Development and Infrastructure Service

Seirbheis an Leasachaidh agus a' Bhun-structair



Highland Forest and Woodland Strategy

Ro-innleachd Choilltean na Gàidhealtachd





Forestry in Highland - as in Scotland generally - is a success story. Scotland's forestry sector as a whole is estimated to contribute £1 billion a year to the Scottish economy and support 25,000 FTE jobs in forestry-related businesses.

Highland's forests, woodlands and trees should be regarded as one of its most highly prized natural resources and those which deliver a wide range of economic, social and environmental benefits, from access and recreational facilities, opportunities to promote and encourage health and wellbeing to the protection and enhancement of its biodiversity - including the restoration of some of the most iconic ancient native woodland landscapes. In addition, by capturing carbon and helping to protect Highland's infrastructure by stabilising soils and regulating water flows, forests, woodlands and trees also play a vital role in helping to meet Scotland's climate change targets.

As well as being home to many cutting edge wood processing, harvesting, haulage and sustainable construction businesses that have seen considerable growth and gained significantly in reputation over the past few decades, Highland is also proud to host the Scottish School of Forestry as a hub for forestry education, training and skills development. The forestry sector in Highland has also played a crucial role in driving forward improvements in integrated land use, land reform and community empowerment.

At the time of developing this Strategy, which sets out the future direction of travel for the Highland forest and woodland resource, forest industries generally - both here and throughout Scotland - are nonetheless facing a challenging period of transition. The sustainability of the sector's success story is coming under threat by the decline in planting of productive woodlands which will affect continuity of future timber supplies and investor confidence. Furthermore, the implications of BREXIT for the forestry and timber sectors will, whilst difficult to predict, undoubtedly involve adjusting to both the challenges and opportunities of operating outside the Common Agricultural Policy.

Notwithstanding these challenges, as the largest local authority area in the UK and custodians of an outstanding natural environment and vibrant forest industry, Highland Council has an important strategic role to play, along with its public and private sector partners, in supporting and maintaining a positive environment for the forest and woodland resource to expand, integrate and thrive alongside other key industries.

Through this refreshed Highland Forest and Woodland Strategy, the Council welcomes the opportunity to play its part in supporting the achievement of the Scottish Government's strategic themes, as set out the Scottish Forestry Strategy, alongside national targets for woodland expansion, as reflected by its own vision, priorities and objectives for Highland's forests and woodlands. The Council will promote the expansion of productive and native woodland and high quality sustainable forest management in Highland. This will in turn enhance the natural environment, secure and create more jobs, stimulate investment and longer term industry confidence whilst striving to improve the infrastructure necessary to support them.

Highland Council's intention is that by helping to steer new planting to the most appropriate locations and guide the restructuring of forests and woodlands, the refreshed Highland Forest and Woodland Strategy will continue to support the enhanced integration of forestry with other land uses and ensure that the uptake of funding for woodland expansion is appropriately targeted.

Executive Summary

The 2018 Highland Forest & Woodland Strategy (HFWS) is one of a series of Supplementary Guidance documents prepared by The Highland Council to support its Highland-wide Local Development Plan (2012).

Whilst essentially a refresh of the 'Highland Forest and Woodland Strategy' produced in 2006, this updated HFWS has been prepared against the backdrop of significant changes in the national and regional policy context and regulatory frameworks for forestry and wider land use, together with new priorities, challenges and opportunities facing the industry that have come to the forefront over the past decade. It presents the key issues, challenges and opportunities, together with a refreshed vision, strategic aims and objectives for the future expansion and stewardship of the Highland forest and woodland resource and associated industries over the next 20 years. Once approved, the HFWS will be reviewed on a 5 yearly basis.

At the broadest strategic level, the purpose of the HFWS is to provide a regional expression of how the national vision and priorities for the protection and expansion of Scotland's forest and woodland resource - as set out in the Scottish Government's Land Use Strategy for Scotland (2012), Scottish Forestry Strategy (2006) and other related Strategies - will be achieved within the context of the Highlands. More specifically, the purpose of the HFWS is to provide Highland Council with the framework for consulting on applications for grant support for woodland creation and management in support of the existing regulatory and environmental protection processes, most notably the UK Forestry Standard.

As a regional reflection of the Scottish Forestry Strategy, and drawing on consultation with a wide range of stakeholders including the Highland and the Islands Forestry Forum, the HFWS sets out the important roles that forestry will continue to play in delivering a wide range of sustainable economic and rural development, environmental, social and community benefits across Highland.

In accordance with Scottish Government Guidance a Strategic Environmental Assessment and Habitats Regulation Appraisal are underway and will inform the HWFS.

Achievement of the Strategy's vision is based around eight key themesthat not only cross cut with those of the Scottish Forestry Strategy but also respond more specifically to the issues and opportunities for the future of forests and woodlands in Highland.

