plan 2021, Gateshead's response to the global challenge, was adopted. The Council is now committed to:

- Make the Council's activities carbon neutral by 2030
- Achieve 100% clean energy across the Council's full range of functions by 2030
- Ensure that all strategic decisions, budgets and approaches to planning decisions are in line with a shift to zero carbon by 2030
- Support and work with all other relevant agencies towards making the entire area carbon neutral within the same timescale
- Ensure that political and chief officers embed this work in all areas and take responsibility for reducing, as rapidly as possible, the carbon emissions resulting from the Council's activities
- Influence and inspire partners across the borough to help deliver this goal through all relevant strategies, plans and shared resources
- Proactively include young people in the process, ensuring that they have a voice in shaping the future
- Call on the UK Government to provide the powers, resources and help with funding to make this possible.

The Action Plan provides the commitment to protect existing woodland and plant an extra 250ha of woodland by 2050, including a commitment to plant 100,000 trees by 2030.

An outcome from the 'A Climate for Change' event<sup>8</sup> held in February 2020 was that *'The Council will work with partners to: .... Produce and deliver a borough wide woodland strategy that ensures 17% woodland cover in Gateshead by 2050 increasing woodland by approx.*

---

<sup>6</sup> Climate Change Strategy Document 2010 Gateshead Strategic Partnership

<sup>7</sup> <https://www.gateshead.gov.uk/article/14171/What-Gateshead-Council-is-doing>

<sup>8</sup> [https://www.gateshead.gov.uk/media/23685/A-Climate-for-Change-Workshop-Harvest/pdf/Appendix 2. A Climate for Change Workshop Harvest.pdf?m=637479713615300000](https://www.gateshead.gov.uk/media/23685/A-Climate-for-Change-Workshop-Harvest/pdf/Appendix%20A%20Climate%20for%20Change%20Workshop%20Harvest.pdf?m=637479713615300000)

*250ha (600 acres) and better management of existing council managed woodlands for biodiversity and public benefit*. In the Climate Change survey<sup>9</sup> conducted at the same time, in response to the question *'To tackle climate change, would you be willing to...?'* over 60% of residents answered 'Yes' to the option to plant or maintain trees, the highest positive response of any option.

### North East Community Forest

As a founding member of the new North East Community Forest (NECF)<sup>10</sup>, Gateshead is part of a 30-year project that will drive forward the creation of new woodlands across the region. Funding has been committed by six core authorities<sup>11</sup> to the NECF and this is being matched by funds from the Trees for Climate Fund<sup>12</sup>.

The partnership has a target of planting 475ha of woodland by 2025, with 700ha more by 2030. This target rises by 200ha every five years thereafter, until 1500ha are planted between 2046 and 2050. This would see a total of 6000ha planted under the initiative, which will help towards an overall target of 30% tree canopy cover within the NECF area by 2060, more than double the current national average. The first 18 months of the project will see a Forest Plan produced that will identify where trees and woodlands will be planted and how local communities and stakeholders will be consulted and involved.

The More and Better Woods Action plan will be an important tool for feeding into the NECF Forest Plan, providing specific, targeted woodland creation sites and a strategic overview as to how these can be achieved successfully.

## 2.3 UK Forestry Standard

The UK Forestry Standard (UKFS)<sup>13</sup> is the reference standard for sustainable forest management across the UK, and applies to all woodland, regardless of who owns or manages it<sup>14</sup>. The standard ensures that international agreements and conventions on areas such as sustainable forest management, climate change, biodiversity and the protection of water resources are applied in the UK.

The UKFS outlines the context for forestry in the UK. It sets out the approach of the UK governments to sustainable forest management by defining requirements and guidelines; and providing a basis for regulation and monitoring - including national and international reporting. The document covers the key elements of sustainable forest management:

- biodiversity
- climate change
- historic environment
- landscape
- people
- soil
- water

---

<sup>9</sup> [https://www.gateshead.gov.uk/media/24358/Climate-Change-survey-responses-2020/pdf/Appendix\\_3\\_Climate\\_Change\\_Survey\\_responses.pdf?m=637479714682370000](https://www.gateshead.gov.uk/media/24358/Climate-Change-survey-responses-2020/pdf/Appendix_3_Climate_Change_Survey_responses.pdf?m=637479714682370000)

<sup>10</sup> <https://www.newcastle.gov.uk/northeastcommunityforest>

<sup>11</sup> Newcastle City Council, Gateshead Council, South Tyneside Council, North Tyneside Council, Sunderland City Council, Durham County Council.

<sup>12</sup> <https://www.communityforest-trust.org/cft-current-initiatives/trees-for-climate>

<sup>13</sup> Forestry Commission (2017). The UK Forestry Standard. Forestry Commission, Edinburgh

<sup>14</sup> The Standard is currently under review with plans to issue a revised version in 2022

The Forestry Commission is the main body responsible for implementing the UKFS in England. This body assesses forestry proposals against the UKFS before giving approval and carries out checks to ensure woodland owners and managers comply with forestry regulations.

The UKFS has been used to inform this Action Plan and it has been developed so that it meets the key elements of sustainable forest management. The 6 key themes of Our Woods, Carbon Woods, Wild Woods, Working Woods, Living Woods and More Woods have been designed to follow the UKFS principles of sustainable forest management.

### Landscape Context and Forest Design Principles

The UKFS indicates how landscape context should be considered and forest design principles applied. The guidelines provide additional information on how to comply with the requirements and include a series of factors to be taken into consideration in the creation and management of woodlands. How this might influence the projects aims in Gateshead is described below.

### Landscape Context

Gateshead falls within two National Character Areas<sup>15</sup>, (14) the Tyne and Wear Lowlands<sup>16</sup> and (16) the Durham Coalfield Pennine Fringe<sup>17</sup>. There are 159 National Character Areas (NCAs) in England, each one sharing similar landscape characteristics, following natural lines rather than administrative boundaries. Each NCA has an Area Profile which describes the area and informs future decision making. Woodlands are referred to within the descriptions and commonly feature amongst the opportunities identified.

The Area Profile for the Tyne and Wear Lowlands includes two key characteristics relating to woodland (i) 'Mixed woodland estates and plantations on restored spoil heaps provide woodland cover in some areas, although sparse elsewhere' and (ii) 'Oak or oak/birch broadleaved woodland, a characteristic feature on steep sides of narrow river valleys ...'. It also includes an opportunity (SEO3) to 'Conserve and enhance the network of green infrastructure – broadleaved woodlands characteristic of the Tyne and Wear river valleys, country estates in and around urban settlements and restored coal mining sites – to increase biodiversity, improve water and soil quality, provide tranquillity and recreation and enhance landscape character.' Quoted examples of how this could be achieved include: -

- Conserving the characteristic, semi-natural, broadleaved oak, ash and alder woodland on steep-sided, narrow denes and bluffs overlooking small flood plains ....
- Creating and extending new woodlands along valley slopes, on country estates and parklands and re-connecting semi-natural woodlands in urban areas ....
- Planning the location, species composition and design of new woodlands (including native species), to enhance biodiversity and ensure their design is sympathetic to the surrounding landscape character
- Planning for the management and restoration of habitats that can provide valuable wildlife corridors by linking woodlands to hedgerows and species rich grassland.

The Durham Coalfield Pennine Fringe Area Profile refers to woodlands in a number of contexts, including (i) Numerous small plantations of conifers or mixed woodland, as blocks or shelterbelts, on hillsides; in places more extensive conifer woodlands on ridgetops and hillsides (ii) .... strips of broadleaved woodland following rivers and streams, and conifer

<sup>15</sup> <https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making>

<sup>16</sup> <http://publications.naturalengland.org.uk/publication/4683608954503168?category=587130>

<sup>17</sup> <http://publications.naturalengland.org.uk/publication/6333292202688512?category=587130>

plantations on valley sides and (iii) Narrow, steep-sided river valleys sheltering fragments of ancient woodland. An Opportunity (SEO3) to 'Protect, enhance and connect trees and woodland in the area to improve their wildlife value, climate regulation capacity, biomass production and potential for access and recreation' is identified and examples of positive actions provided, for example: -

- Enhancing, expanding and buffering existing semi-natural broadleaved woodland, for the range of ... benefits they can provide
- Creating new woodlands, using native broadleaved species, where they will link existing native woodlands
- Creating buffer strips of woodland .... along rivers and streams, where appropriate, to support riparian wildlife and reduce soil erosion ...

Also, in respect of Landscape Context, the UKFS refers to 'Landscape and visual sensitivities', 'Historic Context' and 'Designed landscapes'. Whilst much of Gateshead has been significantly modified by industry and human settlement, this does not mean that these factors will not be important in creating new woodlands and managing existing ones. For example, many woodland plantings on early derelict land reclamation schemes and within new settlements paid little respect to landscape sensitivity, with straight sided blocks of single species woodlands. The coppiced woodlands found in steep sided valleys of the River Derwent are reminders of early industrial activity and require particular treatment and management. Similarly, Gibside is a good example of how woodlands are an integral part of designed landscapes.

The assessment of landscape context informs how various forest design principles should be applied in the management of existing woodlands and the creation of new ones to make a positive contribution to the physical environment. These forest design principles include shape, landform, pattern of enclosure, scale, diversity, unity and spirit of place.

The unsympathetic shape of many late 20<sup>th</sup> century woodland plantings has been referred to above and the management of these woodlands can be adapted to mitigate against this through appropriate felling and replanting. The shape of new woodlands should be designed to reflect a combination of landform and/or patterns of enclosure, as determined by what is dominant in the existing landscape. Gateshead borough generally has relatively hilly landscapes and thus landform will be important, although in some places, such as in the South-East around Kibblesworth a more open landscape with strong patterns of enclosure become more dominant.

Scale within the borough will vary significantly due to its undulating landscape, varying viewpoints and land use patterns. E.g. A felling coupe or new woodland planting that might be appropriate in or adjacent to Chopwell Wood might not be as appropriate in the Tyne Valley.

The number of different elements (species, shape etc.) in a design will dictate its diversity. Woodlands which have greater diversity tend to be more attractive, but in some landscapes, this can become 'fussy' in appearance. This tends to occur when they do not reflect the nature and pattern of the local landscape and thus lack unity with it.

Respecting the local landscape is also relevant to the concept of the spirit of place, which in areas such as those around ex-mining communities or the steep sided Derwent Valley coppice woodlands can offer both significant constraints and opportunities for the creation of new woodlands and the management of existing ones.



## 3. More Woods, Better Woods

Approximately 15% of Gateshead Borough total land area of 145 km<sup>2</sup> is woodland, of which the Council owns and manages about 900ha. This compares favourably with the average for the UK (13%), England (10%) and the North East in general (13%)<sup>18</sup>. This Action Plan sets out the ambition for a net increase in woodland cover of 2% (c. 250ha) in the borough from 15% to 17% by 2050.

The six 'themes' presented below are broad but reflect the inputs and outputs necessary to inform the Action Plan.

### 3.1 Theme 1: OUR WOODS (Current Woodland Provision)

This theme explores the current provision of woodland cover in Gateshead. This theme is important to demonstrate Gateshead's current woodland resource, identifying the need for informed woodland management, and framing priorities for the type and location of new woodland planting that will bring the best benefit for this existing resource.

The current woodland cover within the borough is approximately 2,500ha. The Council owns and manages approximately 900ha of this. Whilst much of this is concentrated in key sites such as the Derwent Walk Country Park and Watergate Forest Park, the Council's woodland ownership is widely distributed across the borough (Figure 1).

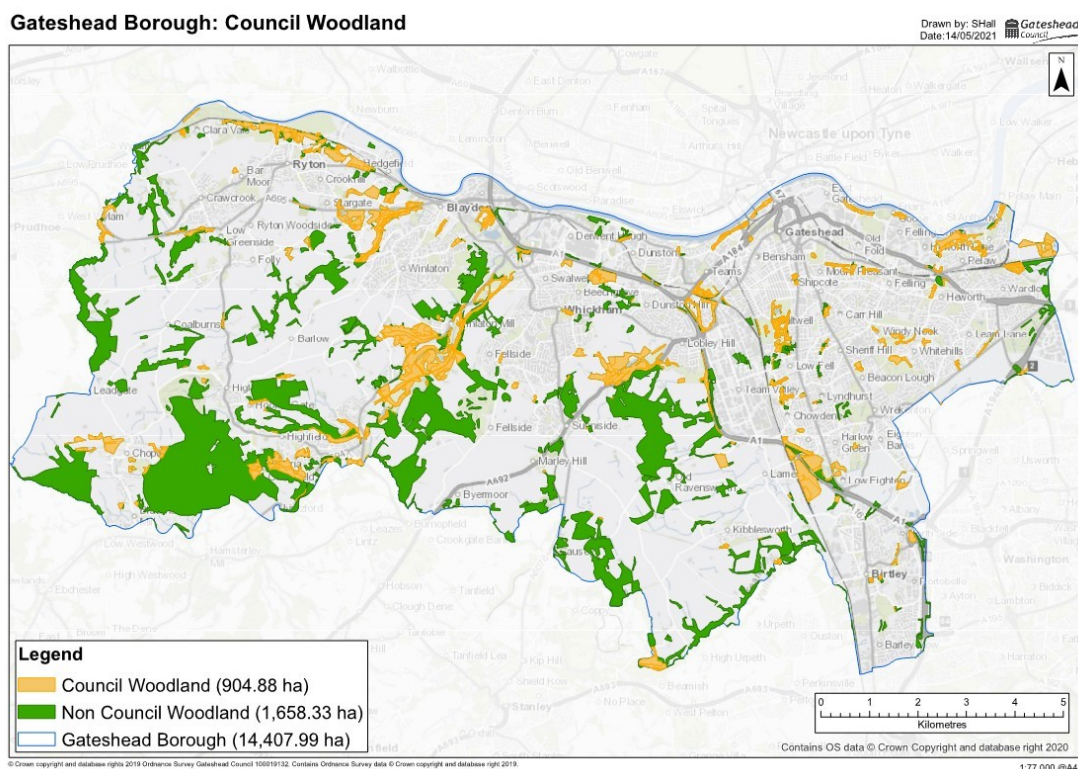


Figure 1. Woodland Cover in Gateshead

<sup>18</sup> <https://www.forestresearch.gov.uk/tools-and-resources/national-forest-inventory>

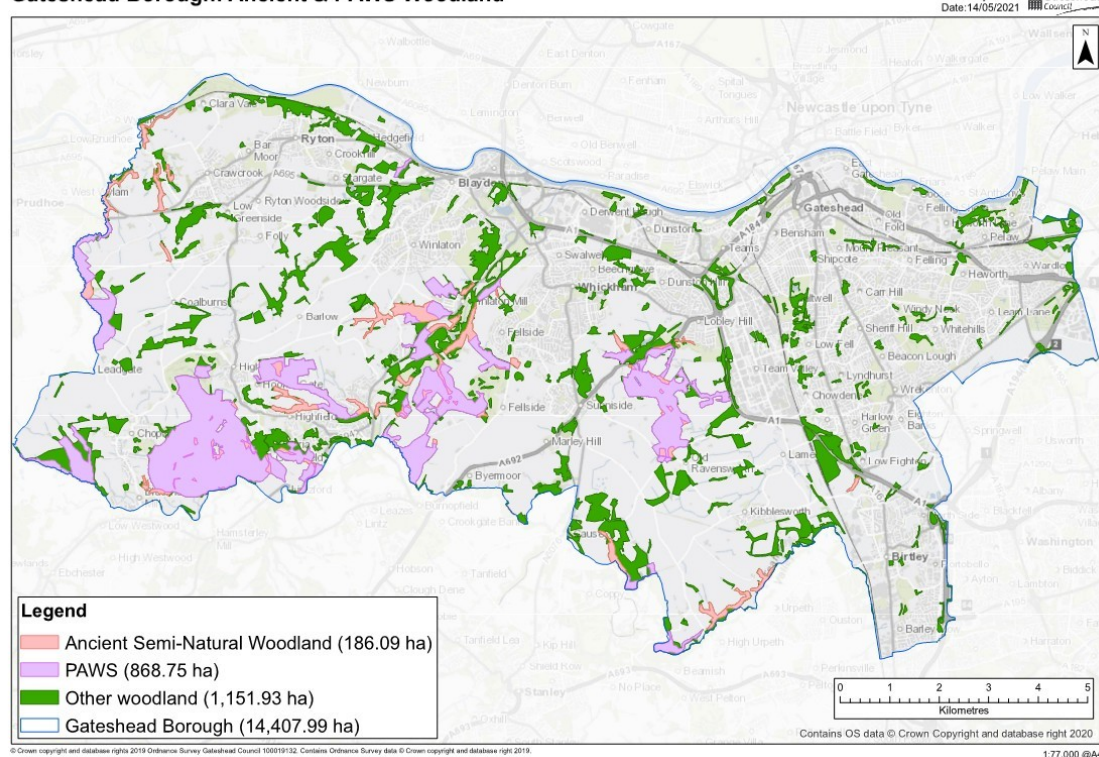


National Forest Inventory (NFI) data<sup>19</sup> records the woodland in the borough under the categories of broadleaf (66%), conifer (20%), mixed (5%) and 'other' (assumed, felled, low density and young trees) (9%). This compares to the North East average of broadleaf (22%), conifer (52%), mixed 8% and other (18%).

