Glasgow and Clyde Valley
Forestry and Woodland Strategy
Trees, woods and forests continue to play an essential role in our environment, our livelihood and our culture. Within the Glasgow and Clyde Valley (GCV) area we already recognise the many public benefits that woodlands provide and have a long legacy of supporting and delivering woodland based opportunities as part of the wider “green network”.

This document brings our work up to date by providing an overview of the key strategic issues, drawing on the findings and strategic priorities identified in the refreshed Glasgow and Clyde Valley Forestry and Woodland Strategy (FWS)\(^1\) and accompanying Environmental Report\(^2\). It highlights the policy context and current state of the woodland resource, points to key strategic priorities for both future woodland expansion and management and crucially, establishes a indicative framework for more focused and collaborative interventions at a local level.


Who should use it?

Local authorities
- Supporting responses to consultations on woodland creation and management.
- Providing a guidance framework to inform the detailed Local Development Plan policies and development management decisions.
- Ensuring that new development makes a positive contribution to development of the Green Network.

Forestry Commission Scotland
- Guiding woodland grant eligibility, ensuring that new schemes for woodland expansion and management are suitable for the environments, constraints and opportunities of the area.

Woodland managers and property developers
- Providing a clear direction for how the woodland resource and forest-based economy in the region should develop over the coming 25 years or so.

Communities
- Allowing a useful insight into the key issues, and the likely patterns of woodland management they might expect to see in their area and the potential benefits that they may deliver.
Our vision

Our aim is to increase the economic, social and environmental contribution that forests and woodlands make to Glasgow and the Clyde Valley. This requires us to make the most of both our existing woodlands and to create opportunities for new ones where they add most value to the environment, local communities and society as a whole.

Our 25 year vision is therefore for the Glasgow and Clyde Valley area to be one where:

“forests and woodlands make a valued contribution to a competitive and successful economy, healthy and empowered communities and a rich and resilient environment.”
Our aspirations for trees and woodlands within the Glasgow and Clyde Valley are supported by strong policies. These include:

**The Scottish Forestry Strategy**

The national vision for forestry is:

"By the second half of this century, people are benefiting widely from Scotland’s trees, woodlands and forests, actively engaging with and looking after them for the use and enjoyment of generations to come. The forestry resource has become a central part of our culture, economy and environment".

Key elements include:

- Woodlands in and Around Towns³ (WIAT)
- Control of Woodland Removal⁴
- The Right Tree in the Right Place – Planning for Forestry and Woodlands⁵

Evolving national targets

The Scottish Forestry Strategy includes a target to increase Scotland’s woodland cover to 25% by the second half of the century. However, more recently the Scottish Government’s Woodland Advisory Expansion Group has recommended moving to an area based target, stating that:

“The focus of the Scottish Government’s woodland creation target should be on creating 100,000 hectares of new woodland over the period 2012-2022,”⁶

This is supported by the Scottish Government’s Climate Change Delivery Plan⁷ where the Forestry Commission aims to increase planting rates to 10,000 - 15,000 hectares/yr by 2015 throughout Scotland.

**National Standards**

Forestry policy and delivery in Scotland are underpinned by Forestry Commission guidance⁸, the UK Forestry Standard (UKFS)⁹ and the UK Woodland Assurance Standard (UKWAS)¹⁰. These are vital in helping define good practice and as such, form the basis for all the proposals put forward in this strategy.

In all cases, we expect to meet or exceed standards of good practice and deliver multiple benefits.

Other related policy areas:

- National Planning Framework (NPF)¹²
- The Town and Country Planning (Scotland) Act 1997
- The Climate Change (Scotland) Act 2009¹³
- Climate Change Adaptation Framework¹⁴
- “Getting the best from our Land – A land use strategy for Scotland”¹⁵
- The Flood Risk Management (Scotland) Act 2009¹⁶
- River Basin Management Planning¹⁷
- Scottish Soil Framework 2009¹⁸

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³ [www.forestry.gov.uk/wiat](http://www.forestry.gov.uk/wiat)
⁴ [www.forestry.gov.uk/woodlandremoval](http://www.forestry.gov.uk/woodlandremoval)
⁵ [http://www.forestry.gov.uk/fcspolicies#planning](http://www.forestry.gov.uk/fcspolicies#planning)
⁶ It also recommends that “there should be a review, initiated no later than 2020, to set targets for beyond 2022”.
⁷ [http://www.forestry.gov.uk/weag](http://www.forestry.gov.uk/weag)
⁹ [http://www.forestry.gov.uk/scotland](http://www.forestry.gov.uk/scotland)
¹¹ [http://www.forestry.gov.uk/ukfts](http://www.forestry.gov.uk/ukfts)
¹⁵ [http://www.scotland.gov.uk/Publications/2011/03/17091927/0](http://www.scotland.gov.uk/Publications/2011/03/17091927/0)
¹⁸ [http://www.scotland.gov.uk/Publications/2009/05/20145602/0](http://www.scotland.gov.uk/Publications/2009/05/20145602/0)
Policy relationships of GCVFWS

Relevant environmental legislation/regulations:
- Nature Conservation Act 2004: Habitats Regulations; Climate Change (Scotland) Act 2009; Water Environment & Water Services (Scotland) Act 2003; Flood Risk Management (Scotland) Act 2009

Other Statutory Council Documents:
- e.g. Local Biodiversity Action Plan; Core Paths Plans

Non-statutory Council documents:
- e.g. Economic Development Action Plan

Glasgow and the Clyde Valley Forestry and Woodland Strategy

GCVSDP

Development Plan pathways

National Policies pathways

Scottish Planning Policy

Scotland Rural Development Programme

Scottish Land Use Strategy

Scotland River Basin Management Plan

Scottish Forestry Strategy

Policy control of woodland removal

UK Forestry Standard

Policy on Woodlands In and Around Towns: Phase 2

National Forest Estate Strategic Plan

Forest District Strategic Plans

Statutory Supplementary Guidance

Other Statutory Council Documents:
- e.g. Local Biodiversity Action Plan; Core Paths Plans