HFWS Themes

- Expanding the area of forests and woodland;
- Achieving the economic potential of forests and woodlands;
- Developing resilience to climate change;
- Encouraging community engagement and empowerment;
- Protecting and enhancing Highland's natural capital;
- Integrating with development and tourism;
- Strengthening connections with health, access and recreation and learning;
- Promoting business and skills development.

Each of these themes is then attributed a number of associated policy objectives as the basis for practical implementation and delivery of key outcomes for Highland (see 5 'Vision, Strategic Themes, Objectives & Outcomes').

A key component of the HFWS and its implementation is the inclusion of updated Spatial Mapping guidance in the form of a map showing indicative classification of land that might be suitable for woodland expansion.

Such classification is necessarily at strategic scale and illustrates the general level of constraint / opportunity for woodland expansion - not land which the HFWS proposes should be planted. It is therefore only intended to guide stakeholders and to help target public funding towards the most suitable sites.

The HFWS Policy Map has been assembled from GIS layers using an objective list of datasets for relevant sensitivities and opportunities including agricultural land classifications, statutory designations for landscape, priority species and habitats and the cultural and historical environment, with a view to achieving a level of consistency with neighbouring local authority forestry strategy spatial guidance, including Aberdeenshire, Moray and the Cairngorms National Park Authority.

The HFWS is a dynamic document and an important aspect of the Strategy process is to review and update the policy context and accuracy of the underlying data to the spatial mapping guidance on a five yearly cycle and to monitor progress towards indicators and targets within the Strategy.

Highland Forest and Woodland Strategy

	introducing the Strategy	
2	Regulatory & Policy Framework	4
3	The Highland Forest & Woodland Resource	7
4	Challenges and Opportunities	13
5	Vision, Strategic Themes, Objectives & Outcomes	26
6	Delivering the Strategy	36
Li	ist of Tables	
	Table 1 Summary of spatial mapping criteria and information layers	38
Li	ist of Figures	
	Figure 1 Area covered by HFWS	1
	Figure 2 Forest cover in Highland	8
	Figure 3 Highland woodland cover - species composition	9
	Figure 4 Highland woodland cover - distribution of standing timber (m3 overbark)	11
	Figure 5 Highland woodland cover - distribution by ownership and woodland type	12
	Figure 6 50 year forecast of average annual availability of softwood per period ('000s of cubic metres overbark standing) in Highland	15
	Figure 7 50 year forecast of average annual availability of hardwood per period ('000s of	
	cubic metres overbark standing) in Highland	

Introduction

- 1.1 The Highland Council area covers some 26,000 km² a third of Scotland's landmass and is the largest local authority area in the UK. The forests and woodlands of the Highlands are iconic elements of the environmental, landscape and cultural fabric of the region as well as being significant contributors to the wider Highland economy. It is therefore of vital importance that the innate value, diversity, and need for sustainable management and expansion of this multi-functional resource are recognised, protected and championed.
- 1.2 The 2018 Highland Forest and Woodland Strategy (HFWS) sets out the important roles that forestry will continue to play in delivering a wide range of sustainable economic and rural development, environmental, social and community benefits. It presents the key issues, challenges and opportunities, together with a refreshed vision, strategic aims and objectives for the future expansion and stewardship of the Highland forest and woodland resource and associated industries over the next 20 years.
- 1.3 Development of the Strategy has been supported by consultation with a wide range of forest industry and woodland-related statutory agencies and other stakeholders, both individually and collectively, through the Highland and the Islands Forestry Forum.



Figure 1 Area covered by HFWS

Strategy Status & Purpose

- 1.4 In line with Scottish Planning Policy, the refreshed HFWS will become Supplementary Guidance forming part of the <u>Highland-wide Local Development Plan</u> (HwLDP) (1).
- 1.5 At the broadest level, the purpose of the HFWS is to provide a regional expression of how the national vision and priorities for the protection and expansion of Scotland's forest and woodland resource as set out in the Scottish Government's Land Use Strategy for Scotland, Scottish Forestry Strategy and other related Strategies will be achieved within the context of the Highlands, as defined by the administrative boundary of the Highland Council see Fig.1.
- 1.6 The HFWS's status as Supplementary Guidance will also link closely with the Council's <u>Trees</u>, <u>Woodland & Development Supplementary Guidance (2013)</u> adopted in order to assist the Council in determining planning applications, particularly those involving development proposals that could result in the loss of trees or woodland.
- **1.7** More specifically the purpose of the HFWS is to:
 - Identify the key issues and opportunities affecting forestry and woodlands in the Highlands;
 - Provide a promotional tool for raising awareness of the multi-faceted value of the Highland forest and woodland resource;
 - Guide Forestry Commission Scotland in the appraisal of funding applications for woodland expansion through the Scottish Government's Forestry Grant Scheme using the Strategy's strategic spatial mapping tool;
 - Assist Highland Council when consulted in connection with applications for grant support for woodland creation and management in support of the existing regulatory processes;
 - Influence and contribute to collaborative working with partner agencies, the forestry industry, landowners, land managers and communities in tackling key issues and realising the opportunities.