Of the total woodland area in the borough, approximately 1060ha is listed as ancient woodland on the Ancient Woodland Inventory (AWI). Ancient woodland is defined as an area that has been wooded continuously since at least 1600 AD and constitutes some of the rarest and most valuable habitat in the British Isles.

Ancient Woodland includes both ancient semi-natural woodland (ASNW) and plantations on ancient woodland sites (PAWS). ASNW is woodland which is '*composed predominantly of trees and shrubs native to the site that do not obviously originate from planting*', whereas PAWS are '*areas of ancient woodland where the former native tree cover has been felled and replaced by planted trees, predominantly of species not native to the site*'. Gateshead has 190ha ASNW<sup>20</sup> and 870ha PAWS<sup>21</sup> (Figure 2) accounting for nearly 50% of woodlands in the borough compared to an average of 28% in England<sup>22</sup>. Woodlands identified on the AWI in the borough include Chopwell, Milkwellburn, Guards Wood, Sherburn Green Wood (Spen Burn), Snipes Dene (Gibside), Thornley Woods and Hill Head Wood.

**Gateshead Borough: Ancient & PAWS Woodland**



**Figure 2. Ancient Woodland in Gateshead**

<sup>19</sup> <https://www.forestresearch.gov.uk/tools-and-resources/national-forest-inventory/>

<sup>20</sup> ASNW are ancient woodlands that have had continuous woodland cover for some centuries. They are typically more ecologically diverse and will often have historical and cultural importance.

<sup>21</sup> PAWS are ancient woodland sites where the semi-natural woodland has been replaced with a plantation

<sup>22</sup> Habitat Inventory Team, Natural England (2022). Ancient Woodland (England): Boundaries of Ancient Woodland polygons. Natural England, Telford.

The Ancient Woodland Inventory currently captures only woodlands over 2ha. and may therefore be under-recording the area of ancient woodland in Gateshead, in particular areas of small, fragmented woodland. An update of the AWI is currently underway and is both mapping areas down to 0.25ha, and also utilising updated techniques for identifying ancient woodland. Together, this may lead to an increase in the area of ancient woodland recorded in the borough, both ASNW and PAWS. The AWI does not record other long-established woodland and tree landscapes such as wood pasture and parkland, both of which are potentially very valuable habitats and may be present in Gateshead.

A ten-year management plan<sup>23</sup> for the Gateshead Council woodland estate was produced in 2008. The long-term management vision was described as managing the woodlands as a resource for nature conservation and public recreation and as an important feature of the local landscape. The management strategy was to focus on PAWS restoration, improvement of ASNW woodland to favourable condition and restructuring of secondary and planted broadleaved woodlands. Whilst some PAWS restoration was undertaken within Thornley Wood, Washingwell Wood and Ousbrough Wood, implementation of the plan across the wider woodland estate was limited. It is proposed that the next iteration of the woodland management plan follows and builds on the key management strategy of its predecessor, but that greater effort is placed on its delivery.

A new woodland management plan for Gateshead Council woodland should also consider the following strategic objectives which link to the UKFS:

- Biodiversity – to manage the woodlands with biodiversity as the major objective, protect and conserve rare and protected species and introduce management techniques where appropriate such as thinning and regeneration felling, controlling invasive non-native species (INNS), increasing levels of deadwood, coppicing and ride, glade and open space management. Some woodlands may benefit from only occasional minimum intervention, such as tree safety works.
- Climate change – to facilitate adaptation of the woodlands to climate change by diversifying species and age classes and to make them more robust with a healthy growing stock of trees.
- People – to involve local communities in the decision making and management of the woodlands and ensure high quality access and recreational opportunities are provided.

Landscape, the historic environment, soil and water are cross cutting themes that underlie the above overarching strategic objectives.

The new plan should ensure it meets the objectives of the Countryside Stewardship Higher Tier<sup>24</sup> woodland management options. This is a key funding source for the improvement of woodlands for biodiversity and can fund targeted operational activities such as thinning, regeneration felling, INNS control, coppicing, increasing deadwood levels and ride and open space management. Appendix 1 provides further details on management planning and Countryside Stewardship and other sources of funding that can support woodland management activity.

Funding from the Woodland Management Planning Grant<sup>25</sup> can help to pay for the production of a new woodland management plan.

---

<sup>23</sup> Gateshead Council Woodland Management Plan 2008

<sup>24</sup> <https://www.gov.uk/countryside-stewardship-grants/woodland-improvement-wd2>

<sup>25</sup> <https://www.gov.uk/government/collections/countryside-stewardship-get-paid-for-environmental-land-management#woodland-support-grants>

## 3.2 Theme 2: CARBON WOODS (Woodlands and Climate Change)

Woodland creation is a key tool in meeting the ambition of Net Zero. New woodlands can be planted with the objective of carbon sequestration amongst others. The increased use of fossil fuels over time, compounded by the intensification of agriculture and accelerated deforestation has driven climate change. Rising temperatures, increasing concentrations of CO<sub>2</sub>, changes to precipitation, water availability and seasonality are affecting our environment. These changes are increasing abiotic and biotic stresses on our ecosystems and habitats, including trees and woodlands.

Planning new woodlands to be sinks for carbon and to be resilient in the face of a changing climate is a key priority in this Action Plan. This follows the guiding principles that the Council has committed to in the Climate Emergency Action Plan 2021.

Newly created woodlands can be measured against the Woodland Carbon Code (WCC)<sup>26</sup> with regards to their ability to sequester carbon. The WCC is the voluntary standard for UK woodland creation projects where claims are made about the carbon dioxide they sequester. Independent validation and verification to this standard provides assurance and clarity about the carbon savings of these sustainably managed woodlands.

The WCC can be used to calculate the carbon sequestered by selected new woodland types which may typically be planted in the borough. These types are defined in Table 1.

Woodland Type	Area (ha)	Duration (years)	Planting Density	Species	Management Regime Applied
New Native Woodland	1	55	2m	Native broadleaves	Thinned
Mixed Woodland	5	100	2m	Majority native broadleaves with some conifer or productive broadleaved species	Thinned
Conifer Plantation	10	40	2m	Mixed conifers	Thinned

Table 1: Woodland type Carbon Code examples

Results from the WCC are presented as Pending Issuance Units (PIUs). This is a promise to deliver a Woodland Carbon Unit (WCUs). A WCU is a tonne of CO<sub>2</sub>e<sup>27</sup> which has been sequestered in a WCC verified woodland. The WCUs can be independently verified, are guaranteed to be there and can be used by companies to report against UK based emissions or to use in claims of carbon neutrality or Net Zero<sup>28</sup> emissions. Table 2 shows the PIUs from the examples provided.

<sup>26</sup> <https://woodlandcarboncode.org.uk/>

<sup>27</sup> Carbon dioxide equivalent. It is used to describe greenhouse gases in a common unit.

<sup>28</sup> Achieving a balance between the carbon emitted into the atmosphere and the carbon removed from it.

Woodland Type	Area (ha)	Duration (years)	Planting Density	Species	Management Regime Applied	PIUs
New Native Woodland	1	55	2m	Native broadleaves	Thinned	298
Mixed Woodland	5	100	2m	Majority native broadleaves with some conifer	Thinned	1550
Conifer Plantation	10	40	2m	Mixed conifers	Thinned	1404

Table 2: Example PIUs

Existing woodland carbon values can be calculated using National Forest Inventory (NFI) data. Based on the NFI 2011 datasets<sup>29</sup> in the North East region, the tonnes of carbon stored per ha of broadleaved woodland is 97.59 and the tonnes of carbon stored per ha of coniferous woodland is 76.71. Table 3 shows the estimated total amount of carbon stored in woodlands in Gateshead.

Woodland Type	Area (ha)	Tonnes of carbon per ha	Total carbon stored (t)
Broadleaved	1452	97.59	141,700
Conifer	440	76.71	33,752
Mixed <sup>30</sup>	110	87.15	9,586

Table 3: Carbon stored in woodlands in Gateshead

If the target of 250 ha of new woodlands were to be realised and the majority of this was new native woodland based on the example in Table 1 above, then approximately 75,000 t/CO<sub>2</sub>e would be sequestered over a 55-year timeframe.

Table 4 shows the annual sequestration of carbon that might occur in the woodlands owned by Gateshead Council. The actual amounts would require significant assessment of various factors (species, tree age, size etc.) on a site-by-site basis, but the methodology adopted, as tested in a report for the National Forest Company<sup>31</sup>, provides an indication of potential gains.

Woodland Type	Area (ha)	Yield class	Annual Increment		
			Cubic metres	'Green' tonnes)	Carbon
Broadleaved	660.56	5	3303	3303	1436
Conifer	199.07	13	2588	2329	1013
Mixed	45.24	9	407	387	168

Table 4: Annual carbon sequestration in Gateshead Council woodlands

<sup>29</sup> Carbon in live woodland trees in Britain. NFI Report. 2011. Forestry Commission.

<sup>30</sup> Average of broadleaved and conifer.

<sup>31</sup> Firewood Carbon and Air Quality Review for the National Forest Company. RDI Associates Ltd. (2021). The National Forest Company, Moira.



### 3.3 Theme 3: WILD WOODS (Woodlands and Environment)

This theme presents the environmental and ecological emergency and demonstrates the importance of woodlands, including ecology, water, soils, clean air and natural flood management.

EU directives (adopted by the UK), provide a range of protection and conservation measures including the Natura 2000 network of protected sites and European Protected Species. There is a duty of care to have regard to the conservation of biodiversity when considering the management of existing and creating new woodlands.

Woodlands have the potential to affect both the immediate woodland site and the ecology of the wider environment, and they should be managed or designed in a way that conserves or enhances biodiversity and opportunities for enhancing biodiversity should be considered at the planning stage.

Whilst there are no international/European designated sites in Gateshead, much of the woodland in the borough is designated as either Site of Special Scientific Interest (SSSI) = 133ha or Local Wildlife Site (LWS) = 1509ha (Figure 3). SSSIs receive statutory protection while LWSs are a non-statutory designation which affords protection through the planning system only. Important non woodland habitats in the borough include rivers and streams, priority grassland, brownfield and wetlands.

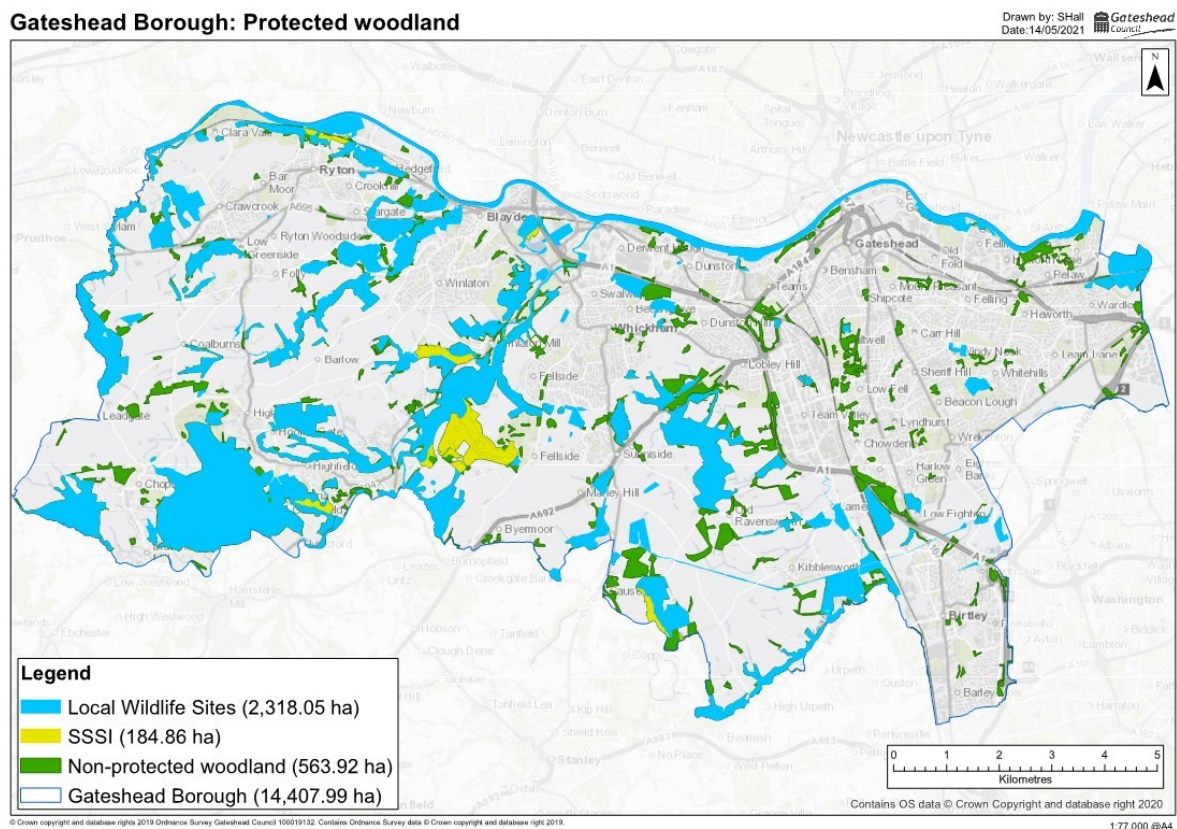


Figure 3. Woodland & Protected Sites in Gateshead

It is essential that the importance of non-woodland sites, habitats and species are understood before identifying sites for woodland creation. Due consideration of the biodiversity impacts of new woodlands should be given within and beyond the woodland boundary. What existing habitats and species will the new woodland be adversely impacting or enhancing? What surrounding habitats and species are there and is there ecological

connectivity? Figure 4 shows the wildlife corridor network in the borough. New woodlands will have an important role to play in addressing the biodiversity crisis through promoting ecological connectivity. Targeting woodland creation within the wildlife corridor network, including new native woodland to link and buffer existing ancient woodland, will contribute to this important goal. Linking this work to the revised Ancient Woodland Inventory will in particular help to join up small and fragmented areas of ancient woodland.

Given their rarity in the British Isles, ancient woodlands in particular are of both great existing importance and future potential. Government set out its policy<sup>32</sup> relating to ancient woodland in 2005 (updated May 2022<sup>33</sup>) and has recently restated its commitment to this, along with Forestry Commission guidance<sup>34</sup>. Restoration management, which can include the introduction of appropriate management techniques into ancient semi-natural woodland (ASNW) and the restoration of plantations on ancient woodland sites (PAWS), can protect and improve the range of habitats provided. The Woodland Trust have extensive experience of restoration management and provide extensive guidance and support for woodland owners. The Trust's approach to ancient woodland restoration<sup>35</sup> is primarily guided by careful assessment and planning, followed by phased management to halt further decline, recovery of the wider ecosystem, and maximising ecological integrity.