Non-statutory Council documents:
- e.g. Economic Development Action Plan

Glasgow City LDP

Inverclyde LDP

Renfrewshire LDP

North Lanarkshire LDP

South Lanarkshire LDP

West Dunbartonshire LDP

East Dunbartonshire LDP

East Renfrewshire LDP

Renfrewshire LDP

North Lanarkshire LDP

South Lanarkshire LDP

West Dunbartonshire LDP

Scotland Rural Development Programme

Scottish Land Use Strategy

Scotland River Basin Management Plan

Scottish Forestry Strategy

Policy control of woodland removal

UK Forestry Standard

Policy on Woodlands In and Around Towns: Phase 2

National Forest Estate Strategic Plan

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- e.g. Economic Development Action Plan

Glasgow and the Clyde Valley Forestry and Woodland Strategy
Our woodland and forestry resource

Trees woodlands and forests already make a vital contribution to the character of Glasgow and the Clyde Valley. However, they can deliver so much more. In line with the above policies, the following characterises the key areas and their woodland potential:

Urban areas, where trees already contribute to the quality of large urban greenspaces such as Pollok Country Park, Glasgow Green or Queen's Park; formal squares and gardens such as those found across the West End; key river corridors, including the Kelvin, Leven and the White Cart through Linn Park in Glasgow and East Renfrewshire.

New towns such as Cumbernauld, by contrast, have an extensive planned greenspace network, much of which includes woodland which is now starting to mature. Trees and woodlands are, however, much less characteristic of large areas of social housing and some of the newer suburbs. There is significant potential to increase tree cover across the area's townscapes, linking and extending existing habitats, providing stepping stones and corridors through the urban area, providing shelter and improving the physical environment. There are opportunities to link into existing programmes including WIAT, local food growing (e.g. orchards) and wood fuel projects.

The middle Clyde valley has some of the most intact and ecologically rich woodlands in the Glasgow and Clyde Valley area. It also has a legacy of orchards, many of which have been lost or stand derelict, and a series of designed landscapes many with distinctive policy woodlands. Here, the emphasis may be on managing and restoring woodlands and orchards, developing woodland and woodland related businesses and increasing opportunities for public access and interpretation.

Neighbouring areas of plateau farmland are, by contrast, more open and exposed, with woodland cover often limited to field boundary trees and small farm woodlands. Here there is a potential for further woodland management and the consolidation of existing trees, with new woodland, possibly linked to habitat networks and wood fuel production.

Across significant parts of Lanarkshire the pattern of coal mining and associated industrial activity has left a legacy of vacant and derelict land with a wider fragmented rural landscape. Over the past decade, the Central Scotland Forest has made a significant positive contribution to these landscapes, using woodland and other enhancements to improve a damaged landscape and secure tangible benefits for communities across the area. This provides lessons which could be used to inform the strategy across much of the study area. There is significant potential to further increase woodland cover in these areas to transform post-industrial landscapes while contributing to a broader range of policy outcomes.
Productive forestry is an important feature of many rural areas, particularly in plateau and upland areas where geometric blocks of even aged conifers often contrast with the apparent wildness of the surrounding area. Examples are found on the Kilpatrick Hills, Clyde Muirshiel, parts of the Campsie and Kilsyth Fells, the Southern Uplands and the plateau moorlands bordering Ayrshire to the south west and Falkirk and the Lothians to the north east. Restructuring is beginning to have an enhancing effect on these areas, with more varied species and age structures and an increase in the diversity of habitats. Some of these areas offer significant potential for recreation, with areas such as the Carron Valley already accommodating a regionally important mountain biking facility.

- The GCV area is made up of 16% woodland cover. This compares to an average figure of 17% for the whole of Scotland.
- Coniferous woodland makes up the largest share of woodland, accounting for nearly 80%. Around 16% of the area’s woodland is ancient or long established in origin.
The potential for woodland expansion

The map opposite identifies the land area of Glasgow and the Clyde Valley classified by sensitivity to woodland expansion, based on the guidance provided by ‘The Right Tree in the Right Place’.

The classification is necessarily a strategic process, giving a broad impression on suitability or otherwise for woodland expansion. It is meant to act as a guide and not replace any detailed consideration at the site level. The following categories have been adopted:

**Preferred:** land that offers the greatest scope to accommodate future expansion of a range of woodland types. Sensitivities are limited and it should be possible to address any site-specific issues within well-designed proposals that meet the UK Forestry Standard and associated guidelines.

**Preferred (urban fringe):** priority urban fringe areas where a range of woodland types can deliver significant social, environmental and economic benefits.

**Potential:** land that offers potential to accommodate a range of woodland types, but where at least one significant sensitivity exists.

**Sensitive:** areas where the nature or combination of sensitivities restricts the scope to accommodate woodland expansion or removal, where constraints exist.

**Existing woodland:** land that is currently under woodland of all types.

**Unsuitable:** land that is physically unsuitable for the growth or management of trees.

**Built-up:** the metropolitan area and major settlements.

As indicated on the map, Glasgow and the Clyde Valley Area (page 7), there is considerable potential to accommodate a range of woodland expansion.

<table>
<thead>
<tr>
<th>Land categories</th>
<th>Area* (nearest hectare)</th>
<th>% GCV land area</th>
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</thead>
<tbody>
<tr>
<td>Preferred</td>
<td>51,633</td>
<td>35</td>
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<td>Preferred (urban fringe)</td>
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<tr>
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<td>Urban</td>
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<td>Unsuitable for woodland</td>
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<td>3</td>
</tr>
</tbody>
</table>

*nearest hectare

Unsuitable: land that is physically unsuitable for the growth or management of trees.