How has the 2018 HFWS changed since 2006?

- 1.8 Although a "Refresh" of the 2006 Strategy, which identified many issues and actions that are still relevant, the 2018 HFWS has been prepared against the backdrop of significant changes in the national and regional policy context and regulatory frameworks for forestry and wider land use. New priorities, challenges and opportunities facing the industry have also come to the forefront over the past decade.
- **1.9** Key differences between the 2018 HFWS and its predecessor Strategy include:
 - Preparation of the 2018 HFWS has been guided by the Scottish Government's <u>Right Tree</u>
 in the Right Place (2010)
 which superseded Circular 9/1999 on Indicative Forestry

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https://highland.gov.uk/info/178/local_and_statutory_development_plans/199/highland-wide_local_development_plan

² https://www.highland.gov.uk/downloads/file/354/trees_woodlands_and_development_supplementary_guidance

³ https://www.forestry.gov.uk/pdf/fcfc129.pdf/\$file/fcfc129.pdf

- Strategies and provides an updated framework for development of local authority regional strategies;
- The 2018 HFWS will be informed by a Strategic Environmental Assessment (SEA) and Habitat Regulations Appraisal (HRA).
- The 2018 HFWS has drawn on the Scottish Forestry Strategy (2006) for developing strategic themes for forestry in Highland that provide a regional interpretation of the national vision;
- Importantly, the 2018 HFWS provides updated indicative strategic guidance for woodland expansion in Highland through the availability of an interactive, online spatial mapping tool. This was derived from an updated set of mapping criteria broadly consistent with those used in the neighbouring forestry strategies for Aberdeenshire and Moray. Using these mapping criteria, the 2018 HFWS has mapped opportunities for woodland expansion at a strategic level using the following categories:
 - Preferred
 - Potential
 - Potential with sensitivities
 - Sensitive
 - Land above 550m (Montane)

2 Regulatory & Policy Framework

2.1 Since the 2006 Strategy there have been significant changes to the legislative, regulatory and policy frameworks that have a bearing on or interact with forests and woodlands at national and regional levels.

National Legislation, Regulation & Control

- 2.2 In 2016, the Scottish Government published its proposals for new arrangements for the governance and regulation of forestry in Scotland. These include putting in place new primary legislation and an organisational structure to fully devolve forestry in Scotland and accountability to Scottish Ministers changes that, subject to consultation, will be finalised during the lifetime of this refreshed HFWS. Until this happens and subject to outcomes of Brexit negotiations, forestry in Scotland will continue to be regulated primarily by Forestry Commission Scotland under:
 - Forestry Act 1967 (as amended) (1);
 - Plant Health Act 1967
 - The Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017 (3)
 - Forestry and Land Management (Scotland) Act 2018
- 2.3 Regulation of some tree felling also comes under the scope of the <u>Town and Country Planning</u>
 (Scotland) Act 1997 (as amended by the Planning (Scotland) Act 2006)
 (4)
- In addition, the <u>UK Forestry Standard (2017)</u> sets out the national tenet for sustainable forest management together with accompanying guidelines. However, the HFWS also encourages woodland managers and owners to achieve UK Woodland Assurance Standard (UKWAS) certification wherever practicable to ensure stronger provisions for biodiversity.

UK Forestry Standard

The UK Forestry Standard (UKFS) is the reference standard for sustainable forest management in the UK providing a basis for regulation and monitoring. The UKFS is supported by a series of guidelines covering biodiversity, climate change, historic environment, landscape, people, soils and water.