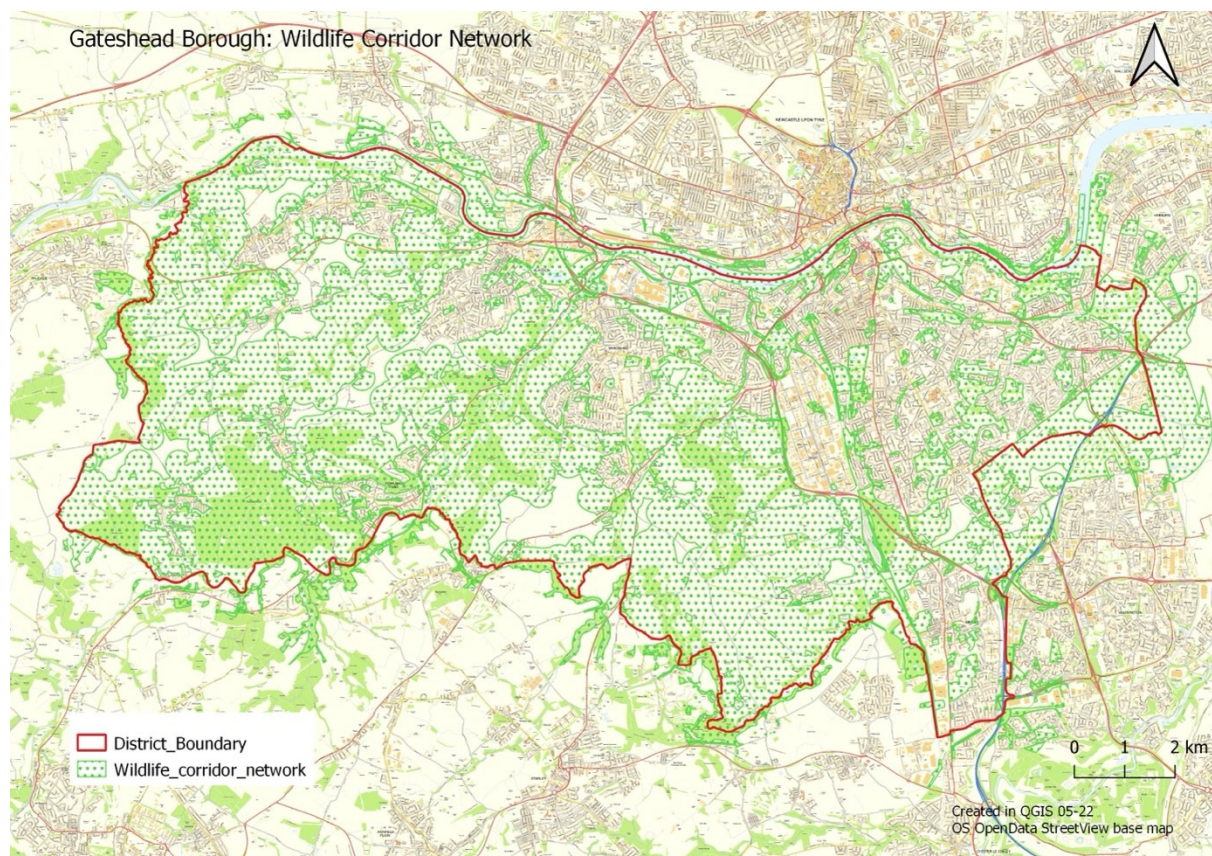


Figure 4. Wildlife Corridors in Gateshead

<sup>32</sup> <https://www.gov.uk/government/publications/keepers-of-time-a-statement-of-policy-for-englands-ancient-and-native-woodland>

<sup>33</sup> <https://www.gov.uk/government/publications/keepers-of-time-ancient-and-native-woodland-and-trees-policy-in-england>

<sup>34</sup> <https://www.gov.uk/government/publications/managing-ancient-and-native-woodland-in-england>

<sup>35</sup> <https://www.woodlandtrust.org.uk/protecting-trees-and-woods/ancient-woodland-restoration/how-we-restore-ancient-woodland/>

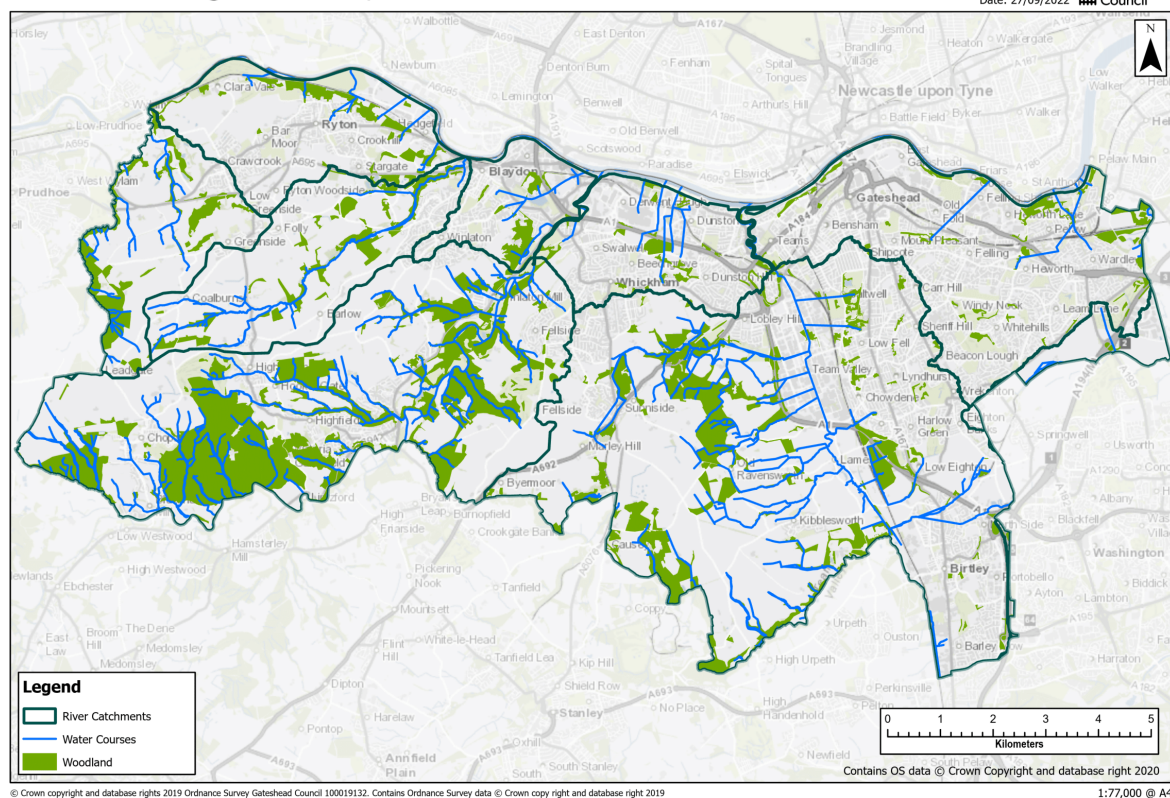


Woodlands provide an important range of ecosystem services. These are the many benefits provided to humans by the natural environment and contribute to functioning, healthy and diverse ecosystems. This includes climate regulation, clean air and water, flood mitigation, soil protection, carbon sequestration, natural pollination and mental and physical wellbeing. New woodlands should be designed so that the values from ecosystem services can be maximised wherever possible. Using the UKFS as the guiding principle will help with this process.

New woodlands can play a vital role in reducing flood risk and improving water quality. Figure 5 illustrates the relationship between woodland, water courses and river catchments in the borough. The following link provides flood risk details for Gateshead and identifies current proposed locations for woodland creation on Council land - [Woodland Action Plan - Flood Risk Map \(arcgis.com\)](#)

**Gateshead Borough: Woodland, Water Courses & River Catchments**

Drawn by: LDavis  
Date: 27/09/2022  
Gateshead Council



*Figure 5. Woodland, Water Courses & River Catchments in Gateshead*

### 3.4 Theme 4: WORKING WOODS (Woodlands and Sustainable Growth)

This theme presents the economic benefits of woodlands and their role in a green economy.

Within Gateshead there are a number of large woodlands which are managed for commercial objectives (amongst others). These include woodlands managed by Forestry England (the land management agency of the Forestry Commission) and private landowners.

Forestry England manage approximately 700ha of woodland in the borough, at Chopwell (375ha), Spen Banks (64ha), Clockburn (18ha), Ravensworth (140ha) and Gibside (136ha).

Chopwell and Spen Banks are owned by the Forestry Commission whereas Clockburn and Ravensworth are leased from private landowners. Gibside is leased from the National Trust. Chopwell, Clockburn, Gibside and Ravensworth are predominantly PAWS and the FE Forest Plans focus on the gradual conversion of the sites over many decades to broadleaf woodland. The forest plans also state that the primary economic objective is to establish economically viable and commercially marketable parcels of timber to maintain future productivity of the forest during the Ancient woodland restoration.

In addition to FE woodlands, there is an additional 240ha of conifer or mixed woodland in the borough, where economic return (either actual or potential) could be a significant objective. Ownership of these woodlands is spread across a number of small estates and individual farms, consisting of larger woodland blocks, smaller plantations and shelter belts.

As with the UK as a whole, most commercial woodlands in the borough are managed through a process of 'clear-fell', although alternative silvicultural practices such as Continuous Cover Forestry (CCF) are becoming more common, in particular in those woodlands managed by FE. Clear-fell consists of the establishment of trees, either by new planting or restocking of a felled site, followed by a cycle of thinning trees to promote overall growth and maximise volume production over a rotation of 40 to 60 years (conifers) or up to 150 years (broadleaves). The remaining trees will then be clear-felled, and replanted. CCF involves regular thinning of the woodlands whilst promoting natural regeneration so that no clear fell takes place, meaning there is continuous woodland cover on the site. Both systems have advantages and disadvantages. Commercially managed woodlands require an element of forest infrastructure which includes roads and rides for the harvesting and extraction of timber, stacking areas for timber awaiting haulage, fences and drains.

The management of existing woodlands and creating new woodlands can be done under multi-purpose objectives where productivity can and indeed should be considered. This can be achieved at different scales, from the production of timber for construction and other sawn wood products through the management of plantation woodlands, to designing new native woodlands to have an element of productivity in the future for say, local timber markets such as woodfuel and fencing or more specialist coppice products and non-timber forest products.

The Clean Growth Strategy<sup>36</sup> sets out the governments ambitions to grow national income while cutting greenhouse gas emissions. Along with the 25 Year Environment Plan, it provides the government's commitment to increase the use of timber in construction. Increasing the use of timber in construction will lock away carbon in the long term and provide a stimulus for woodland creation.

Woodland creation and management offers employment opportunities. As more woodlands are brought into management and created, a growing and skilled workforce will be required. The recent Forestry Skills Forum Forest Workforce Research<sup>37</sup> indicated that across England, over 1000 additional jobs would need to be created in the forestry sector by 2030 to achieve current government targets. Jobs will be created in planting and maintaining sites, as they will for the management of existing woodlands, and help to ensure that the necessary capacity and skills are in place to manage the woodlands that will be created through the fulfilment of this plan's objectives. Additional jobs will be created in the timber processing sector.

Bringing council woodlands into active management has the potential to support this enhanced employment by stimulating action by private owners. By setting an example of best practice, in particular in the management of habitats of the highest value or potential

---

<sup>36</sup> <https://www.gov.uk/government/publications/clean-growth-strategy>

<sup>37</sup> RDI Associates (2021). Forestry Workforce research Final Report. Forestry Skills Forum.



(such as PAWS restoration), it can also provide contractors with experience of working in such woodlands and foster markets for the timber harvested.

Timber markets are currently strong in the UK and this in turn is creating considerable incentive to bring woodlands into management. This combined with the Countryside Stewardship Higher Tier grants for supporting woodland improvement for biodiversity, offers strong financial incentives to manage woodlands for multipurpose benefits.

### 3.5 Theme 5: LIVING WOODS (Woodlands & People)

This theme presents the socio-economic, and health and wellbeing benefits derived from woodland.

The Indices of Deprivation 2019 (IMD2019) shows that Gateshead is ranked 47<sup>th</sup> out of 317 local authorities in England where 1 is the most deprived. Around 32,700 or 16% of Gateshead residents live within the most deprived 10% LSOAs<sup>38</sup> (lower-layer super output areas) in England.

Of the seven indices of deprivation, Gateshead scored lowest for health and disability, where it ranked 24<sup>th</sup>. The health and disability domain includes indicators relating to years of potential life lost and mood and anxiety disorders, both factors which can be influenced by the quality of environment and access to green space, including woodlands.

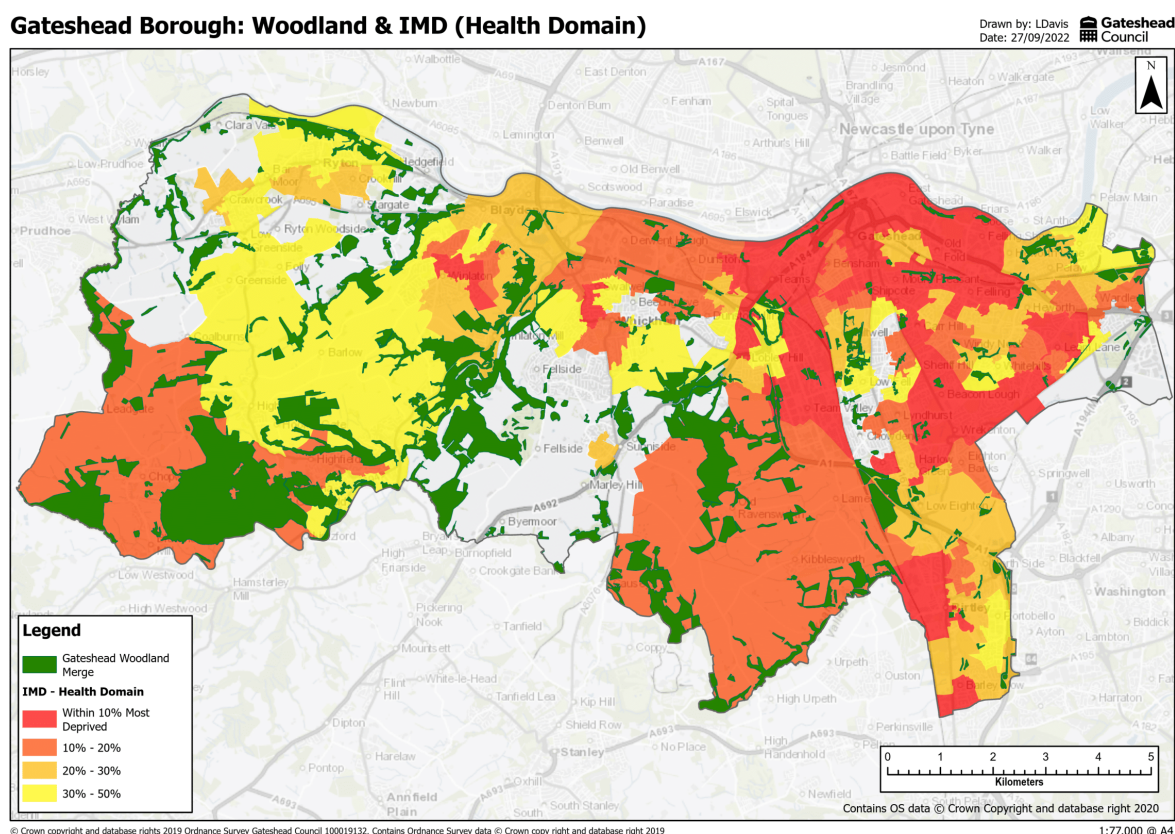


Figure 6: Index of Multiple Deprivation (Health) in Gateshead

<sup>38</sup> Small areas designed to be of a similar population size with an average of 1500 residents.