Built-up: the metropolitan area and major settlements.
Potential for Woodland Expansion in the Glasgow and Clyde Valley Area

Legend
- Green Network Strategic Priorities
- Country Park
- River Clyde & Waterways
- GCV SDPA boundary

Land Classification
- Preferred: Land with greatest scope to accommodate future expansion of a range of woodland types
- Preferred (Urban fringe): priority urban fringe areas where woodland can deliver significant social, environmental & economic benefits
- Potential: land that offers potential to accommodate a range of woodland types, but where at least one significant sensitivity exists
- Sensitive: sensitivities restrict the scope to accommodate woodland expansion or removal, where constraints exist
- Existing: land that is currently under woodland of all types
- Urban: the metropolitan area and major settlements
- Unsuitable: land that is physically unsuitable for the growth or management of trees
Achieving the vision

Our analysis clearly highlights the potential opportunities for both woodland creation and management. Delivering the vision also requires us to have a sound understanding of the possible benefits that we might achieve and how to realise them. These are described within the following four themes, outlining the key strategic issues for each as a guide to priorities and a focus for action:

- Supporting the economy.
- Improving quality of life.
- Promoting resilience to climate change.
- Creating a high quality environment.
Supporting the economy

Trees and woodlands will make an increasingly important contribution to the region’s economy. As well as supporting a healthy timber sector, they will help create an environment which attracts investment and encourages high quality development.

This will be achieved by:

Contributing to an environment for investment

The strategy aims to increase the role of trees and woodland in creating an environment for investment by:

• Enhancing economic investment locations.
• Encouraging temporary planting on stalled sites and derelict land.
• Growing the Green Network.
• Enhancing transport corridors.
• Promoting rural development and diversification.
• Supporting the tourism sector.
• Shaping new communities.

Opportunities for supporting an environment for investment include:

• Encouraging a sensitive approach to existing trees and woodland in and around development sites and supporting their retention, enhancement and expansion wherever possible.
• Promoting the bold use of new woodland planting to create to high quality landscape structure for new development including the Community Growth Areas.
• Encouraging the imaginative use of trees along access routes and transport corridors, in public greenspaces, civic spaces and private gardens.
• Promoting advanced planting and management to create a high quality setting for development.
• Encouraging temporary greening to improve the environmental quality of vacant and derelict land and stalled development sites.
• Prioritising biomass crops to provide a source of wood fuel and an income stream for owners of land.
• Working with the Urban Regeneration Companies to identify opportunities for the creation of new urban woodlands as a component of the regeneration of strategic locations within the Region.
• Highlighting the potential for hardwood timber production to provide a catalyst for environmental enhancement.

Supporting a healthy timber production and processing sector

The timber growing and processing sector is an important component of the Glasgow and Clyde Valley economy, but one where there is potential for growth.

The region includes around 37,000ha of productive forest, most of which is made up of Sitka spruce and other introduced species. The character of these woodlands is changing as they are harvested and replanted, with a greater emphasis on open space, native tree species and varying age structure. At the same time, there is potential to expand the total area of productive forest, and to increase the volumes of hardwood and biomass production.
Recent research carried out for the Glasgow and Clyde Valley Green Network Partnership, Forestry Commission Scotland and Scottish Enterprise confirmed the potential to establish a viable biomass market in the region. This requires there to be an established demand for wood fuel, a sustainable supply and an effective processing and distribution network.

Compared with other parts of Scotland, Glasgow and the Clyde Valley has a good network of transport routes able to accommodate timber transport as it lies close to local markets, several sawmills and processing plants. This provides a good base upon which to grow the sector.

This strategy aims to support the growth of timber production and processing in Glasgow and the Clyde Valley by:

- Maintaining and increasing timber production.
- Supporting the development of robust supply chains.
- Encouraging hard wood production.
- Encouraging management and expansion of woodland for biomass production.
- Supporting the expansion of timber processing.
- Creating and protecting local markets.

Opportunities for supporting a healthy timber production and processing sector include:

- Supporting and prioritising the restructuring of existing productive forests to increase their landscape, biodiversity and recreational benefits.
- Encouraging hard wood production and landowners to bring woodland into positive management to build hardwood supply chains.
- Promoting planting of broadleaves for timber production to strengthen and restore landscape structure and character.
- Minimising the loss of existing woodland through the rigorous application of the woodland removal policy.
- Encouraging the management of existing woodlands to provide wood fuel and income for woodland owners.
- Prioritising the creation of new areas of biomass on vacant and derelict land, and in areas where farming is less viable.
- Encouraging local authorities and businesses to take advantage of the opportunities offered by the Renewable Heat Incentive when procuring or refurbishing buildings stock.
- Supporting the development of a market for wood fuel by encouraging public sector organisation to take the lead on biomass boiler procurement, raising awareness among developers and householders, and liaising with regulators to providing clear guidance on the use of biomass equipment in Smoke Control Areas and Air Quality Management Areas.
- Supporting the creation of an efficient processing and distribution network for wood fuel.
- Supporting and securing existing forestry sector sites through liaison with local authorities and the Mid-Scotland Forest Industries Cluster.
- Surveying and reviewing industrial locations and identify appropriate sites for future forestry sector development.

Supporting the economy

Tourism

The strategy aims to support tourism and recreation by developing and promoting new recreation opportunities by:

- Working with land managers to increase the contribution of woodland and forests to the rural economy, bringing benefits for the agricultural sector, creating alternative sources of rural income and supporting community ownership and social enterprise.
- Working with the farming sector to increase the management of farm woodlands and to identify opportunities to create new farm woods.
- Encouraging the use of woodland to improve the setting of tourism sites.
- Prioritising the management of existing trees with historic landscapes and where they make a significant contribution to the quality of open spaces, civic spaces and country parks.
Trees and woodlands help improve the quality of places where we live and work, create opportunities for communities to get involved in managing and owning woodlands, encourage healthier lifestyles and support education, training and social enterprises.

Improving local environments where it is needed most
The strategy aims to improve local environments where it is needed most by:

• Ensuring that local planning and open space documents prioritise opportunities for woodland creation and management.
• Continuing the focus of woodland management and creation on woodlands in and around towns.
• Increasing opportunities for people to get involved in planning and managing their local woodlands.
• Increasing the range of opportunities for recreation, education, training and employment linked to existing and new woodlands.