¹ https://www.legislation.gov.uk/ukpga/1967/10/contents

² https://www.legislation.gov.uk/ukpga/1967/8

³ http://www.legislation.gov.uk/ssi/2017/113/contents/made

⁴ https://www.legislation.gov.uk/ukpga/1997/8/contents

⁵ https://www.gov.uk/government/publications/the-uk-forestry-standard

National Policy

- **2.5** The overarching context for the HFWS flows primarily from:
 - The Scottish Government's updated <u>Land Use Strategy (getting the best from our land)</u>
 (2016) (6) with its stated potential "for a new strategic vision for the uplands";
 - Scottish Forestry Strategy (2006) (7) which marks an important shift in the emphasis of forestry policy, focusing on seven important themes that reflect the role of trees and woodlands in meeting a broad range of objectives for sustainable development.
 - The Scottish Forest Strategy was under revision in 2018 at the time of writing the HFWS. There is a commitment to ensure that any objectives, priorities and policies contained with the forthcoming revised Strategy (2018) will be incorporated into the HFWS in due course and as required.
 - The Scottish Government's Rationale for Woodland Expansion (2009) which provides detail on how woodland expansion can best increase the delivery of public benefit from Scotland's Land;
 - Scottish Government Policy on Control of Woodland Removal (2009) whichsets out the policy and criteria for determining the acceptability of woodland removal which should be taken into account when preparing development plans and determining planning applications;
 - The Climate Change Plan 2018-2032 affirms a target of planting 100,000 hectares between 2012 and 2022. The long term ambition is that by 2032 Scotland's woodland cover will increase to 21% of the land area.
 - <u>Scottish Planning Policy</u> which contains policies to guide development management.
 - National Planning Framework 3 (2014) which reiterates the need to plan for the expansion of woodland cover and creation of green networks;
 - Scottish Government Community Empowerment Act (2015) which helps to empower communities through the ownership and control of land;
 - <u>Draft Climate Change Plan (2017)</u> which sets out the Scottish Government's targets for new planting and increased promotion of home grown timber in UK construction.
 - <u>The Scottish Land Rights and Responsibility Statement</u> which is a Statement of land rights and responsibilities in Scotland, as required by Land Reform (Scotland) Act 2016.
 - The <u>Code of Practice on Deer Management</u> which sets out how land managers can deliver sustainable deer management. It specifies land managers' responsibilities and helps them to identify what they must do, should do and could do to manage deer sustainably.
- 6 http://www.gov.scot/Publications/2016/03/5773
- 7 https://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/forestry-strategy
- 8 https://scotland.forestry.gov.uk/images/corporate/pdf/ForestExpansion.pdf
- 9 https://www.forestry.gov.uk/pdf/fcfc125.pdf/\$file/fcfc125.pdf
- 10 http://www.gov.scot/Publications/2018/02/8867
- 11 http://www.gov.scot/Topics/Built-Environment/planning/NPF3-SPP-Review/NPF3
- 12 http://www.legislation.gov.uk/asp/2015/6/contents/enacted
- 13 http://www.gov.scot/Resource/0051/00513102.pdf

2 Regulatory & Policy Framework

 The <u>Scottish Biodiversity Strategy</u> which shows how the Scottish Government, its public agencies, Scottish business and others can contribute to the Strategy's aims as well as supporting sustainable economic growth.

Local Policy

2.6 At local level the overarching context for the HFWS is provided by Highland-wide Local Development Plan (2012) and associated supplementary guidance.

Scotland's Forest Resource

- 3.1 Scotland's trees, woodlands and forests make a vital contribution to the nation's economic, environmental and social wellbeing as well as currently offsetting over 10 million of Scotland's annual 70 million tonnes of CO² emissions.
- 25,000 full time equivalent jobs in forestry-related businesses. Scotland is also home to world-leading forestry and wood businesses that have seen considerable growth with investment of £250m in the last decade.
- 3.3 Over 55% of Britain's trees are in Scotland where the total area of woodland and forest is currently 1.42 million hectares 18% of Scotland's total land area. Whilst 70% of Scotland's forests were planted during the second half of the 20th Century, since the 1990s, however, there has been a significant shift in the type and location of new planting.
- 3.4 Native woodlands are also a vital part of Scotland's natural and cultural heritage. Although what is left today is only a small proportion of the native woodland that once covered much of Scotland, much has been done since the 1980s to protect and restore the areas that remain, a considerable proportion of which is in Highland.
- **3.5** Although woodland cover has increased significantly in the past 50-60 years, it nonetheless still compares unfavourably with the European average of 37%. Over the last decade planting targets have failed to be met but this trend is likely to be reversed over the coming years.
- **3.6** Failure to increase planting is a threat to security of wood supply for the wood processing industries, and business confidence, inward investment and activity elsewhere in the forestry sector. In addition the failure to increase tree planting may result in soil erosion, increased greenhouse gas emissions and a loss of biodiversity.

Forest and Woodlands in Highland

3.7 Forestry is one of the most extensive uses of land in Highland with a total woodland cover of about 310,000 hectares or 13% of land area. See Figure 2 'Forest cover in Highland'. With reference to a 2015 study "The Economic Contribution of the Forestry Sector in Scotland", the forestry sector provides over 25,000 FTE jobs, of which a significant number will be located within Highland.

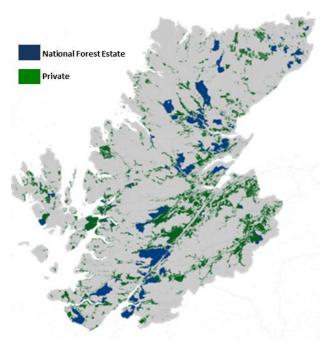


Figure 2 Forest cover in Highland

- **3.8** Most of the woodland expansion in the Highlands up to the late 1980s was aimed at softwood timber production through establishment of large-scale conifer plantations.
- **3.9** Development of the commercial forestry resource has typically been concentrated in areas with favourable soils and climate notably within the Inner Moray Firth, Strathspey and Great Glen corridor towards Fort William and also to the North and North West, including substantial areas within Caithness and Sutherland.
- **3.10** In recent decades however, the type of and objectives for new planting have shifted towards the restoration and expansion of the Highland's historically depleted native woodlands, together with more multi-functional woodland.
- **3.11** Woodland also delivers a wide range of ecosystem services with non-commercial woodland often being important in relation to resources such as biodiversity, natural flood management, protection of water quality and fisheries, air quality benefits, recreation and tourism as well as carbon storage. Ancient woodland plays a particularly important role in absorbing runoff and conserving groundwater

Woodland Types and Characteristics

Productive Woodland

3.12 Productive woodland is that primarily grown to be harvested for timber production. Productive woodland can comprise both native and non-native species. The HFWS strongly encourages an increased proportion of productive woodland which uses native species.