At 77.8 for men, and 81.8 for women, life expectancy is lower than the England averages of 79.8 and 83.4 respectively. Around 22% of people in Gateshead reported that their health limits day to day activities compared to around 18% nationally, and 23.6% of residents said their general health was 'fair', 'bad' or 'very bad', compared to 18.5% across England as a whole<sup>39</sup>.

### Public Access

Access to woodland can improve mental and physical wellbeing and improve quality of life. A 2019 report<sup>40</sup> by FOREST EUROPE identified five key mechanisms by which forests and woodlands contribute to human health and well-being:

- Reduced exposure to noise and air pollution
- Stress reduction and psychological and physiological restoration
- Strengthening the immune system through contact with nature
- Increased physical activity and reduction in obesity rates
- Better social contacts

Quoted in the 2022 Gateshead Director of Public Health Annual Report<sup>41</sup>, Lucy Brenkley, Active Forests Coordinator for Forestry England said '*Throughout 2020, public demand soared for outdoor recreation. Mental Health Foundation research<sup>42</sup> shows that, during the long months of the pandemic, going for walks outside was one of our top coping strategies, and 45% of us reported being in green spaces has been vital for our mental health. Research has also highlighted the importance of physical activity and engaging with nature in supporting people to maintain their wellbeing during restrictions and the pandemic<sup>43</sup>.*'

Recent work undertaken by Forest Research indicates that the annual mental health benefits associated with visits to the UK's woodlands, resulting in reduced costs to the NHS and employers, are estimated to be £185m<sup>44</sup>.

Woodlands visual prominence can create a balance between the built and natural environment and help to soften industrial landscapes, especially in urban areas. They also provide cultural and social benefits. Figure 5 shows the network of public rights of way across the borough.

---

<sup>39</sup> ONS (2012). Census 2011

<sup>40</sup> FOREST EUROPE, Liaison Unit Bratislava, 2019: Human Health and Sustainable Forest Management by, Marušáková L. and Sallmannshoferet M., et al. FOREST EUROPE Study

<sup>41</sup> <https://www.gateshead.gov.uk/article/5519/Annual-Report-from-the-Director-of-Public-Health-for-Gateshead>

<sup>42</sup> Rowland M, Mental Health Foundation (2020) Blog: Why Nature was the theme for Mental Health Awareness Week 2021.

<sup>43</sup> O'Brien, L and Forster, J. (2020) Engagement with nature before and during the Covid-19 restrictions. Quantitative analysis. 2020. Forest Research, Farnham

<sup>44</sup> <https://www.forestresearch.gov.uk/research/valuing-the-mental-health-benefits-of-forestry-phase-2/>

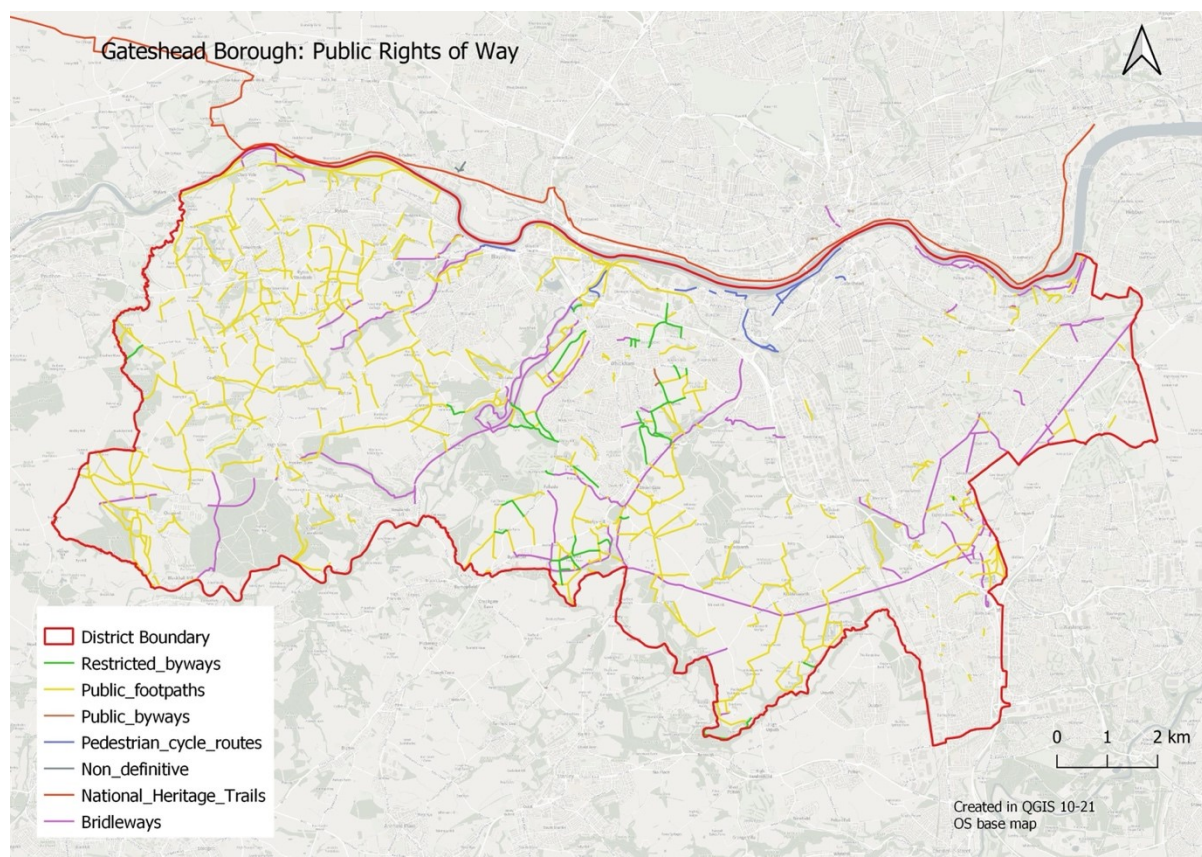


Figure 7. Public Rights of Way in Gateshead

New woodlands should be designed with proximity to people and access in mind. The Woodland Trust policy paper ‘Space for People’<sup>45</sup> shows that within Gateshead district, some 99% of the population live within 4km of an accessible woodland over 20ha in size. However, only 17% of the population live within 500m of an accessible woodland over 2ha in size, which is more representative of people’s daily lives.

Woodlands in urban<sup>46</sup> and peri-urban<sup>47</sup> situations provide an opportunity for people to take regular exercise in quiet and restful environments and enjoy regular contact with nature. This has the known<sup>48</sup> benefits of relieving stress and depression and physical symptoms such as high blood pressure and obesity.

Woodlands can provide venues for social activity. This can be through their use for education and training, Forest Schools activities, community woodland initiatives, local events or just family and friends getting together for exercise or picnics.

This action plan notes the importance of engaging local communities in the process of woodland creation and management from the outset. Communities should be engaged through consultation for site selection, planning, design and future management requirements.

<sup>45</sup> Space for People (2017) The Woodland Trust

<sup>46</sup> [https://cdn.forestresearch.gov.uk/2022/02/serg\\_urban\\_health\\_and\\_forestry.pdf](https://cdn.forestresearch.gov.uk/2022/02/serg_urban_health_and_forestry.pdf)

<sup>47</sup> [https://cdn.forestresearch.gov.uk/2022/02/peri-urban\\_woods\\_and\\_health\\_report\\_2012.pdf](https://cdn.forestresearch.gov.uk/2022/02/peri-urban_woods_and_health_report_2012.pdf)

<sup>48</sup> <https://www.forestresearch.gov.uk/tools-and-resources/fthr/biomass-energy-resources/fuel/woodfuel-production-and-supply/woodfuel-production/forestry-for-woodfuel-and-timber/social-benefits-of-woodland/>



## The Historic Environment

The Historic Environment (HE) is culturally important and existing woodlands are often important places for historic and archaeological features. The management and creation of new woodland must consider the HE and take account of the historical and cultural values of the landscape. Steps should be taken to ensure any historic features, which may be affected by woodland creation and management, are known and evaluated, consulting with and taking advice from local historic environment authorities.

Tools to help with planning for the HE includes thorough research of HE records, careful design and provision of open space, rides and edges, alternating structure in terms of species groups, spacing and height, provision and management of public access and amenity and long-term operational planning – when, where and how future woodland operations will be conducted. Figure 6 identifies key historic environment features across the borough. Additional site specific HE surveys should be conducted prior to determining their suitability for woodland creation.

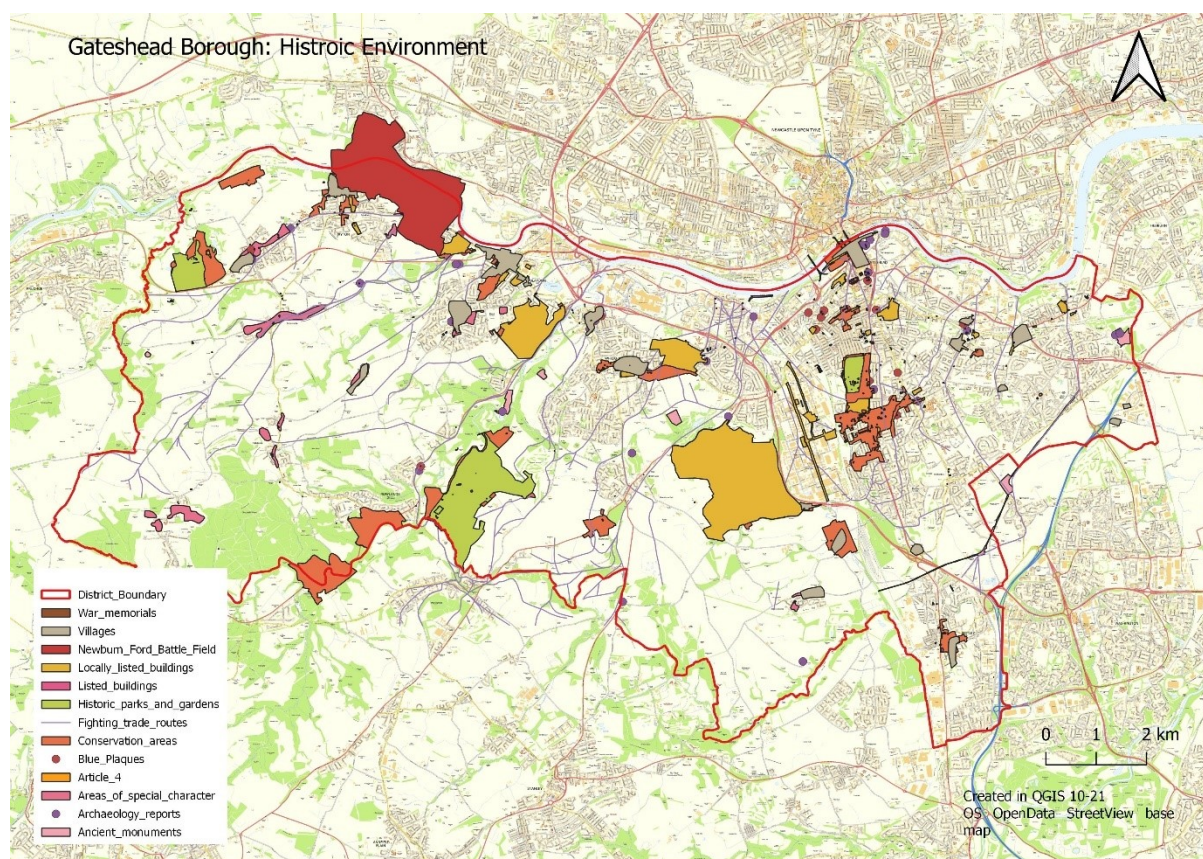


Figure 8. The Historic Environment in Gateshead

## 3.6 Theme 6: MORE WOODS (Woodland Expansion)

This theme examines the potential for woodland expansion on Gateshead Council land.

The Council has set the ambition of supporting a net increase in woodland cover of 2% (c. 250ha/2.5km<sup>2</sup> out of a total land area of 14,000ha/140km<sup>2</sup>) in the borough from 15% to 17% by 2050. This ambition can be compared to the target of increasing England's woodland cover from 10% to 12% by 2050 (2600km<sup>2</sup>).



Using existing data sets, this action plan identifies a 'long list of sites' that could be explored further as to their potential for conversion to woodland. The long list (Figure 7) can be defined as sites that, from desk-based research, have the potential to support woodland creation meeting the UKFS themes of biodiversity, climate change, historic environment, landscape, people, soil and water. The long list allocates a priority to each site based on the following criteria:

- *High Priority Sites* will be those considered to be highly suitable and deliverable and as such make the short list.
- *Medium Priority Sites* are those that may have additional constraints but could be investigated further if future policy or demand required.
- *Low Priority Sites* are those that would not support tree planting because of a major constraint or several minor constraints.

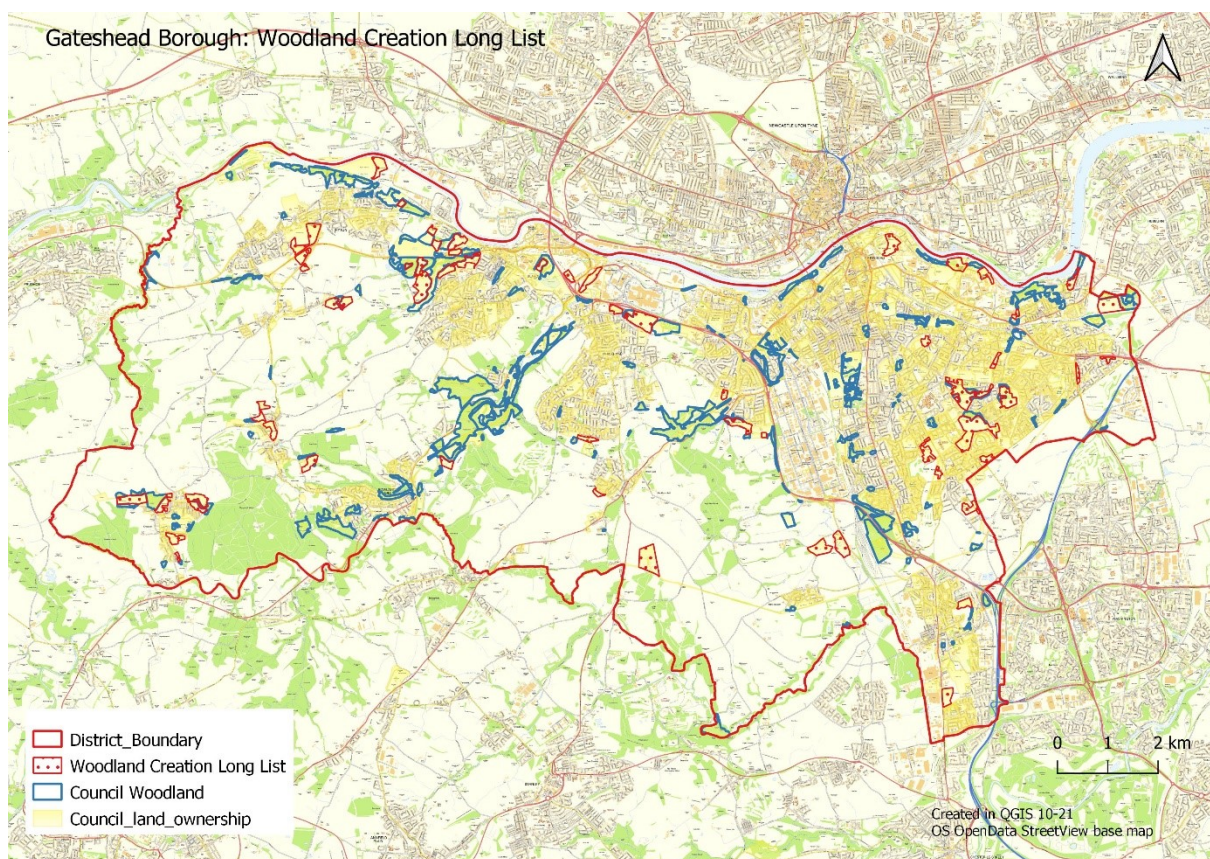


Figure 9. Woodland Expansion in Gateshead (Long List)

Appendix 2 provides a more detailed description of the long list of sites.