Involving and empowering communities
At the very least, this means providing effective ways of discussing woodland creation or enhancement proposals particularly where they could affect local communities. There are also opportunities for people to become more actively involved in owning and managing woodlands.

The Scottish Forestry Strategy emphasises the importance of involving the public in the forestry planning process. Woodland managers need to be equipped with the skills necessary for effective consultation and stating the requirement for such consultation as a condition of grant support will help make such involvement a part of normal forestry practice.

The management and creation of woodland can also create opportunities for social enterprises – locally owned companies with social and environmental as well as commercial objectives which can help create training or employment opportunities based on activities such as tree planting, forest management, timber harvesting and processing together with recreation and interpretation.

Social enterprises have, for example, focused on managing woodlands as a source of wood fuel (logs and wood chips) for the local community. The benefit of these kind of projects are best realised when linked to formal training and educational processes.

Outdoor recreation and exercise is widely recognised as a key way of securing health improvement in Scotland – contributing to physical and mental wellbeing.

Council Core Path Plans and Open Space Strategies, together with individual forest plans play a key role in prioritising and developing woodland based access opportunities and linking them to wider access networks. The involvement of NHS Greater Glasgow and Clyde and Lanarkshire Health Boards will ensure that health benefits are maximised.

The Strategy aims to involve and empower communities by:

• Ensuring they are engaged at key stages in forest and woodland planning.
Improving quality of life

- Ensuring woodland managers have training to allow effective consultation.
- Creating and improving woodland habitats, linking to surrounding areas and providing a resource for education and learning.
- Creating opportunities for people to volunteer, receive training or secure employment from woodland related activities.
- Providing sources of income for example from timber production and wood fuel.
- Supporting community ownership of woodlands where this brings benefits for local people.
- Ensuring there is adequate training, advice and support for communities taking ownership of woodlands.
- Promoting the role of new woodlands and existing woodland in supporting social enterprises linked to training and education.
- Creating high quality access and recreation opportunities close to where people live.
- Targeting provision in areas with poor health, low incomes and high on the indices of multiple deprivation.

Promoting resilience to climate change

Climate change is one of the greatest challenges we face today. Trees and woodland have a role to play in helping reduce the impacts. However, it will also affect existing trees and woodland across the region so forestry practice will need to adapt.

Increasing climate change mitigation

Trees and woodlands have a key role to play in helping to reduce net carbon emissions into the atmosphere – so called climate change mitigation. Trees absorb (or sequester) carbon from the atmosphere as they grow, only releasing it again when timber is burnt or decays naturally. By increasing the overall extent of woodland, and encouraging wider use of timber products, this strategy will help increase the total amount of carbon sequestered across Glasgow and the Clyde Valley. This will help offset carbon emissions from fossil fuel use.

Scottish timber is increasingly recognised as a high quality and sustainable building material\(^{20}\), with strong links to vernacular styles and applications in cutting edge architecture alike. The planning and building control processes should also promote the use of timber as a low carbon building material and there is scope for demonstration projects to influence investors and house builders.

\(^{20}\) [www.forestry.gov.uk/forestry/NFD-6B2JFB](http://www.forestry.gov.uk/forestry/NFD-6B2JFB)

Measures to mitigate climate change should include:

- Expand the total area of trees, woodland and forests within the region to increase the amount of carbon dioxide absorbed from the atmosphere in line with wider strategy aspirations.
- Encouraging the use of timber as a sustainable building material, particularly where this reduces the need for carbon intensive materials such as steel, concrete or materials transported long distances.
- Developing the biomass and wood fibre sector as a source of low carbon fuel for heating and power generation.
- Accommodating renewable energy infrastructure associated with existing woodlands and forests, where other constraints allow.
- Encourage energy efficiency in the timber sector.

Opportunities for wind farms must take account of:

- Minimising the requirement for woodland removal and ensure that any losses are balanced by woodland creation within the Glasgow and Clyde Valley region and in line with the guidance set out in this strategy.
- Using woodland removal and new planting to help restructure existing areas of forest.
**Adapting to climate change**

The latest modelling suggests that winters are likely to become milder and much wetter, while summers will become warmer and drier. Trees and woodlands can help us adapt to some of the challenges that will result from this changing climate. At the same time, the way we manage our trees and woodlands will need to change. This strategy promotes climate adaptation in terms of:

**Contributing to sustainable flood management**

Given the history of flooding within parts of the metropolitan area and in other smaller settlements across the region, flood management is a significant concern. Woodland and forests can help reduce this risk as part of sustainable flood management projects. Woodland expansion in the upper parts of river catchments and on river floodplains can help slow the rate at which rainfall runs off into rivers, in turn reducing the risk of flooding.

Developing floodplain and riparian woodland in the upper catchments of the area’s major rivers, including the Clyde, Kelvin, White and Black Cart Waters and the Gryfe could play an important role in this respect and make a major contribution to enhancing biodiversity values and landscape quality.

Woodland can also help stabilise steeper slopes where there is a risk of landslips. This can be important in increasing the resilience of transport routes and providing protection for property.

**Expanding habitat networks**

We also need to help plants and animals adapt to the changing climate, particularly where habitats have been lost or fragmented in the past. Habitat networks can link habitats, helping species to become more resilient by establishing larger and healthier populations which are able to relocate in response to the changing climate. Existing and new woodlands can form an important part of Integrated Habitat Networks across the region.

**Wind farms**

Forests and woodlands may also be able to accommodate other types of renewable energy development. This is particularly true in upland and plateau moorland areas where there is interest in developing wind farms. By 2011 around 3200 ha of woodland – the vast majority being productive conifers – have been lost in the GCV area as a result of wind farm development\(^{21}\). A significant area is at risk from further development.

The Scottish Government policy on woodland removal means that any trees that are felled in order to build new wind farms should be balanced by new woodland creation. Where woodland removal is proposed, compensatory planting should take place within the region. The type, siting and design of new woodlands may differ from those being removed but should reflect the guidance set out in this strategy.