3 The Highland Forest & Woodland Resource

- 3.13 Of the total woodland area in Highland, 75% is coniferous woodland (1), broadly mirroring that for Scotland as a whole.
- **3.14** The distribution of conifer species is dominated by Sitka spruce (27%), Scots pine (21%) and Lodgepole pine (19%) with birch being the dominant broadleaved species at 17% of the total woodland cover as shown in Figure 3 'Highland woodland cover species composition'.

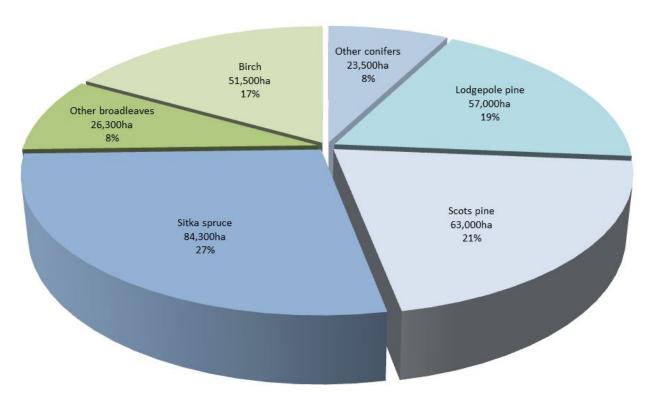


Figure 3 Highland woodland cover - species composition

Native Woodland

- **3.15** HFWS promotes the protection of existing and expansion of new native woodlands which play an important role in supporting a variety of species, contribute positively to landscape character and environmental targets.
- **3.16** Remnant ancient woodland is irreplaceable and therefore of particular importance where it exists throughout the Highlands. HFWS strongly supports the protection and restoration of these valuable habitats.
- **3.17** The area of native woodland in Highland (as recorded in the Native Woodland Survey for Scotland: Highland 2014) is 130,000 Ha which is 37% of the total woodland area and 5% of the total land area of Highland.
- **3.18** The main priority habitat types are native pinewoods (43%, including the iconic areas of remnant Caledonian Forest), upland birchwoods (34%) and wet woodland (9%).

¹ NFI provisional estimates for Highlands & Islands Conservancy; October 2014, Forestry Commission

² Native Woodland Survey for Scotland: Highland; January 2014, Forestry Commission Scotland

3 The Highland Forest & Woodland Resource

- **3.19** Many of the native woods in Highland are highly semi-natural in their present structure and composition with Scots pine and downy birch the most common native tree species in the upper canopy.
- **3.20** Less common woodland habitats include upland oakwoods (4%), upland mixed ash woods (2%) with the remaining woodland made up of habitats including hazel woodland and Montane willow scrub.

Woodland Habitat Networks

- **3.21** An evolving and increasingly significant woodland type within Highland, particularly on marginal peat sites where the design of conifer plantation restructuring is an on-going process, is the establishment of transitional woodland edges to help protect and enhance forest margins where these interface with peatlands, on which otherwise traditional conifer restocking is no longer appropriate.
- 3.22 Riparian woodland is defined as any woodland on the edge of a watercourse or waterbody. The main benefits of riparian woodland are improvements to water quality, shading to reduce summer temperatures for salmon and freshwater pearl mussel, bank stabilisation and an increase in habitat diversity. Rivers and burns are natural corridors along which riparian woodland can create woodland habitat linkages within and between river catchments. Gullies formed by upland burns can be refuges for woodland remnants, also containing associated understorey species.
- **3.23** Woodland habitat networks also provide important ecological connections across the landscape and as buffers around rich or ancient woodland sites.

Timber Supply & Availability

The Forestry Commission's 2014 National Forestry Inventory data indicates that there are currently some 62 million cubic metres of standing timber within Highland forests and woodlands, of which 36% comprises Sitka spruce, 22% Scots pine and 17% Lodgepole pine representing the three dominant productive conifer species. Only 13% of total standing volume comprises other conifer species with the 12% balance of 7.4million m³ being broadleaves as shown in Figure 4 'Highland woodland cover - distribution of standing timber (m3 overbark)'.