## 4. More Woods - Proposed Woodland Creation Sites

This section presents a short list of sites where woodland creation could be undertaken upon Council land and the evidence upon which this is based.

## 4.1 Scoring Matrix for Site Selection

A scoring matrix has been developed to help the Council through the site selection, planning and design stages. The matrix draws on the principles of the UKFS and uses readily available data sets that can be interrogated to assess the 'risks' and 'benefits' of creating woodland. The principles of the scoring matrix are:

- Will the proposed site enhance biodiversity and ecological connectivity?
- Has resilience to climate change been considered?
- Does the proposed site have any HE features which need to be considered?
- Will the proposed site enhance the local landscape?
- Will the proposed site improve access to green space and recreational opportunities for people?
- Have the proposals considered impacts on soil?
- Have the proposals considered impacts on the water environment?
- What are the opportunities for carbon sequestration?
- Have all site constraints been duly considered?

Sites are then scored according to the criteria as set out in Table 5.

Score	Description
1	Site does not contribute to objective and may even affect it detrimentally. Woodland creation may not be suitable for the site.
2	Limited contribution to objective. Woodland creation may be suitable if adequate mitigation measures can be introduced.
3	Contributes to the objective. Limited mitigation measures required.
4	Good contribution to the objective. No mitigation measures required.
5	Enhances objective.

*Table 5: Site scoring matrix*

Sites can score a maximum of 50. The full scoring matrix can be found in Appendix 4.

## 4.2 Short Listed Sites

Short listed sites can be assessed using the matrix to provide an initial assessment against the UKFS requirements, utilising existing data sources such as MAGIC<sup>49</sup>, FC map browser<sup>50</sup> and ESC DSS<sup>51</sup> amongst others.

Table 6 provides a short list of sites (high and medium priority) that could be brought forward for more detailed assessment, consultation, planning and design.

<sup>49</sup> <https://magic.defra.gov.uk/MagicMap.aspx>

<sup>50</sup> <https://www.forestergis.com/Apps/MapBrowser/>

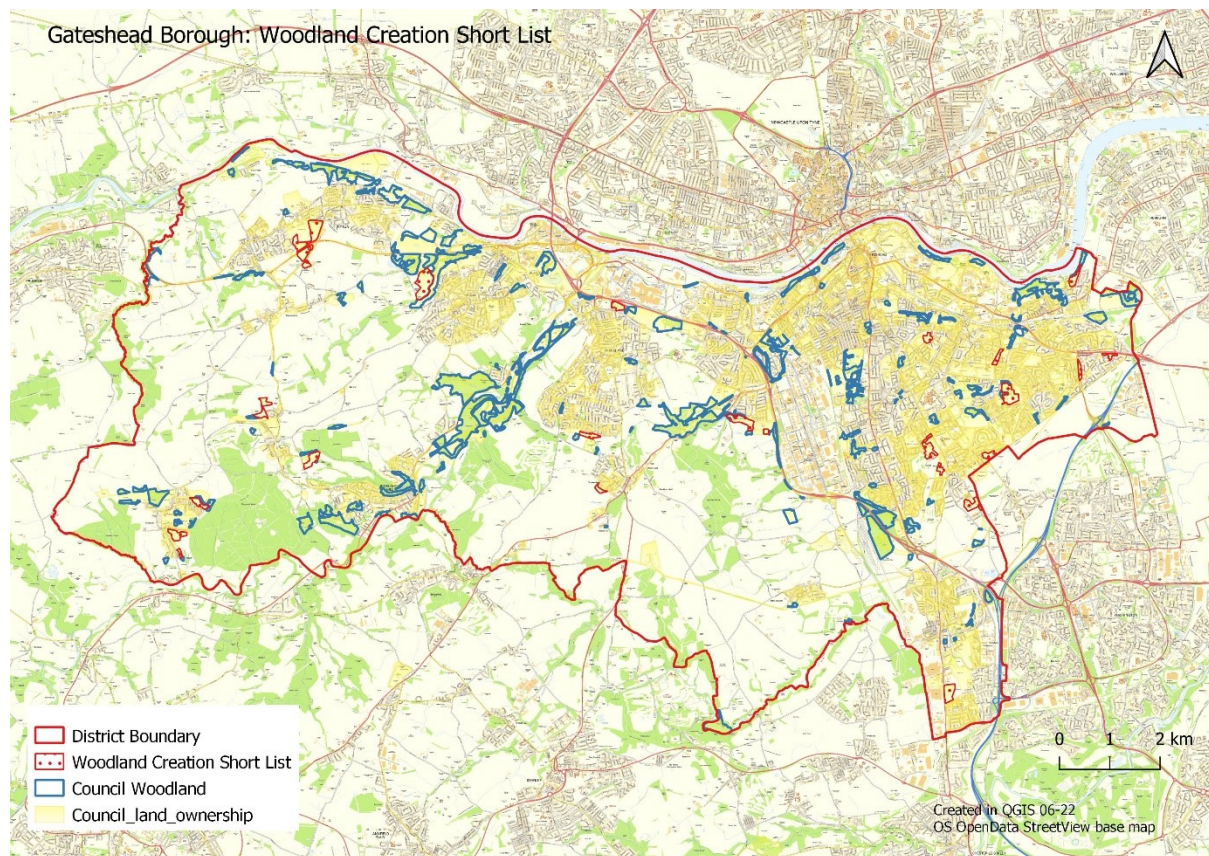
<sup>51</sup> <https://www.forestresearch.gov.uk/tools-and-resources/fthr/ecological-site-classification/>

Name/location	NGR	Area (ha)	Priority
Bolton's Bungalows	NZ120577	4.68	Medium
East Terrace	NZ120573	0.88	Medium
Off South Road	NZ123584	3.37	Medium
Hooker Gate	NZ146591	5.16	Medium
High Spen Park	NZ137601	5.05	Medium
Ryton Woodside South	NZ145630	1.6	High
Ryton Woodside North	NZ145633	4.34	High
Ryton Rugby Club East	NZ147637	7.99	High
Ryton Rugby Club South	NZ145634	4.67	High
Blaydon Burn West	NZ169626	13.75	Medium
Market Lane East	NZ207623	3.07	Medium
Beggar Wood	NZ231600	7.23	High
Millgreen Cottage	NZ237598	0.97	High
Bill Quay - Riverside Park	NZ297628	3.67	Medium
Leam Lane East (a)	NZ299611	1.35	High
Leam Lane East (b)	NZ299609	0.46	High
Wardely	NZ305613	1.52	High
Felling Cricket Club North	NZ283613	1.39	High
Felling Cricket Club South	NZ283614	0.68	High
Deckham	NZ268616	2.49	High
Whitehills East	NZ283605	9.29	High
Wrekenton	NZ281593	2.73	High
Ravensworth Golf Course	NZ271591	1.75	Medium
Mossheap Recreation Ground	NZ269594	5.9	Medium
Eighton Banks East	NZ277583	5.31	Medium
Barley Mow	NZ273547	6.43	High
Sunniside	NZ204584	1.52	Medium
Gladeley Hill	NZ202595	2.79	High
<b>Priority Totals</b>			
High		55.93	
Medium		54.11	
Total		110.04	

Table 6: Woodland expansion sites (short list)



Figure 10 shows the location of the short-listed sites.



*Figure 10. Woodland Expansion in Gateshead (Short List)*

The short list identifies 55.93ha in the high priority category and 54.11ha in the medium priority category. This falls 139.96ha short of the overall target of creating 250ha of new woodland in the borough. It would therefore be necessary to work with wider third and private sector partners to achieve this.

#### Woodland Creation on Non-Council Owned Land

Due to the short fall in available medium and high priority sites for woodland creation on Council owned land, it is necessary to work with private and third sector landowners and their representatives within the borough to help target areas of land that could be suitable for woodland creation. Key partners in achieving this will be the NECF, the Woodland Trust, Durham Wildlife Trust, CLA, NFU and land agents.

It is worth noting that there are large areas of farmland to the central western and central southern areas of the borough, totalling approximately 3500ha. The short fall of 101ha represents approximately 3% of this area. Desk based constraints checks and mapping could determine the extent of available, low risk, land that could be targeted for woodland creation. This could include mapping the Forestry Commission 'Low Risk Areas for Woodland Creation' map layer available on the Map Browser tool<sup>52</sup>. The Council, through its

<sup>52</sup> <https://www.forestergis.com/Apps/MapBrowser/>



partners at the NECF, could provide facilitation services to landowners to help bring forward projects to help achieve the 250ha target.

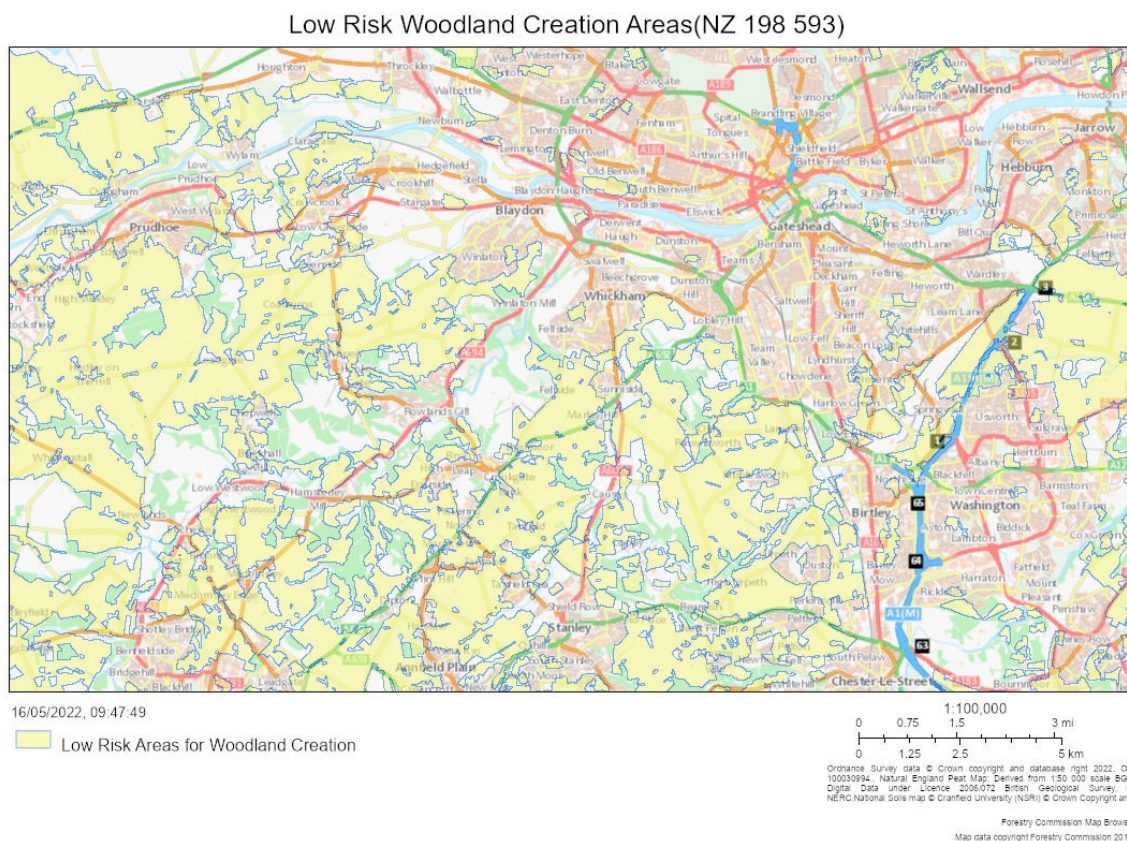


Figure 11: Extract from FC Map Browser - Low-Risk Areas for Woodland Creation

## 4.3 Investing in More and Better Woods

This section details how much the woodland planting will cost and how it will be paid for.

### Woodland Creation Costs

The cost of creating woodland varies greatly depending on the size, location and site constraints. Typically, creating new woodland in urban and peri urban locations is more costly than creating woodland on agricultural land and in more rural areas. Urban and peri urban woodland may have additional constraints around former land use, land values and social related issues. Thus, the costs quoted below, which relate to typical rural planting schemes, may be a significant underestimate of the potential costs for an equivalent size and type of scheme in an urban or peri-urban setting.

Land values may be a major constraint to securing land for tree planting in Gateshead due to the potential development value of the land. Agricultural land prices vary according to the grade of the land in question but average prices for lower grade arable and improved grassland are currently in the region of £18,000/ha and £14,000/ha respectively.

The average prices in Table 7<sup>53</sup> show the cost of planting and establishing 1 ha of new native woodland at a planting density of 1600 trees per ha with 20% open ground.

<sup>53</sup> Based on current market averages. Prices were obtained through competitive quotation for schemes managed by RDI Associates Ltd.

Item	Unit	Number	£/unit	Total cost	Notes
Planting density	Ha	1600	£3.48	£5,568.00	Lower or higher planting densities will increase or decrease price accordingly
Fencing	Meters	400	£7.75	£3,100.00	Might not be necessary if tubes are used and no threat from livestock incursion
Gates	Each	1	£475.00	£475.00	Might not be necessary if tubes are used and no threat from livestock incursion
<b>Total</b>				<b>£9,143.00</b>	

*Table 7: Woodland creation - average cost per ha*

Typical ongoing maintenance costs could be between £400 to £700 per ha for the first 3 to 4 years and in the region of £50 to £200 per ha thereafter. These may need to be amended where access and recreational provision is made and additional costly items such as maintenance of surface footpaths, litter bins and more regular grass and vegetation management may be required.

It could cost in the region of £2.3 million if all 250ha of new woodland were to be achieved, with an annual maintenance budget requirement of £137,000 for the first 3 to 4 years and £31,000 thereafter.

Appendix 3 provides more detailed costs based on current averages paid for planting materials, labour rates and maintenance costs.

## Funding Options

### Woodland Creation Planning Grant and England Woodland Creation Offer

The woodland creation planning grant (WCPG) can be used to help with the initial consultation and design of new woodlands. This is paid for schemes which total over 5ha which can be in several different blocks as long as each block is a minimum area of 0.5ha and a minimum width of 20 meters.

The WCPG process is split into 2 stages. Stage 1 requires a desk-based exercise which identifies constraints and opportunities for the sites. The scoring matrix developed as part of this action plan follows the same principles as stage 1 of the WCPG. If stage 1 is successful, the scheme proceeds to stage 2 where a detailed woodland creation design plan is produced. This plan can be used to access the England Woodland Creation Offer (EWCO) grant and may be useful in securing other forms of funding which are explored further below. The grant pays a flat rate of £1000 for stage 1 and then £150/ha for stage 2 less the £1000 stage 1 payment. For applications under 10ha in size, a minimum payment of £500 is made for stage 2.

EWCO replaced the Countryside Stewardship Woodland Creation and Maintenance grant earlier in 2021. The grant rates have been revised to be more favourable and realistic of actual costs. It also provides a range of supplementary payments and capital options. The maximum grant payable per ha is capped at £8500, excluding capital items and supplements. Table 8 sets out the typical rates that are available from EWCO along with indicative supplementary payments that may reasonably be expected to be available for schemes in the borough.