\(^{21}\) Figures from FCS Central Scotland Conservancy, rounded to the nearest 100ha (correct as of March 2011)
Managing trees and woodland in a changing climate

Existing trees and woodlands are likely to be affected by climate change as winter water-logging alternates with summer drought, storms become more frequent and severe and pests and diseases become more common. The long timescales associated with trees and woodlands means we need to start planning for these impacts now.

Forestry Commission Scotland guidance is designed to help forest managers to start planning for climate change by anticipating the implications for site selection, tree species, management techniques, harvesting and the design of forest infrastructure. Reflecting these factors in new and restructured forests will be essential if other objectives relating to climate change and multi-purpose forestry are to be achieved.

It is likely that traditional approaches to harvesting, based on the clear-felling of larger blocks of forest will give way to ‘continuous cover’ forestry based on the selective felling of trees within a woodland. This will create a more varied woodland structure and should reduce the risk of erosion.

Urban, historic and semi-natural woodlands

Trees in urban areas could also experience stress as temperatures rise and summer droughts take their toll. This could have a major impact on street trees, green corridors, urban woodlands and open spaces and parks.

Within the wider landscape, climate change could result in the further loss of farm woodlands, field boundary trees and shelter belts, many of which make an important contribution to the character of the area. Native and semi-natural woodlands, such as those along the Clyde valley between Lanark and Hamilton, could also suffer stress as the climate changes and pests and diseases become more common.

In both cases, it is important to start anticipating these impacts now rather than waiting until the evidence of tree loss is visible across the area. The first priority should be to maintain trees and woodland so they are in the best condition possible to cope with the changing climate. Where it is likely that trees will be lost replacement planting should start as soon as possible, using species suited both to the location and to future conditions. This may mean some difficult decisions where, for example, an historic landscape is characterised by particular types of trees.

Biomass

Opportunities should be explored for Biomass. This should be based on three main components:

Supply: Existing woodlands should be brought into positive management alongside new short rotation coppice crops and short rotation forestry to provide a viable supply of wood fuel. Research suggests there is considerable scope to increase production within Glasgow and the Clyde Valley.

Demand: The public sector will have a key role to play in generating demand for wood fuel, by direct investment in public buildings and by raising awareness among development companies and householders.

Distribution: There will also need to be an efficient supply chain, with a network of distribution and processing depots. The planning process can help identify suitable locations for such infrastructure.

Adaptation measures (or opportunities) should include:

- Increasing awareness of the role of woodlands in sustainable flood management and slope stabilisation.
- Promoting the development of integrated habitat networks to help species become more resilient to climate change.
- Ensuring that forest management adapts to the changing climate.
- Support the move to continuous cover forestry where practical.
- Promote good management of trees and woodland to increase their resilience to climate change.
- Where appropriate seek to bolster tree species and age class structures as a means of avoiding future impacts of large scale tree loss.

Opportunities for biomass should include:

- Prioritising the creation of new areas of biomass on vacant and derelict land, and in areas where farming is less viable.
- Supporting the development of a market for wood fuel by encouraging public sector organisations to take the lead on biomass boiler procurement, raising awareness among developers and householders, and liaising with regulators to providing clear guidance on the use of biomass equipment in Smoke Control Areas and Air Quality Management Areas.
- Supporting the creation of a sustainable processing and distribution network for wood fuel.
Creating a high quality environment

Trees and woodlands make an important contribution to the environmental character and quality of Glasgow and the Clyde Valley. They support internationally important wildlife habitats, help shape the wider landscape, contribute to our cultural heritage and help maintain the quality of air and water resources. The strategy aims to increase this contribution, helping to create a richer and more diverse environment.

Conserving and enhancing diverse species and habitats

Woodlands within Glasgow and the Clyde Valley provide rich and varied habitats for wildlife. Existing ancient or long-established native or semi-natural woodlands tend to be concentrated along the river valleys of the Clyde, Leven, Avon, and Calder and in the foothills of the Campsie and Kilsyth Hills and Kilpatrick Hills. Most native woodland is found along rivers and burns where steep grazing have made cultivation and grazing difficult.

Of the 93 Sites of Special Scientific Interest in the area, several are designated for their high quality woodland habitats. The region has around 7,900 ha of ancient and long-established woodland, comprising around 2.4% of total land area. There are also many other undesignated areas – both wooded and open – which make a major contribution to the biodiversity and character of the area.

Glasgow and the Clyde Valley Green Network Partnership has been developing the idea of ‘integrated habitat networks’ which comprise a mix of habitats including unimproved grassland, floodplain wetland, woodlands and raised bogs. Work carried out by Forest Research identified potential for 14 Priority enhancement areas for woodlands within GCV where new woodland planting would connect and expand existing areas of established woodland or contribute to mixed habitats such as those found along river corridors.

The Strategy aims to improve, expand and link surviving woodland habitats whilst conserving other, non-woodland habitats by:

- Improving the condition of nationally important woodland habitats.
- Contributing to local biodiversity action plan targets.
- Restoring ancient and semi-natural woodland.
- Developing habitat networks.
- Expanding native woodlands.
- Protecting and enhancing other important habitats.

Conservation and enhancement opportunities should include:

- Encouraging the development of integrated habitat networks as a means of expanding and linking designated and priority woodland habitats.
- Working with land managers to raise awareness of the biodiversity importance of designated sites and the availability of funding via the Scottish Rural Development Programme for woodland management.
- Encouraging positive management of existing ancient, semi-natural and native woodlands, with a focus on priority habitats and species.
- Increasing the overall extent of woodland in the GCV area, and ensuring that habitat creation and
management is considered alongside other objectives such as timber production so that the biodiversity value associated with woodlands as a whole increases.

- Promoting the restoration of native woodland on former ancient and semi-natural woodland sites where this will result in significant biodiversity benefits.
- Promoting the role of new and existing native woodlands in contributing to integrated habitat networks, particularly where they link areas of ancient and semi-natural woodland (including sites that have been planted with productive forestry), where they connect with areas of woodland planted primarily for timber and where they create networks in areas with few existing habitat links (e.g. urban areas and intensively farmed areas).
- Ensuring the management and expansion of woodland is in accordance the UK Forestry Standard.