³ NFI provisional estimates for Highlands & Islands Conservancy; October 2014, Forestry Commission

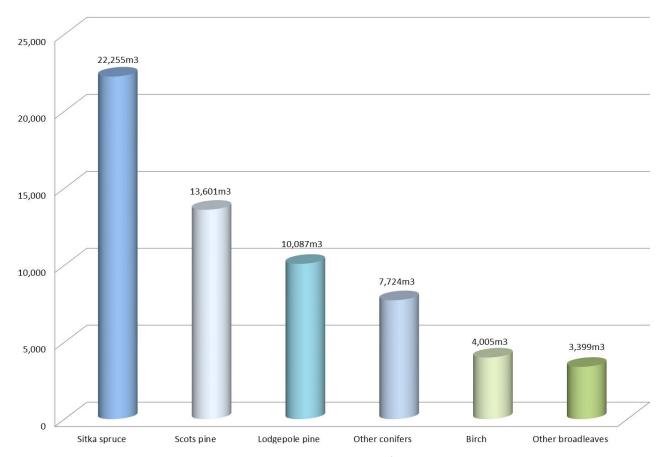


Figure 4 Highland woodland cover - distribution of standing timber (m3 overbark)

- 3.25 The inventory also indicates that an estimated annual output of some 2 million m³ and 45,000 m³ of softwood and hardwood timber respectively will become available from Highland forests over the period 2017-21 rising to 3.2million m³ and 80,000 m³ respectively by 2037.
- **3.26** After this period however, there is a marked drop off in timber availability, the risks of which are highlighted below.

Timber Processing

- important economic contribution to the wider forestry sector through the provision of market outlets for the region's small roundwood and sawlog dimension timber. The sector has seen considerable inward investment over the past two decades which was further consolidated in early 2016 with Norbord's announcement of its £100m investment into an additional line within its oriented strand board plant at Dalcross, almost doubling its annual intake of small roundwood.
- **3.28** Elsewhere, Highland has seen the expansion and modernisation of the region's key sawmilling businesses including BSW in Fort William and Boat of Garten, JDG Munro at Dingwall, John Gordon and Tulloch Timber at Nairn.

3 The Highland Forest & Woodland Resource

3.29 In addition to small roundwood processing at Norbord there is also the Balcas combined heat and power plant at Invergordon that generates 8MW of electricity and manufactures 100,000 tonnes per annum of woodfuel pellets and local woodfuel markets have also developed, often as a result of bringing small, unmanaged and remote woodlands back into more active management.

Ownership

3.30 As elsewhere in Scotland, ownership of woodlands is fragmented, although there has been a trend over the past decade for an increasingly large proportion of private land within Highland to come under the management of a small number of landowners. Currently 66% of the Highland forest and woodland resource is under private ownership (including an increasing proportion of community owned or managed woodlands) with the balance of 34% comprising National Forest Estate, owned by Scottish Ministers and managed by Forestry Commission Scotland and its successor body Forestry and Land Scotland. This means that the private sector will have an increasingly important role to play in the stewardship of Highland's forest and woodland resource as shown in Figure 5 'Highland woodland cover distribution by ownership and woodland type'.

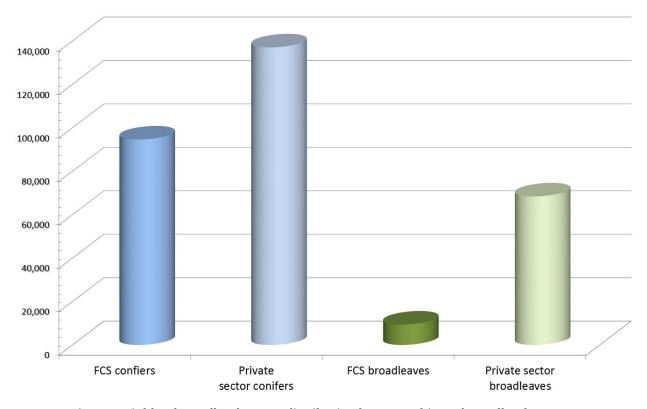


Figure 5 Highland woodland cover - distribution by ownership and woodland type

4.1 This section outlines some of the key forest and woodland-related challenges, constraints and opportunities that have come to the fore both nationally and within Highland over the past decade. The issues and opportunities were identified in consultation with stakeholders as influencing factors in the context of the development of the Strategy's vision, themes and objectives.

Woodland Expansion

- **4.2** The Climate Change Plan (2018-32) affirms a target of planting of 100,000 hectares between 2012 and 2022. The long term ambition is that by 2032 Scotland's woodland cover will increase to 21% of the land area.
- **4.3** The regional distinctiveness of Highland brings many challenges and opportunities in relation to woodland expansion. The geographical scale of Highland provides significant opportunity for a wide variety of woodland types. However, issues such as remoteness, accessibility and difficult terrain can make woodland expansion challenging.
- **4.4** There are significant opportunities to enhance and expand native woodlands by regeneration and planting in recognition of their valuable contribution to ecosystem services and tourism as well as increasing opportunities for timber production.
- 4.5 The scarcity of better arable land limits opportunities for farm woodland creation and expansion. However, there should be engagement with farmers and crofters to help identify where opportunities exist to expand the planting and management of farm woodlands including the development of Highland agroforestry systems.
- **4.6** Furthermore there is now a presumption against new planting on many peatland soils particularly where peat depth is > 50cms where there may be net negative environmental impacts of planting in terms of greenhouse gas emissions. In relation to restocking there is separate guidance available from FCS.