Item	Unit	Rate
Supply and Plant a Tree	Each	£1.60
Individual tree shelters	Each	£2.00
Sheep netting	Meter	£7.68
Wooden field gate	Each	£487.00
Close to settlements	Ha	£500.00
Recreational access	Ha	£2200.00
Nature recovery	Ha	£2800.00
Nature recovery lower	Ha	£1100.00

Table 8: EWCO standard rates

## Other Sources of Funding and Support for Woodland Creation

### Trees for Climate<sup>54</sup>

The Trees for Climate programme is led by England's Community Forests and has been funded out of the £640 million Nature for Climate fund. The Community Forest Trust (CFT) provides a central facilitation role and can help partners accessing funding such as the Urban Tree Challenge and Local Authority Treescapes<sup>55</sup> funds. Trees for Climate offer grants for woodland creation up to a maximum of £17,200/ha<sup>56</sup>. With the creation of the North East Community Forest, Gateshead is well placed to take advantage of this initiative.

### The Urban Tree Challenge Fund (UTCf)<sup>57</sup>

The UTCf is a £10 million government fund for tree planting in and around towns and cities in England. The fund is designed to support planting large 'standard' trees over a two year period. Administered by the Forestry Commission, the CFT facilitates the bidding process and the current round for 22/23 is due to close Spring 2022. The fund provides 50% of published costs for planting and establishment with the other 50% being funded via match funding in the form of money or labour. The scheme is designed for parkland and street tree planting projects and can pay in the region of £400 per tree.

### Local Authority Treescapes Fund (LATF)<sup>58</sup>

Part of the Nature for Climate Fund, this tree planting initiative aims to increase tree planting and natural regeneration in non-woodland areas.

### Woodland Creation Accelerator Fund<sup>59</sup>

A new fund, which at the time of writing is still to be officially launched, it is designed to support local authorities to accelerate tree planting and woodland creation projects. The fund will be competitive and cover the cost of staff or consultants to help with the delivery of planting plans and take advantage of capital grants that are available from now to 2025.

<sup>54</sup> <https://www.communityforest-trust.org/cft-current-initiatives/trees-for-climate>

<sup>55</sup> <https://www.gov.uk/guidance/local-authority-treescapes-fund>

<sup>56</sup> The grant currently pays £688 per standard tree planted. 25 trees equate to 1 ha of planting.

<sup>57</sup> <https://www.communityforest-trust.org/cft-current-initiatives/the-urban-tree-challenge-fund>

<sup>58</sup> <https://www.gov.uk/guidance/local-authority-treescapes-fund>

<sup>59</sup> <https://www.adeptnet.org.uk/woodlandfund>

## MOREwoods

The Woodland Trust provide a range of mechanisms to aid tree planting by landowners, including MOREwoods<sup>60</sup>. This scheme can support the creation of woodlands over 0.5ha by providing trees and guards at a subsidised cost. Applicants are also provided with an adviser to design the scheme and ensure the necessary procedures have been followed. Although there is no upper limit, other schemes such as EWCO may provide more beneficial support for landowners.

## Woodland Carbon

The UK government has created a woodland carbon guarantee scheme (WCaG)<sup>61</sup> to kick start the nascent woodland carbon market in the UK. The scheme offers landowners the option to sell captured carbon in the form of verified carbon credits (WCUs - see Theme 2 above), to the government for a guaranteed price every 5 or 10 years up to 2055/56. This provides an additional long-term income for the woodland. WCUs are generated through verification under the WCC. Recent auctions on the site have attracted values in the region of £20 per tonne of carbon.

At the time of writing the WCaG is not available to public sector bodies. However, it is worth noting that one ha of new native woodland generating 300 WCUs over a timeframe of 35 years would generate an annual income per ha of around £170 to £200. Carbon prices are likely to rise in the future and there are private carbon finance providers, such as Forest Carbon<sup>62</sup>, so it is well worth considering entering newly created woodlands into the WCC from the outset so the option to generate income from carbon is there.

## Timber Income

Income can be derived from the sale of timber arising from thinning and clear-felling processes. On average, woodlands are thinned (see Section 3.4) every 5 – 10 years, from approximately age 20 onwards, depending on species and yield class. Clear felling takes place at the end of an economic rotation, although for most woodlands managed by the Council this is unlikely to be an appropriate silvicultural treatment. Instead, woodlands could be managed through an appropriate continuous cover forestry method, whereby tree cover is maintained but by means of selective thinning, replacement trees are encouraged through natural regeneration.

Particular treatment may be required for PAWS restoration (see Section 3.1), whereby conifers or non-native broadleaves are removed in order to enable planting or natural regeneration of site native species. Whilst clear felling is rarely the appropriate prescription in these circumstances, it is possible that existing trees will be removed before their normal economic rotation, bringing forward the income from timber.

The net income to the landowner from timber sales will depend on (a) timber prices at the time of felling and (b) the cost of felling and extraction. As described in Section 3.4, timber prices are historically high at present, but fluctuations will occur over the lifetime of woodlands being created and managed as an outcome of this plan. Timber is a global commodity and prices fluctuate according to economic cycles, currency exchange rates (the UK imports in excess of 70% of its timber and is the world's second largest importer of timber, after China) and market demand (construction, biomass etc.). As biomass (firewood for domestic consumption and woodfuel for heat and electricity generation) has become an

<sup>60</sup> <https://www.woodlandtrust.org.uk/plant-trees/trees-for-landowners-and-farmers/morewoods/>

<sup>61</sup> <https://www.gov.uk/guidance/woodland-carbon-guarantee>

<sup>62</sup> <https://www.forestcarbon.co.uk/>



increasingly important market for timber in the UK, so the price of fossil fuels (oil and gas) has influenced timber prices overall.

Figure 11<sup>63</sup> shows price indices for standing sales (where the timber is sold standing, before felling) and sawlogs.

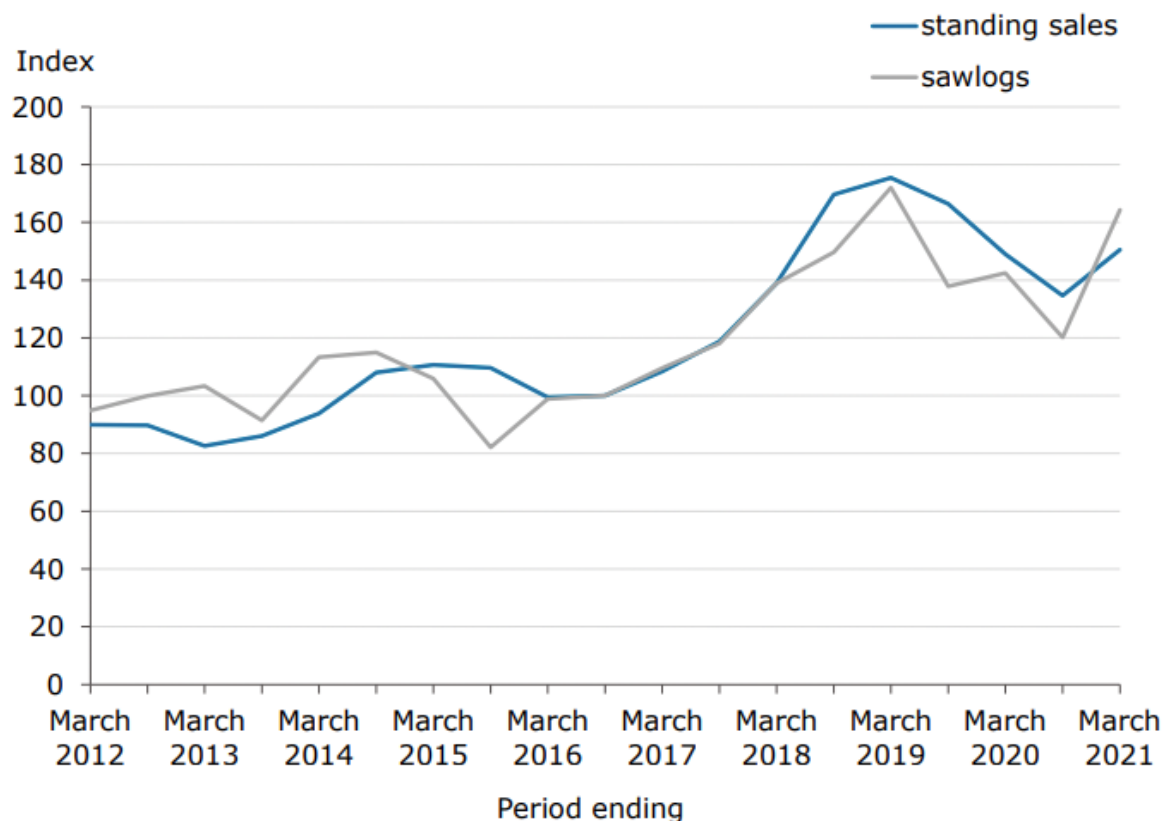


Figure 12: Coniferous Standing Sales and Sawlog Price Indices for Great Britain, 2012 - 2021

The cost of felling and extraction is less impacted by external factors and will largely depend on the site (area, accessibility, constraints etc), timber volume and tree size (dictating whether mechanical or manual harvesting is possible), distance to processor and, of particular relevance to many woodlands in urban areas, the ability or otherwise to leave equipment and machinery on site overnight.

Notwithstanding the comments above regarding price variations, Table 8 indicates the potential income from timber harvesting. These prices are for the net return to the owner i.e. after all costs for felling, extraction and haulage to processor have been taken account of.

Felling type	tonnes/ha	£/tonne	£/ha total
Conifer – thin	30	£25	£750
Conifer – clearfell	350	£25	£8,750
Broadleaf – thin	20	£20	£400
Broadleaf - fell	250	£20	£5,000

Table 9: Potential income from timber for various felling types

<sup>63</sup> Forestry Statistics 2021. Forest Research, Edinburgh.

## 5. Plan Implementation

This section sets out the timeframe, key milestones and outputs for the implementation of this action plan.

### Woodland Creation

There is often long lead in times for creating new woodlands as the planning, design and funding stages can take some time. Even on less complicated sites it is not untypical that a scheme may take 12 to 18 months from site selection to planting. A risk register for sites should be developed that includes key and peripheral risks. Such risks are identified as 'other constraints' in appendix 4.

All considerations, constraints and risks must be fully understood before a site is put forward for woodland creation and key to success will be early community and stakeholder engagement. Following the steps in the WCPG and scoring matrix will allow sites to be considered for their initial suitability followed by community and stakeholder engagement. Once sites are fully appraised and feedback from stakeholders received, and the decision taken to bring them forward for woodland creation, they should then be registered to the Council's Single Business Identification (SBI) number on the Rural Payments Agency (RPA) system. This will allow access to WCPG and EWCO. This registration process may take up to 6 months, particularly if there are multiple parcels to register. Once registered, the WCPG should be applied for, and the planning process started. Up to a year should be allowed for this process to reach a conclusion, particularly if many sites are included. This process does not apply to schemes funded through the NECF Trees for Climate programme.

### Woodland Management

Long-time scales are often the case with getting woodland management plans approved and CS grants applied for. CS is due for replacement by 2024 by the Environmental Land Management Scheme (ELMS). Whilst it is anticipated that support for woodland management activity will remain broadly similar under the new scheme, the details have not yet been confirmed and thus the following information relates to current support mechanisms only.

At the same time as registering land parcels for woodland creation, existing woodland field parcels should be registered to allow access to Woodland Management Planning Grant (WMPG – see appendix 1 for more details) and CS Higher Tier. This registration process may take up to 6 months, particularly if there are multiple parcels to register. Once registered, the WMPG should be applied for, and the planning process started. Allow 9 to 12 months for this process to reach a conclusion, particularly if many sites are included.

The timeline for woodland management can be longer than that for woodland creation as an approved woodland management plan is required in order to be able to access CS Higher Tier and the application window for CS is restricted to February each year. With the management planning and approvals process taking the best part of 12 months, this would mean the next CS application window that could be achieved is February 2023 with the funding agreement starting in January 2024.

These timeframes will also be subject to the authority's decision-making processes.

Key milestones with their outputs and timelines are presented in the following sections.

## 5.1 Woodland Creation Action Plan Timeline

Table 10 presents the proposed timeline for woodland creation on Council land.

Year			2022	2023					2024				25	26	27	28	29
Quarter			4	1	2	3	4	1	2	3	4						
Milestone		Outputs															
1	Detailed analysis of woodland creation site short list	Short list analysis to determine suitability for woodland creation															
2	Community engagement and stakeholder consultation for short listed sites	Local communities and stakeholders engaged in planning process															
3	Firm up sites selected and register field parcels with the RPA	Sites selected for woodland creation and land registered with the RPA to allow access to funding schemes															
4	Apply for Woodland Creation Planning Grant	WCPG applied for															
5	Complete Woodland Creation Planning stages 1 and 2	Woodland Creation Planning stages 1 and 2 completed and woodland creation design plans produced															
6	Carry out second round of community engagement and stakeholder consultations	Local communities and stakeholders engaged in design planning process															
7	Apply for EWCO and or other sources of funding	EWCO and or other sources of funding applied for and secured															
8	Register on the WCC	Schemes registered on the WCC															
9	Select planting contractors	Contractors selected to plant sites															
10	Plant and maintain sites	Sites planted and maintenance schedule commenced															

Table 10: Woodland creation timeline

## 5.2 Woodland Management Action Plan Timeline

Table 11 presents the proposed timeline for the management of Council owned woodlands.

Year			2022	2023					2024				25	26	27	28	29
Quarter			4	1	2	3	4	1	2	3	4						
Stage		Outputs															
1	Register existing woodland field parcels with the RPA	Woodland field parcels registered with the RPA to allow access to grants															
2	Apply for Woodland Management Planning Grant	Woodland management planning grant applied for															
3	Community engagement and stakeholder consultation for short listed sites	Local communities and stakeholders engaged in planning process															
4	Write woodland management plan	Woodland management plan produced															
5	Apply for CS Higher Tier woodland improvement grants	CS Higher Tier agreement															
6	Implement rolling programme of woodland management in line with CS Higher Tier agreement	Woodland management activity															

Table 11: Woodland management timeline



### 5.3 Priority Action Timeline

	Years	Actions - Woodland Creation	Actions - Woodland Management
Short Term Actions	1 to 3	Detailed analysis of woodland creation short listed sites	Register woodland parcels with RPA
		Register field parcels with RPA	Apply for Woodland Management Planning Grant
		Apply for Woodland Creation Planning Grant or equivalent	Write woodland management plan
		Complete WCPG stages 1 and 2 and apply for capital grants	Apply for CS Higher Tier Funding
		Register sites on WCC	Start CS Higher Work Programme
		Tender for planting contracts	
		Site preparation and planting	
Medium Term Actions	4 to 6	Continued site preparation and planting	Continue CS Higher Tier Work Programme
		Maintenance of sites	Monitor and measure success of management interventions
Long Term Actions	7 to 10	Monitor and measure success of management interventions	Review 10 year management plan
		Continued maintenance of sites	Extend/renew CS Higher Tier agreement or successor ELMs scheme
		Consider early thinning, coppicing or pruning interventions	

Table 12: Priority action timeline

## 6. Conclusion

This action plan sets out Gateshead Council's vision for More and Better woods based on the six core themes of *our woods*, *carbon woods*, *wild woods*, *working woods*, *living woods* and *more woods*. Each theme sets out the framework under which new woodlands will be created and existing woodlands managed.

By 2050 the Council aims to create 250ha of new woodland and bring into positive, sustainable long-term management their existing woodland portfolio. This will provide new areas for recreation and leisure, sequester carbon, provide valuable, diverse and resilient ecosystems and provide a positive contribution to the green economy.

Site analysis using a scoring matrix based on the UKFS requirements has been used to identify potentially suitable sites to take forward for more detailed assessment, consultation, planning and design, and through to planting and maintenance. Partners, such as the NECF and the Forestry Commission, can provide support for this process through facilitation and access to funding.

Not all of the 250ha target for new woodland can be met on Council owned land and it will be necessary to engage with other public sector and private landowners to achieve it. This can be facilitated through constraints analysis and mapping of available land and working with partners such as the NECF, Woodland Trust and Wildlife Trust to help engage with landowners.