Creating better townscapes and landscapes

Trees and woodlands form part of our cultural heritage, contributing to the character of cities, towns and villages, helping to shape the rural landscape and forming part of many important historic sites.

Trees are an equally important component of rural landscapes and an integral part of the historic environment within the GCV area, often emphasising the contrast between valleys, lowland and upland parts of the area. Traditionally, trees and woodlands performed a number of important functions including providing shelter, building materials and fuel. Orchards were characteristic of areas such as the Clyde Valley where the microclimate combined with proximity to Glasgow created a niche market. Today, many of the factors that shaped our rural landscapes have changed and many types of woodland have fallen into neglect.

Historic gardens and designed landscapes are found throughout the GCV area, making an important contribution to its landscape as well as representing a valued historic resource in their own right. Some survive relatively intact, others have lost their historic houses while some have been absorbed into the urban fabric, sometimes being included as public parks and open space.

The strategy will increase awareness of trees’ cultural and landscape importance, aiming to increase their contribution to landscape and townscape quality by:
- Improving townscapes and landscapes.
- Enhancing damaged landscapes.
- Maintaining important designed landscapes and specimen trees.
- Protecting the historic environment.

Opportunities to create better townscapes and landscapes should include:
- Encouraging positive management of existing trees in urban areas, helping to improve their resilience to climate change and ensuring the programmed maintenance and replacement of trees in good time. Conservation Areas and Tree Preservation Orders provide important protection mechanisms.
• Ensuring planning for woodland and trees is an integral part of regeneration initiatives for former industrial sites across the GCV area.
• Ensuring that Community Growth Areas and other developments are, where appropriate, set within a woodland framework.
• Encouraging new woodland and tree planting in areas with low levels of tree cover, using a combination of planting along road corridors, on underused areas of open space and private gardens to enhance the character of the urban landscape.
• Promoting woodland planting along major road corridors where it provides screening and enhances key views.
• Promoting temporary greening on sites awaiting development.
• Promoting positive management of trees and woodland where they make an important contribution to the character and quality of the landscape.

Secure a high environmental quality
Woodland management, and planting along river corridors, can help maintain and improve water quality. Trees and woodlands can have a positive influence on air quality where they filter and absorb pollutants from the air. The benefits of this are most likely to be noticed adjacent to major road corridors and other sources of air pollution.

Trees can help reduce the impacts of noise, both by providing a barrier which absorbs noise, and by creating a more natural source of noise which can mask or reduce the prominence of traffic or other sources of noise.

Planting trees on contaminated sites can help break down organic pollutants, reduce concentrations of heavy metals and the development of healthy soils. Trees can also help stabilise soils where there is a risk of loss or damage as a result of water or wind erosion. Wetter winters and drier summers could increase the importance of protecting and conserving soils. On steeper slopes, trees can also help reduce instability following heavy rain.

Opportunities for securing a high environmental quality should include:

• Supporting the use of woodland and trees as part of sustainable catchment management to reduce the risk of downstream flooding.
• Encouraging the planting of trees to filter and absorb air pollutants adjacent to transport corridors and other sources of air pollution.
• Encouraging the planting of trees to absorb and reduce noise impacts.
• Supporting the use of tree planting on derelict and contaminated sites as an integral part of site restoration and soil restoration.
• Promoting the use of trees and woodland to minimise soil erosion.
The Glasgow and Clyde Valley Priority Areas are based largely on broad landscape character types, adjusted to reflect key issues and opportunities for woodland creation and management. The map shows the key priority areas with the Glasgow and Clyde Forestry and Woodland Strategy.

The Priority Areas establishes an indicative framework for more focused and collaborative interventions at a local level with key woodland stakeholders. The Glasgow and Clyde Valley Landscape Character Assessment, published by SNH, provides a more detailed description of the area’s landscape and the contribution made by trees and woodland.

This includes a 1km zone around the larger settlements defined as ‘urban fringe’ to target action were it can add most value. Although smaller than the other zones, the Clyde Valley is highlighted for its very specific character, quality and sensitivity of the existing woodland resource.

The characteristics of each priority area are briefly outlined, including the existing woodland resource and potential to add value.
Clyde Valley Between Lanark and Hamilton, the Clyde Valley, together with tributary valleys such as the Avon, Nethan, South Calder and Garrion, contains some of the UK’s finest areas of riverine and gorge woodlands. Many of these woodlands are ancient in origin and have a history of woodland management that extends back to the middle ages and their rich ecology is reflected in designation under European legislation as a Special Area of Conservation.

Farmland The farmland area ranges from lower lying areas on the floodplains of the Black and White Cart Waters and in the Kelvin Valley, to more open and elevated pastures along the middle Clyde valley in South Lanarkshire.

Moorland Hills The Moorland Hills area comprises the Clyde Muirshiel Hills, Kilpatrick Hills, Campsie and Kilc提示 Fells and the south western part of the Pentland Hills. The moorland hills support a range of upland habitats including peat bog, grasslands and wetlands. The hills also include some areas of productive coniferous forest.

Plateau Moorland Plateau moorlands and foothills enclose much of the Clyde Valley to the south and east of the Glasgow conurbation. These are open areas of gently sloping moorland with a mixture of peatland, grassland and coniferous forests.

Southern Uplands Landcover in the Southern Uplands is typically coarse grassland, though the highest areas often comprise heather moorland. Semi-natural woodland is scarce, limited to a few more sheltered glens, gullies and clefts. There are also extensive areas of coniferous forest, together with prominent, almost sculptural plantations, particularly around the fringes of the higher hills.

Urban Urban areas account for most of the region’s population, employment and economic activity. Trees and woodlands make an important contribution to some areas, including many Victorian parks, squares, crescents and sections of river corridor such as the River Kelvin.