Woodland Removal

- **4.7** A key strategic issue facing Highland, as elsewhere in Scotland, is the net loss of woodland cover in the region, together with the historic shortfall in new planting compared with national targets, particularly in respect of productive woodland.
- 4.8 In 2009 Scottish Government a policy on the control of woodland removal to provide direction for decisions on woodland removal in Scotland. The policy was in support of Scottish Forest Strategy and the Climate Change Scotland Act 2009 to meet the target of creating 100,000 hectares of new woodland over the period 2012-22. The permanent loss of woodland cover can be the result of factors such as development, restructuring of forests and the enhancement of priority habitats such as peatland restoration in the Caithness and Sutherland Natura site. Browsing by deer and other livestock can prevent successful woodland regeneration and be a cause of ancient woodland degradation.
- **4.9** More emphasis is therefore required in prioritising efforts to reverse the decline in productive forestry by supporting opportunities for expansion of high quality productive planting and restocking on the most appropriate sites and where there are appropriate transport links

4 Challenges and Opportunities

4.10 Whilst it is recognised that the diverse range of ownerships across Highland will have a correspondingly diverse range of objectives and priorities for planting, the HFWS provides the opportunity to support and help target public funding for appropriate woodland creation and long term forest plan proposals.

Future Timber Supplies and the "Timber Gap"

- **4.11** This anticipated significant increase in availability of hardwood timber from Highland forests provides strategic business opportunities for the development of the hardwood sector, including timber utilisation and downstream markets, particularly within the private sector.
- **4.12** The 2014 National Forest Inventory's 50-year UK timber availability forecast shows a steadily increasing supply of softwood timber until the late 2030s followed by a sharp decline thereafter. This is briefly summarised below the detailed report can be found here.
- **4.13** The forecast for Highland follows a similar trend as shown in Figure 6 ' 50 year forecast of average annual availability of softwood per period ('000s of cubic metres overbark standing) in Highland'. This drop-off has serious implications for future security of softwood timber supplies post-2030 and with it, the potential for job losses and loss of confidence, reduced new investment by the wood processing sectors in Highland and missed opportunities in contributing to climate change targets.
- **4.14** Conversely, the forecast for hardwoods over the same period shows a marked increase in availability as shown in Figure 7 ' 50 year forecast of average annual availability of hardwood per period ('000s of cubic metres overbark standing) in Highland' this arising as a consequence of a corresponding peak in native broadleaved woodland planting during the period 2000-10.

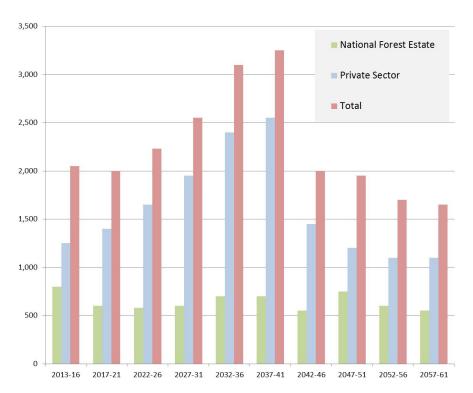


Figure 6 50 year forecast of average annual availability of softwood per period ('000s of cubic metres overbark standing) in Highland

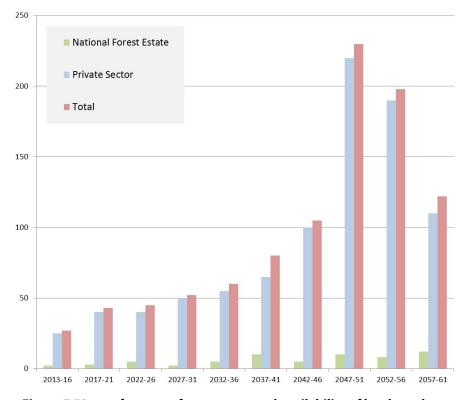


Figure 7 50 year forecast of average annual availability of hardwood per period ('000s of cubic metres overbark standing) in Highland