Bringing the Council's 900ha of existing woodlands under a single, co-ordinated long term management plan will allow access to the funding opportunities which can pay for improvement activities that will benefit the woodlands for biodiversity and in turn provide other important ecosystem services such as climate regulation, clean air and water, flood mitigation, soil protection, carbon sequestration, natural pollination, public access and recreation and help them to be more resilient in the face of climate change.

# Appendices

1. Woodland Management Planning and Countryside Stewardship
2. Long list of sites
3. Woodland creation costs
4. Scoring matrix
5. Consultee register
6. Glossary

# Appendix 1 - Woodland Management Planning and Countryside Stewardship

The overall objectives of this are as follows: -

1. Production of a long-term woodland management plan including application of woodland management planning grant and felling licences.
2. Application for a 5-year Countryside Stewardship Higher Tier Woodland Management Support programme and ongoing support as required.

## Stage 1 - land registration

Register the woodland parcels under the Rural Land Registry (RLR) to a single business identification (SBI) such as Gateshead Council if it doesn't already exist.

Requirements - completion of a Rural Payments Agency (RPA) RLE1 form and maps which identify all woodland parcels that will be included in the management plan.

## Stage 2 - woodland management plan

Once the woodland parcels have been registered, the Council can apply for the Countryside Stewardship (CS) grant for Woodland Management Planning. For woodland areas 3 to 50 ha, the grant is paid at a flat rate of £1000 and over 50ha the rate is £20/ha. If all 900ha of woodlands were to be brought under a single plan this could attract £18,000 of woodland management planning grant.

The management planning process will involve producing a 10-year Forestry Commission (FC) approved woodland management plan to manage the woodland according to the management objectives and in line with the UK Forestry Standard. A 10-year Felling Licence is also secured. The plan covers all the main environmental, social and economic aspects of woodland management and can be used to leverage the Countryside Stewardship Higher Tier grants for woodland management (a management plan is a requirement to access these). The plan will be produced with a series of supporting maps covering compartment boundaries, biodiversity and other constraints and a felling programme.

## Stage 3 - Countryside Stewardship Higher Tier Grant Application

The Countryside Stewardship Higher Tier (CS) woodland improvement grants can pay £100 per hectare of woodland for a five-year period for an agreed prescription of work. This will include options for thinning, regeneration felling, coppicing, ride mowing, invasive species control, increasing deadwood levels and creating and maintaining open space. There is also support for capital items such as fencing and scrub/rhododendron control (list not exhaustive). An approved management plan is a prerequisite to be able to apply for this grant.

The requirements to successfully draw down the grant are that you produce reports in years 3 and 5 which provide evidence of the work you have done. This will include:

- Photographic record of work done
- Records of any materials bought such as trees, tubes, stakes.
- Records of contractors employed to do thinning and felling work
- Record of staff activity and time spent on managing the agreement

The application process starts in February each year when the application window opens and is competitive. Not all woodlands will score sufficiently to meet minimum scoring criteria based on biodiversity and other values of the woodlands. If all 900ha of Council owned were to be brought under an agreement, this would attract £90,000 of revenue funding. Additional capital funding can also be sought for one off project such as fencing, installation of woody leaky dams and scrub or rhododendron control. Agreements usually start 1<sup>st</sup> January following the application window opening.

### **Other Sources of funding for woodland management activity**

#### **Woods into Management Forestry Innovation Fund**

Most of our woodlands have been managed in the past to provide timber and fuel. This management has shaped and maintained the habitats that support the plants and animals enjoyed and valued by society today. Presently around 41% of our woodlands are not actively managed and this can have a negative impact on the biodiversity they contain.

The Woods into Management (WiM) Forestry Innovation Funds are being launched as part of the Government's Nature for Climate Fund. The WiM Forestry Innovation Funds aim to restore vulnerable woodland habitats and help woodlands adapt to a changing climate and recover from the impacts of pests and diseases. Three funding streams are being launched:

- Routes to market for ash timber Innovation Fund
- Temporary infrastructure Innovation Fund
- Regional woodland restoration Innovation Fund

#### **Routes to market for ash timber Innovation Fund**

Ash dieback is expected to cause many millions of our ash trees to die over the next 10-20 years. Using wood from infected trees in wood products and energy generation projects could help owners offset the cost of managing ash dieback. This fund will open to organisations including woodland management companies, conservation organisations, timber processors and forestry agents to support the development of new business models that will develop new supply chains for ash timber and help restore woodlands damaged by ash dieback.

#### **Temporary infrastructure Innovation Fund**

To carry out habitat improvement operations including the felling and extraction of trees, suitable access is required. This fund is aimed at woodland management companies, contractors and owners with multiple blocks of woodland. Applicants can bid for funds to develop business models that will use temporary infrastructure including (but not limited to) aluminium or rubber roading, logshutes and 'Bailey' type bridges to access neglected or degraded woodlands.

#### **Regional woodland restoration Innovation Funds**

The threats faced by our woodlands and the biodiversity they support are numerous and varied. They include a lack of adaptation to climate change, diseases such as ash dieback and *Phytophthora ramorum*, insect pests, over grazing by deer and ring barking by grey squirrels. In addition, in many parts of the country there are opportunities to restore conifer and hardwood plantations on ancient woodland sites and to improve the condition of woodlands SSSI. The intensity and impact of each of these threats varies across the country. Forestry Commission [Forestry and Woodland Advisory Committees](#) are scoping projects most likely to deliver the greatest improvement in woodland habitat condition. Once completed these projects will be put out to competitive tender.



## Appendix 2 - Woodland Creation Long List

Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
1	Newhouse Farm	NZ111584	9.33	Farmland, adjacent to GBC woodland.	ANGS	Likely permanent semi-improved grassland.	Chopwell Meadows / leased to DWT	Low	N
2	Allotments (adjacent) Chopwell	NZ118584	4.96	Grassed open space, adjacent to allotments, adjacent to GBC woodland. Adjacent to dwellings	ANGS	Grassed open space.	Close to dwellings and allocated for housing	Low	N

Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
3	Bolton's Bungalows	NZ120577	4.68	Grassed open space, adjacent to allotments, adjacent to GBC woodland. Adjacent to dwellings	LPOS	Grassed open space.	Likely areas of priority grassland developed over made ground (colliery waste) / impact on long distance views incl. from adjacent housing / likely limited potential only / requires further investigation. Close to dwellings.	Medium	Y

Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
4	East Terrace	NZ120573	0.88	Farmland, adjacent to GBC woodland to south (Tongue Burns Plantation). Adjacent to dwellings	Tongue Burns is an ASNW	Likely permanent semi-improved grassland.	Site appears to be currently let for grazing / survey required to determine ecological value of grassland. Close to dwellings.	Medium	Y
5	Off South Road	NZ123584	3.37	Grassed open space, adjacent to GBC woodland. Adjacent to dwellings, play area	LPOS	Grassed open space.	Relocate fixed play and goal posts / provide suitable buffer to housing / easement for culverted watercourse. Close to dwellings.	Medium	Y
6	West Meadows	NZ124585	6.57	Grassed open space, adjacent to GBC woodland. Adjacent to dwellings.	ANGS	Grassed open space.	Designated LWS / priority grassland / subject to s106. Close to dwellings.	Low	N

Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
7	Hooker Gate	NZ146591	5.16	Grassed open space, adjacent to GBC woodland. Adjacent to disused school?	Adjacent to PAWS site - Spen Banks and ASNW Betty Plantation	Grassed open space.	Former school ear-marked for residential / potential opportunities for woodland creation on former sports pitches subject to Sport England approval	Medium	Y

Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
8	Glossop Street High Spen	NZ139599	4.58	Grassed open space. Adjacent to playing field and dwellings.	TBC	Grassed open space	Main body of grassland offers significant opportunity for enhancement (BNG) / impacts on residential properties to east / some localised opportunities for woodland planting / significant scope for hedgerow creation to boundaries	Medium	Y
9	High Spen Park	NZ137601	5.05	Grassed open space. Adjacent to playing field and dwellings.	ANGS (part of)	Grassed open space	Currently let for grazing / assessment of grassland required to determine ecological value. Close to dwellings.	Medium	Y



Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
10	South of Derwent Walk Country Park	NZ174592	3.61	Grass/scrub land with water bodies. Adjacent to sewage works?	ANGS. Adjacent to ASNW	Grass/scrub with water bodies	LWS / priority grassland & wetland / recently subject to HLF	Low	N
11	Folly (west side)	NZ153624	4.45	Grassed open space. Adjacent to GBC woodland	ANGS	Grassed open space	LWS / priority grassland / s106	Low	N
12	Folly (east side)	NZ153624	3.72	Grassed open space. Adjacent to GBC woodland	ANGS	Grassed open space	LWS / priority grassland / s107	Low	N
13	Ryton Woodside South	NZ145630	1.6	Grassed open space. Could be farmed?	TBC	Grassed open space - pasture?	Appears to be currently let for grazing & agriculture	High	Y
14	Ryton Woodside North	NZ145633	4.34	Agricultural land - grass. Adjacent to dwellings and allotments	Agricultural land - grass	Agricultural land - grass	Appears to be currently let for agriculture	High	Y
15	Ryton Rugby Club East	NZ147637	7.99	Agricultural land - arable. Adjacent to rugby playing fields.	Agricultural land - arable	Agricultural land - arable	Agri. Tenancy	High	Y
16	Ryton Rugby Club South	NZ145634	4.67	Agricultural land - arable. Adjacent to rugby playing fields.	Agricultural land - arable	Agricultural land - arable	Agri. Tenancy	High	Y

Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
17	Parson's Haugh	NZ161650	6.8	Grassed open space - part of Ryton Willows LNR	LNR/LWS/ANGS. Within Newburn Battlefield Area	Adjacent to SSSI/LNR.	Main body of the site adjacent the river ear-marked for wetland creation / limited potential for creation of < 1ha of wet woodland to south adjoining SSSI	Medium	Y
18	Hedgefield	NZ165643	1.45	Grassed open space - adjacent to GBC woodlands. Overhead powerline	LWS/ANGS. Within Newburn Battlefield Area.	Adjacent to SSSI/LNR.	LWS / priority grassland / leased to DWT	Low	N
19	Stella adjacent to School	NZ170638	1.98	Grassed/scrub open space - adjacent to GBC woodlands.	LWS Within Newburn Battlefield Area.	Agricultural land - grass	LWS / priority grassland	Low	N
20	Stella Wood South	NZ171635	2.5	Grassed open space - adjacent to GBC woodlands.	LWS/ANGS Within Newburn Battlefield Area.	Adjacent to Path head Wood PAWS. Agricultural land - grass	LWS / priority grassland	Low	N

Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
21	Path Head Wood East	NZ176635	6.25	Grassed open space - adjacent to GBC woodlands.	LWS/ANGS Within Newburn Battlefield Area.	Adjacent to Path head Wood PAWS. Agricultural land - grass	LWS / priority grassland	Low	N
22	Summer Hill Sand Pit	NZ175634	2.27	Grassed open space - adjacent to GBC woodlands.	Part ANG	Adjacent to Path head Wood PAWS. Agricultural land - grass	Leased to Woodland Trust for woodland creation 2019	High	Y
23	Blaydon Burn East	NZ178632	6.02	Grassed/scrub open space - adjacent to GBC woodlands. Adjacent to dwellings	Part LNR/LWS/ANGS	Agricultural land - grass and scrub	LWS / priority grassland	Low	N
24	Blaydon Burn Central	NZ173630	4.12	Grassed/scrub open space - adjacent to GBC woodlands. Adjacent to dwellings	Part LNR/LWS/ANGS	Agricultural land - grass	LWS / priority grassland	Low	N
25	Bewes Hill East	NZ168631	4.34	Grassed/scrub open space - adjacent to GBC woodlands. Under overhead powerlines	LNR/LWS/ANGS	Scrub	LWS / priority grassland & wetland	Low	N

Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
26	Bewes Hill West	NZ166631	1.06	Grassed/scrub open space - adjacent to GBC woodlands.	LNR/LWS/ANGS	Scrub/open space within existing woodland	LWS / priority grassland	Low	N
27	Blaydon Burn West	NZ169626	13.75	Farmland with hedgerows adjacent to GBC woodland	LNR/LWS/ANGS	Likely permanent semi-improved grassland.	LWS / assessment of grassland to determine botanical value / site used by wintering flock of curlew	Medium	Y
28	Shibdon Pond Nature Reserve	NZ192631	2.69	Grassed/scrub open space - within Shibdon Pond NR	LNR/LWS/ANGS	Scrub/open space within existing woodland. Adjacent to SSSI	LWS / priority grassland / leased to DWT	Low	N
29	Derwenthaugh Industrial Estate South	NZ198629	2.6	Grassed/scrub open space	LWS/ANGS	Scrub/open space within existing woodland. Adjacent to SSSI	LWS / wetland creation / leased to DWT	Low	N
30	Riverside Way	NZ202629	5.94	Grassed/scrub open space	Adjacent to R Derwent (LWS)	Scrub/open space.	Extant planning permission for extension to existing garage	Low	N



Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
31	Market Lane East	NZ207623	3.07	Grassed/scrub open space	None - TBC	Scrub/open space. Adjacent to river.	Currently let for grazing? / botanical assessment of grassland required	Medium	Y
32	Cross Lane Meadows Nature Reserve	NZ213620	14.62	Grassed/meadows with hedgerows adjacent to GBC woodland.	LNR/LWS/ANGS	Likely wildflower rich meadows	LWS / priority grassland / leased to DWT	Low	N
33	Land adjacent to Watergate Forest Park car park	NZ229606	1.83	Grassed area - former nursery site?	None - TBC	Former nursery site?	Allocated for housing	Low	N
34	Beggar Wood	NZ231600	7.23	Grassed/scrub open space, adjacent to GBC woodland. Recreation Ground?	LPOS Adjacent to ASNW and Conservation Area	Scrub/open space.	C.1ha already identified for woodland creation 2021 / soft marketing being undertaken for commercial operation of driving range and pitch and putt	High	Y

Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
35	Millgreen Cottage	NZ237598	0.97	Grassed/scrub open space, adjacent to GBC woodland. Recreation Ground?	LPOS Adjacent to Conservation Area	Scrub/open space.	Land currently held by Sport & Rec.	High	Y
36	East Gateshead - derelict land adjacent to Gateshead College	NZ261635	8.07	Derelict land, scrub and grass.	Development land TBC	Scrub/open space	Baltic Quarter Development Site	Low	N
37	Friars Goose	NZ275632	7.39	Grassed/scrub open space, adjacent to GBC woodland. Public Park?	LWS/ANGS. Adjacent to river	Scrub/open space	LWS/ priority grassland / s016	Low	N
38	Felling Shore	NZ280630	4.4	Derelict land, scrub and grass.	LWS/ANGS. Public park? Development land? TBC. Adjacent to river.	Scrub/open space	Subject to planning application for industrial use	Low	N
39	Heworth Lane	NZ286622	1.44	Grassed/scrub open space, adjacent to GBC woodland.	ANGS	Scrub/open space	Northumbrian Water mains sewer / recent works with site restored to priority grassland	Low	N

Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
40	Bill Quay - Riverside Park	NZ297628	3.67	Grassed/scrub open space, adjacent to GBC woodland. Public Park?	LWS/ANGS. Adjacent to river.	Scrub/open space	Impacts of views of river / assessment of grasslands needed	Medium	Y
41	Monkton Fell	NZ303624	11.91	Grassed open space, adjacent to GBC woodland.	LWS/ANGS. Adjacent to LNR.	Grassed open space	LWS / priority grassland / skylark	Low	N
42	Leam Lane East a	NZ299611	1.35	Grassed open space. Adjacent to dwellings	LPOS	Grassed open space	Parkland planting approach. Close to dwellings.	High	Y
43	Leam Lane East b	NZ299609	0.46	Grassed open space. Adjacent to dwellings	SPOS	Grassed open space	Parkland planting approach. Close to dwellings.	High	Y
44	Wardely	NZ305613	1.52	Grassed open space/public park? Adjacent to dwellings and western bypass	LPOS	Grassed open space	Parkland planting approach. Close to dwellings and western bypass.	High	Y

Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
45	Felling Cricket Club North	NZ283613	1.39	Grassed open space/public park? Adjacent to dwellings and cricket ground	LPOS	Grassed open space	Parkland planting approach. Close to dwellings.	High	Y
46	Felling Cricket Club South	NZ283614	0.68	Grassed open space/public park? Adjacent to dwellings.	LPOS	Grassed open space	Parkland planting approach. Close to dwellings.	High	Y
47	Deckham	NZ268616	2.49	Grassed open space/public park? Adjacent to dwellings.	LPOS	Grassed open space	Parkland planting approach. Close to dwellings.	High	Y
48	Whitehills East	NZ283605	9.29	Grassed open space/public park? Adjacent to dwellings.	LPOS	Grassed open space	Identified for tree planting as part of proposed Whitehills Carbon Park. Close to dwellings.	High	Y
49	Whitehills West	NZ277606	17.34	Grassed/scrub open space/public park? Adjacent to dwellings.	LNR/ANGS/LPOS	Grassed open space	Windy Nook Nature Park / priority grassland / s106. Close to dwellings.	Low	N

Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
50	Whitehills South	NZ278601	24.82	Grassed/scrub open space/public park? Adjacent to dwellings.	LWS/ANGS/LPOS	Grassed open space	Identified for tree planting as part of proposed Whitehills Carbon Park. Close to dwellings.	High	Y
51	Wrekenton	NZ281593	2.73	Grassed/scrub open space/public park? Adjacent to dwellings.	LPOS	Grassed open space	Parkland planting approach. Close to dwellings.	High	Y
52	Ravensworth Golf Course	NZ271591	1.75	Grassed/scrub open space/public park? Adjacent to golf course	ANGS/LPOS	Grassed open space	Assessment of grassland required / potential parkland planting approach	Medium	Y
53	Mossheap Recreation Ground	NZ269594	5.9	Grassed/scrub open space/public park? Adjacent to dwellings.	ANGS/LPOS	Grassed open space	Assessment of grassland required / potential parkland planting approach. Close to dwellings	Medium	Y

Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
54	Eighton Banks East	NZ277583	5.31	Grassed/scrub open space/public park? Adjacent to dwellings.	ANGS	Grassed open space	Part of site leased for grazing / public park to northwest poss. parkland planting approach. Close to dwellings	Medium	Y
55	North Side	NZ277565	3.79	Grassed/scrub open space/public park? Adjacent to dwellings.	TBC	Grassed open space	Allocated for housing.	Low	N
56	Barley Mow	NZ273547	6.43	Grassed/scrub open space/public park? Adjacent to dwellings.	ANGS	Grassed open space	Some whip planting previously delivered / scope for further tree planting. Close to dwellings	High	Y
57	Lamesley East	NZ252576	9.55	Grassland/wet land area.	LWS	Grassland.	LWS / priority grassland & wetland / leased to DWT	Low	N
58	Lamesley West	NZ248575	8.67	Grassland/wet land area.	LWS/ANGS	Grassland.	LWS / priority grassland & wetland / leased to DWT	Low	N



Site number	Name/location	NGR	Area (ha)	Description	Designations	Biodiversity	Comments	Priority - low, medium, high	Add to shortlist Y/N
59	Andrews House	NZ214573	16.33	Grassland/wet land area.	LWS/ANGS	Grassland.	LWS / priority heathland & wetland / leased to DWT	Low	N
60	Sunniside	NZ204584	1.52	Grassed/scrub open space/public park? Adjacent to dwellings.	LPOS	Grassland.	Poss. parkland planting approach / assessment of grassland required. Close to dwellings	Medium	Y
61	Gladeley Hill	NZ202595	2.79	Grassed/scrub open space/public park? Adjacent to dwellings.	LWS/ANGS/LPOS	Grassland.	Overhead powerlines / potential mix of whip and parkland planting	High	Y
		Priority totals							
		High	83.02						
		Medium	65.49						
		Low	176.93						
		Total	325.44						

## Appendix 3 - Woodland Creation Costs

Item	Unit	£/unit
Tree supply - bare rooted whip 40-60cm	Each	£0.38
Tree tube	Each	£1.15
Tree stake	Each	£0.70
Planting cost per tree (labour for hand screefing <sup>64</sup> and planting)	Each	£1.10
Pre planting herbicide per tree	Each	£0.15
Total per tree	Each	£3.48
Annual maintenance		
Summer herbicide (spot spray)	Each	£0.15
Beat up - replace losses (10%)	Each	£1.35
Strim/cut open areas and rides	Ha	£1,000.00
Fencing		
Livestock fencing	Meter	£7.75
Field gates	Each	£475.00

### Breakdown of maintenance costs

Phase/Item	Unit	No	£/unit	Total	Description
<b>Years 1 - 5</b>					
Summer herbicide	Each	1600	£0.15	£240.00	Spot spray application to the base of each tree
Beat up - replace losses (10%)	Each	160	£1.35	£216.00	Allow for up to 10% losses for the first 2 growing seasons
Manage open areas and rides	Ha	0.2	£1,000.00	£200.00	Mowing and strimming of rides and open areas
Sub-total				£656.00	
<b>Years 3 - 5</b>					
Summer herbicide	Each	1600	£0.15	£240.00	Spot spray application to the base of each tree
Strim/cut open areas and rides	Ha	0.2	£1,000.00	£200.00	Mowing and strimming of rides and open areas
Sub-total				£440.00	
<b>Ongoing</b>					
Strim/cut open areas and rides	Ha	0.2	£1,000.00	£200.00	Mowing and strimming of rides and open areas
Tube removal at year 8 to 10	Each	1600	£1.00	£1,600.00	Remove and recycle tubes

<sup>64</sup> Turning the turf over to create a bare soil planting patch for each tree. If this method is selected, then pre planting herbicide may not be required.

## Appendix 4 - Woodland Creation Scoring

UKFS compliance	
To measure potential new woodland creation sites against the UKFS requirements	To be completed for each site as part of preliminary planning/scoping exercise.

Site name	Example site 1
Address	Gateshead
NGR	NZ 123 456
Brief scheme details	Creation of 1 ha of new native woodland planted at high density to maximise carbon sequestration potential

High Level assessment	FC Low Risk Areas for Woodland Creation	FC Map Browser tool - 'Targeting and Scoring'	<a href="https://www.forestergis.com/Apps/MapBrowser/">https://www.forestergis.com/Apps/MapBrowser/</a>
-----------------------	---	---	---

UKFS requirement	Data sets	Features present	Research links
Biodiversity	MAGIC	Priority habitats	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
		Priority species	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
		SSSI	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
		NNR	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
		LNR	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
		Bird reserves/areas of importance for birds	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
		Proximity to AWS and or priority woodland habitat	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>

-	-	International designations - SPAs, SACs	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
	Environmental Records Information Centre North East	Biodiversity records, species lists	<a href="https://www.ericnortheast.org.uk/">https://www.ericnortheast.org.uk/</a>
		SINC/SLINC	<a href="https://www.ericnortheast.org.uk/">https://www.ericnortheast.org.uk/</a>
		Local Wildlife Site	<a href="https://www.ericnortheast.org.uk/">https://www.ericnortheast.org.uk/</a>
		Local/regional geological importance	<a href="https://www.ericnortheast.org.uk/">https://www.ericnortheast.org.uk/</a>
Climate change	ESC DSS	Climate resilience, species selection and site suitability	<a href="https://www.forestresearch.gov.uk/tools-and-resources/fthr/ecological-site-classification-decision-support-system-esc-dss/">https://www.forestresearch.gov.uk/tools-and-resources/fthr/ecological-site-classification-decision-support-system-esc-dss/</a>
	WCC	Woodland carbon	<a href="https://www.woodlandcarboncode.org.uk/">https://www.woodlandcarboncode.org.uk/</a>
			-
Historic Environment	MAGIC	Statutory designations - WHs, SAMs, listed buildings, conservation areas, registered park and garden, battlefields	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
		HLC - Historic Landscape Characterisation	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
	ADS - Archaeology Data Service	HLC	<a href="https://archaeologydataservice.ac.uk/archives/view/HLC/">https://archaeologydataservice.ac.uk/archives/view/HLC/</a>
	Historic England National Heritage List	As above	<a href="https://historicengland.org.uk/listing/the-list/">https://historicengland.org.uk/listing/the-list/</a>
	Local Authority	HER - all known non-designated heritage assets	Local Authority search
	Local Authority	TPOs	<a href="https://www.gateshead.gov.uk/article/5371/Protected-trees">https://www.gateshead.gov.uk/article/5371/Protected-trees</a>
Landscape	MAGIC	Statutory Landscape designations e.g. AONBs. NPs	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
		Non-statutory Landscape designations e.g. Heritage Coasts	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
	Local Authority (link to HER)	Area of Landscape Value or locally designated landscape	
	Landscape analysis and assessment	FC design techniques best practice guidance	<a href="https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/689922/Design_techniques_for_forest_management_planning.pdf">https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/689922/Design_techniques_for_forest_management_planning.pdf</a>

		NCA profiles - 10, 16, 14, 15	<a href="https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making/national-character-area-profiles">https://www.gov.uk/government/publications/national-character-area-profiles-data-for-local-decision-making/national-character-area-profiles</a>
People	MAGIC	PROWs	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
		Common Land	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
		CROW access rights	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
	Stakeholders	Neighbours/local residents	
		Ward/Parish Councils	
Soil	MAGIC	Soil map	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
		Agricultural Land Classification	<a href="https://magic.defra.gov.uk/">https://magic.defra.gov.uk/</a>
	UK Soils Observatory	Soil map	<a href="http://mapapps2.bgs.ac.uk/ukso/home.html">http://mapapps2.bgs.ac.uk/ukso/home.html</a>
	Soilscapes	Soil map	<a href="http://www.landis.org.uk/soilscapes/">http://www.landis.org.uk/soilscapes/</a>
Water	Environment Agency catchment data explorer	Identification and condition of water bodies- Northumbria River Basin District	<a href="https://environment.data.gov.uk/catchment-planning/RiverBasinDistrict/3">https://environment.data.gov.uk/catchment-planning/RiverBasinDistrict/3</a>
	<a href="https://www.gov.uk">Gov.uk</a>	Local flood risk	<a href="https://flood-warning-information.service.gov.uk/long-term-flood-risk">https://flood-warning-information.service.gov.uk/long-term-flood-risk</a>
		Background to flood risk management	<a href="https://www.gov.uk/guidance/flood-risk-management-information-for-flood-risk-management-authorities-asset-owners-and-local-authorities">https://www.gov.uk/guidance/flood-risk-management-information-for-flood-risk-management-authorities-asset-owners-and-local-authorities</a>
	FC Map browser	Water availability	<a href="https://www.forestergis.com/Apps/MapBrowser/">https://www.forestergis.com/Apps/MapBrowser/</a>
		Water acidification	<a href="https://www.forestergis.com/Apps/MapBrowser/">https://www.forestergis.com/Apps/MapBrowser/</a>
	Local Authority	Public or private water supplies or abstraction points	Local Authority search
Current land management	Existing LA records	Does the site have any existing land management agreements on it e.g. ES, CSS, WGS	Local Authority search
	Site visit/survey	What is the existing land use cover - arable, grass, brownfield etc.?	Local Authority search
Other Constraints and Risks	Site visit/survey	Access	Assess and locate best access points

		Utilities/services	Assess and locate utilities and services (OHPL, culverts, pipes etc..)
		Neighbouring land use	Assess neighbouring land use types - residential, industrial, agricultural etc..
		Pests and diseases	Assess prevalence of any pests and diseases in or adjacent to site e.g. signs of mammal damage, tree diseases
		INNS and 'garden escapes'	Assess prevalence of INNS in or adjacent to site - balsam, knotweed, grey squirrels, likelihood of plants escaping from adjacent gardens etc..
		Land grab/encroachment	Assess likelihood of land encroachment from adjacent land uses
		Anti-social behaviour and vandalism	Assess likelihood of anti-social behaviour

Scoring Matrix	
To score potential new woodland creation sites against the UKFS requirements	To be completed for each site as part of preliminary planning/scoping exercise.

Score	Description
1	Site does not contribute to objective and may even affect it detrimentally. Woodland creation may not be suitable for the site.
2	Limited contribution to objective. Woodland creation may be suitable if adequate mitigation measures can be introduced
3	Contributes to the objective. Limited mitigation measures required.
4	Good contribution to the objective. No mitigation measures required.
5	Enhances objective.

Site name	Example site 1
Address	Gateshead
NGR	NGR NZ 123 456
Brief scheme details	Creation of 1 ha of new native woodland planted at high density to maximise carbon sequestration potential



Item	Description	Mitigation measures	Score 1 to 5 (max 50)
UKFS compliance - biodiversity	Will the proposed planting site provide biodiversity gain?	E.g. the proposal is to convert permanent improved grassland that has low species diversity to woodland where an overall biodiversity gain will be achieved.	4
UKFS compliance - climate change	Has resilience to climate change been considered?	E.g. ESC DSS reports show wide range of species will suit the site given 2050 and 2080 scenarios	4
UKFS compliance - historic environment	Does the proposed planting site have any HE features which need to be considered in the final design?	E.g. ridge and furrow known to be present on part of the site. Maintain as open ground and or plant at lower density or avoid planting site	2
UKFS compliance - landscape	Will the proposed planting site enhance the local landscape	E.g. No landscape designation present on the site. Site is adjacent to main road, housing development and industrial area and not prominent in the landscape.	4
UKFS compliance - people	Will the proposals involve local people through consultation and stakeholder engagement	E.g. Ward councillors and residents consulted and supportive of proposal. Would like to see designated access points and path maintained and the site kept litter free and safe.	4
	Will the proposed planting site have public access and recreation provision	E.g. yes, full public access with designated paths designed in throughout the site	5
UKFS compliance - soil	Have the proposals considered soil impacts	E.g. yes - low ground impact preparation techniques to limit soil disturbance - hand screening only	4
UKFS compliance - water	Have the proposals considered water impacts	E.g. yes - water availability will not be a problem. Known local water quality issues are related to phosphates (agriculture related) and woodland creation will help to improve this in the long term	4
Carbon	Will the proposed planting site sequester carbon in line with the WCC to an acceptable level?	E.g. yes - predicted 300 WCUs per ha.	3
Site constraints and risks	Have all site constraints and risks been duly considered?	E.g. yes - low voltage overhead power line intersects site. Maintain 10 meter planting buffer and plant shrubs and low growing species adjacent.	3
		Total	37

## Appendix 5 - Consultee Register

- Durham Wildlife Trust – Mark Dinning
- Environment Agency – Robert Carr
- Forestry Commission – Jim Smith
- Gateshead Council
  - Peter Shield
  - Neil Wilkinson
- Tyne Catchment Partnership – Jack Bloomer
- Woodland Trust – Sian Atkinson

## Appendix 6 - Glossary

Ancient Semi Natural Woodland	ASNW
Community Forest Trust	CFT
Countryside Stewardship	CS
Department of the Environment Food and Rural Affairs	DEFRA
Ecological Site Classification Decision Support System	ESC DSS
England Trees Action Plan	ETAP
England Woodland Creation Offer	EWCO
Forestry Commission	FC
Historic Environment	HE
Indices of Deprivation 2019	IMD2019
Invasive Non-Native Species	INNS
Lower layer super output areas	LSOAs
National Character Areas	NCA
National Forest Inventory	NFI
North East Community Forest	NECF
Pending Issuance Unit	PIU
Plantation on Ancient Woodland Site	PAWS
Rural Payments Agency	RPA
Single Business Identification Number	SBI
Site of Special Scientific Interest	SSSI
UN Climate Change Conference of the Parties 26	COP26