Urban Fringe The urban fringe includes areas within 1km of the edge of urban settlements, reflecting the influence of urban areas on the surrounding countryside, and the opportunity for Woods in and Around Towns projects.
Urban areas and the urban fringe

This priority area comprises the Glasgow metropolitan area (including parts of Renfrewshire, East Renfrewshire, South Lanarkshire, North Lanarkshire, East Dunbartonshire and West Dunbartonshire, together with the urban part of Glasgow itself), larger settlements such Dumbarton, Greenock and Gourock, Paisley, East Kilbride and Cumbernauld and smaller towns such as Kilsyth and Lanark.

The priority area also includes the urban fringe around these settlements (defined as areas within 1km of the edge of settlements), reflecting the influence of urban areas on the surrounding countryside, and the opportunity for Woods in and Around Towns initiatives.

Urban areas account for around 16% of the Glasgow and Clyde Valley area (almost a third of the region if you include a 1km urban fringe), and account for most of the region’s population, employment and economic activity. Many parts of the urban area are characterised by multiple deprivation, with high unemployment and poor health. The region’s key regeneration initiatives are concentrated in the urban areas and are designed to tackle the economic, social and environment legacy of the area’s industrial past.

Trees and woodland cover is variable, making an important contribution to some areas, including many Victorian parks, squares and crescents and some sections of river corridor. Many of the more recent commercial and residential developments include new tree or woodland planting, though in most cases this will take decades to reach maturity.

Trees are less common in other parts of the urban area. In part this reflects the history of industrial activity and the pattern of twentieth century urban growth. However, it means that much of the area gains few of the economic, community and environmental benefits associated with trees and woodlands.

Around the urban fringe a combination of vacant and derelict land and areas of fragmented, and sometimes abandoned, farmland presents different challenges and opportunities in terms of environmental enhancement and new forms of woodland planting.

Much has already been achieved through the FCS Woods in and Around Towns (WIAT) scheme – however, significant opportunities remain for woodland to contribute to quality of life, environmental enhancement and sustainable economic development.

Priorities for woodland management and expansion

• Increase in woodland cover within urban areas and a very significant increase around the urban fringe. These might include native woodland, mixed woodland and energy22 woodlands.

• Encourage the positive management of existing trees and woodland within urban areas. This will reinforce settlements’ attractiveness as a place to live, work, invest and visit. It will also contribute to the development of habitat networks and increase resilience to climate change.

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22 Woodlands grown predominantly for use for woodfuel.
Urban areas and the urban fringe
The Farmland priority area makes up around 18% of the GCV region. It ranges from lower lying areas on the floodplains of the Black and White Cart Waters and in the Kelvin Valley, to more open and elevated pastures along the middle Clyde valley in South Lanarkshire.

**Key characteristics of these areas include:**
- Plateau landforms with some smaller areas of more complex upland and valley farmland.
- Predominance of pastoral farming.
- Patterns of shelterbelts, farm woodlands, field boundary trees, policy woodlands and areas of productive forest.
- Localised impact of mineral working, settlements, transport and other infrastructure.

Agriculture also makes an important contribution to the economy of the region, to the vitality of rural communities, and to the character of the wider landscape. The emphasis of current policy is to achieve greater integration of agriculture and forestry, with woodland creation and management contributing practically and financially to farm businesses, whilst delivering other social and environmental benefits.

**Priorities for woodland management and expansion**
- A key priority of the Strategy is to encourage the positive management of existing woodland and trees within the Farmland priority area.
- Across the GCV area, there are significant opportunities for woodland to support existing agricultural activity and provide new business opportunities for land owners and managers. There is also potential to contribute to the achievement of a range of social, economic and environmental objectives.
- The Strategy supports a significant increase in woodland cover across this priority area, these new woodlands could be made up of mixed woodland, productive conifers, new native woodland and energy woodlands.

23 This zone corresponds broadly to the Rolling Farmland, Plateau Farmland, Rugged Upland Farmland and parts of the Fragmented Farmland landscape character types as defined within the SNH Glasgow and Clyde Valley Landscape Character Assessment.
Farmland
Clyde Valley and the tributaries

Between Lanark and Hamilton, the Clyde Valley\(^{24}\), together with tributary valleys such as the Avon, Nethan, South Calder and Garrion, contains some of the UK’s finest areas of riverine and gorge woodlands. Many of these woodlands are ancient in origin and have a history of woodland management that extends back to the middle ages and their rich ecology is reflected in designation under European legislation as a Special Area of Conservation. The steep, often unstable nature of many valley slopes meant that these woodlands survived despite the industrialisation of neighbouring areas of countryside during the 19th and early 20th centuries. The woods are not untouched, however, reflecting the history of grazing, coppicing and other types of management.

These rich, semi-natural and ancient woods are accompanied by a series of historic gardens and designed landscapes, many of which exploited the dramatic, well wooded character of the valley. There is also a legacy of fruit orchards, remnants from the time when farmers in the Clyde Valley exploited the micro-climate to supply Glasgow with apples and soft fruit. Orchards subsequently gave way to horticultural glasshouses and later to garden centres.

The Clyde Valley has a series of small settlements, many based around bridging points or mills, the latter including the World Heritage Site of New Lanark. The area is of importance for tourism and recreation. In addition to the World Heritage Site, the Clyde Walkway passes and a tourist route pass through the valley.

Priorities for woodland management and expansion

- The main priority within the Clyde Valley FWS Priority area is on managing the existing woodland resource with a particular emphasis on internationally and nationally important woodland habitats, the area’s legacy of historic gardens and designed landscapes, ancient wood pasture and surviving orchards.
- The strategy also supports a relatively small increase in woodland cover. This could be made up of riparian woodland, native woodland and mixed woodland.

\(^{24}\) This zone corresponds broadly to the Incised River Valleys landscape character type as defined within the Glasgow and Clyde Valley Landscape Character Assessment.
Clyde Valley and the tributaries
This FWS Priority area comprises the Clyde Muirshiel Hills, Kilpatrick Hills, Campsie and Kilsyth Fells and the south western part of the Pentland Hills. Together, these hills make up just over 9% of the GCV area. The moorland hills support a range of upland habitats including peat bog, grasslands and wetlands. The hills also include some areas of productive coniferous forest. Key characteristics include: distinctive upland character created by the combination of elevation and exposure; rugged landform, moorland vegetation and the predominant lack of modern development; a sense of remoteness which contrasts strongly with the farmed and developed lowland areas; and presence of archaeological sites on some hilltops and sides.

The hills are already an important recreation resource for the GCV area, providing areas with a more remote character and extensive views close to the metropolitan area. The Clyde Muirshiel Hills form part of a Regional Park that extends into North Ayrshire, with a visitor centre and a network of trails. The Campsie Fells include the Carron Valley forest which has regionally important mountain biking trails and a more extensive network of forest tracks and paths. The wider Campsies are an important recreation resource and have been proposed as a Regional Park. The Kilpatrick Hills are also important with work underway to expand native woodland and improve recreation opportunities. That part of the Pentland Hills within this priority area lies out with the Pentland Hills Regional Park.

Priorities for woodland management and expansion

• These hills will continue to include areas of productive conifer forest. Given the hills’ recreation importance, the emphasis will be on restructuring to improve their landscape and ecological value whilst further developing opportunities for woodland based recreation.

• The Strategy also supports a moderate increase in native woodland cover, although with some opportunities for new conifer woodland particularly on lower hill slopes and along burns and river valleys.

• There may be opportunities to work with communities neighbouring these moorland hills to create significant new community woodlands.

• There may be opportunities, particularly in the Kilpatrick Hills, to expand the existing network of forests and woodlands to deliver new access and recreation opportunities of regional scale and significance.

25 This zone corresponds broadly to the Rugged Moorland Hills, Old Red Sandstone Hills and Drumlin Foothills landscape character types as defined within the Glasgow and Clyde Valley Landscape Character Assessment
North and west Moorland Hills

Moorland Hills near Lanark
Plateau moorlands and foothills enclose much of the Clyde Valley to the south and east of the Glasgow conurbation\(^{26}\). Key characteristics of this area include: open areas of gently sloping moorland with a mixture of peatland, grassland and coniferous forests; distinctive upland character – created by the combination of elevation, exposure, smooth, plateau landform and moorland vegetation; and a sense of remoteness contrasting with the farmed and settled lowlands.

The moorlands include important habitats and a number of areas which are protected under European legislation. The hills are cut by the open valleys of the Clyde and its tributaries, providing routes for transport corridors and more sheltered locations for villages and smaller towns.

Mineral working has affected large parts of this area and today it accommodates a number of wind energy developments. Forest cover in this priority area has been reduced as a result of wind farm development.

Priorities for woodland management and expansion

- Continue to include areas of productive conifer forest – with long term restructuring continuing to improve both their landscape and ecological value.
- Opportunities for a significant increase in new woodland cover across this priority area. These could comprise a combination of: productive conifer areas (likely be sited in areas accessible from the main road network and potentially in those in areas affected by mineral working); native woodlands (designed to expand integrated habitat networks on lower hill slopes and along burns and river valleys); energy woodlands (particularly closer to transport infrastructure, settlements and processing infrastructure) and mixed woodlands, comprising farm woodlands and shelterbelts within the larger valleys cutting through these moorlands.
- There may be opportunities to work with communities in the river valleys and fringes of the plateau moorlands to create new community woodlands.

\(^{26}\) This zone corresponds broadly to the Plateau Moorland and parts of the Upland River Valley landscape character types as defined within the Glasgow and Clyde Valley Landscape Character Assessment.
Plateau moorlands
Immediately south of the Southern Upland Fault lies a bold upland area with a character very different to the lower moorlands and hills to the north and west. The Southern Uplands are distinguished by their height (up to 575 m AOD), their geology and the influence of glacial erosion. The hills have steep, smooth slopes rising to rounded summits. A series of valleys are cut into the hills, providing routes for road and rail corridors and a number of small settlements, some of industrial origin.

Landcover in the Southern Uplands is typically coarse grassland, though the highest areas often comprise heather moorland. Areas of rough grazing generally lack walled enclosures. Semi-natural woodland is scarce, limited to a few more sheltered glens, gullies and clefts. There are also extensive areas of coniferous forest, together with prominent, almost sculptural plantations, particularly around the fringes of the higher hills. Forest cover in this priority area has, however, been reduced as a result of wind farm development.

Priorities for woodland management and expansion

- Continue to include areas of productive conifer forest – with long term restructuring continuing to improve both their landscape and ecological value.
- The Strategy supports an increase in woodland cover across this priority area. New woodlands could comprise a combination of: native woodlands – designed to expand integrated habitat networks on lower hill slopes and along burns and river valleys; productive conifer areas – sited in areas accessible from the main road network to optimise efficiency and reduce emissions.
- There may be opportunities to work with communities within the Southern Uplands to create new community woodlands.
Southern uplands
## GCV FWS Priorities

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**List of Abbreviations**
- CRBDAG: Clyde River Basin District Advisory Group
- FCS: Forestry Commission Scotland
- GCPH: Glasgow Centre for Population Health
- GCVGMP: Glasgow and Clyde Valley Green Network Partnership
- GCVSDPA: Glasgow and the Clyde Valley Strategic Development Planning Authority
- MSFTIC: Mid Scotland Forest and Timber Industries Cluster
- NFU: National Farmers Union
- SEPA: Scottish Environmental Protection Agency
- SGRPID: Scottish Government Rural Payments and Inspections Directorate
- SNH: Scottish Natural Heritage
- SRPBA: Scottish Rural Property and Business Association
- WSAS: West of Scotland Archaeological Service
Glasgow and Clyde Valley

Forestry and Woodland Strategy

Our aim is to increase the economic, social and environmental contribution that forests and woodlands make to Glasgow and the Clyde Valley. This requires us to make the most of both our existing woodlands and to create opportunities for new ones where they add most value to the environment, local communities and society as a whole.