Timber Transport

- **4.15** A key feature of the transport network within Highland is that only 950km (12%) of the total public road network length of 7,700km are trunk roads. The balance of 88% (6,776km) are predominantly minor rural roads which provide the primary access to the forest resource and are within the Council's direct responsibility for maintenance.
- **4.16** There are increasingly significant constraints on the use of the public road network by the forestry industry in parts of the Highlands, particularly in remote areas. These areas, which timber lorries can struggle to access, are served by minor rural roads which are often single-track, have structural limitations and are in poor condition.
- 4.17 Reductions in local authority budgets for maintaining the rural road network are a limiting factor in the economic viability and sustainable management of the forest resource and its associated supply chain. In parts of Caithness and Sutherland the inadequacy of the rural road network to accommodate predicted volumes of future timber production is leading to the likelihood of long term restrictions being placed on timber traffic. Furthermore, planning for expansion and restocking will have to take road infrastructure limitations into consideration.
- 4.18 Through Scotland's network of Regional Timber Transport Groups, including the Highland Timber Traffic Group (HTTG), the forest industry has worked collaboratively with the Government, local authorities and communities to identify agreed routes for timber haulage vehicles to use, seek alternatives to road transport and invest in the roads infrastructure, the latter with support from the Strategic Timber Transport Fund
- 4.19 The Highland Agreed Routes Map developed by the HTTG to categorise the roads leading to forests in terms of their capacity to sustain the likely level of timber haulage will remain at the heart of the partnership approach to help mitigate many timber transport challenges in the region. Furthermore the <u>Highland Timber Transport Group Flow Country Strategy</u>
 2014-16 (2016)
 (3)
 highlighted the unrealised potential for rail to play a significant part in mitigating the recognised constraints on the public road network.
- The <u>HITRANS Branchliner Report (2016)</u> went further by pointing unequivocally to the need for a modal shift to establish the feasibility of transferring the transport of substantial quantities of timber from road to rail, thereby establishing a more integrated solution to future timber transport across keys timber producing areas of Highland. Further concerted action will be required to address the most difficult to access areas and the HTTG will continue its vital role in coordinating activity and supporting and promoting potential alternative modes of transport.

¹ Scottish Transport Statistics No.35 2016, February 2017, Transport Scotland

² https://scotland.forestry.gov.uk/supporting/forest-industries/timber-transport/strategic-timber-transport-scheme

³ https://timbertransportforum.org.uk/attachments/article/74/ HTTG%20Publication%202014%20Flow%20Country%20Strategy.pdf

⁴ https://hitrans.org.uk/Corporate/Research/Rail

Climate Change

4.21 Helping to **mitigate** and **adapt** to climate change will be a key role for Highland's forests and woodlands over the foreseeable future.

Mitigation

- **4.22** Mitigation involves the reduction of carbon emissions either by substituting the use of fossil fuels or by increasing the capacity of the environment to absorb and store carbon and thereby contribute to national and regional climate change targets.
- **4.23** Opportunities for mitigation include:
 - New planting of trees to absorb carbon where appropriate and with particular reference to Forestry Commission Scotland guidance in relation to planting or restocking on areas of deep peat;
 - Carbon offsetting new woodlands created in Highland could become verified under the <u>UK Woodland Carbon Code</u> and thereby gain access to potential carbon markets;
 - Use of wood and biomass as an energy source supporting forests and woodlands that can contribute to and bolster the woodfuel supply chain will contribute to a lower carbon economy for Highland.
 - Increased use of timber as a building material helping to reduce carbon emissions associated with the manufacture and transportation of more energy intensive materials such as steel and concrete and locking up carbon in the longer term. There is a growing body of best practice from across Scotland with exemplars within Highland demonstrating how timber can be used in a range of building types, for example:
 - "Sullivan Report" (6)
 - "Code for Sustainable Homes" (7)
 - Sustainable Construction Timber (8)
 - Designing Housing with Scottish Timber

 (9)

⁵ https://www.forestry.gov.uk/carboncode

⁶ www.sbsa.gov.uk/sullivanreport.htm

⁷ www.communities.gov.uk/planningandbuilding

⁸ www.forestry.gov.uk/sustainableconstruction

⁹ https://scotland.forestry.gov.uk/images/corporate/pdf/designing-with-Scottish-Timber.pdf

4 Challenges and Opportunities

Adaptation

- **4.24** Adaptation involves planning and managing woodland ecosystems to minimise the harmful impacts of climate change. This can include increases in the frequency of flooding, forest fires, drought highlighting the need to help woodland habitats adapt to climate change.
- **4.25** Opportunities for adaptation include:
 - Sustainable drainage trees and woodland are recognised as being a key component of Sustainable Urban Drainage Systems (SUDS);
 - Tree planting to reduce flood risk this has an important role to play in a package of
 measures designed to stabilise slopes and slow the flow of water from upland areas to
 reduce the impact on downstream communities and infrastructure. Existing forests and
 woodland can also play a key part in sustainable approaches to flood management;
 - Species selection consideration as to how changing climate will affect the future management and species composition of the Highland forest resource, given that it is already having impacts elsewhere in UK forestry, including growth rates and the increased incidence of pests and diseases. As management horizons for trees and woodlands are inherently long, planning for enhanced adaptability and resilience to climate change, for example through a broader choice of suitable species, needs to be given increased emphasis within woodland creation and restructuring plans.

Tree Health

- 4.26 Tree health is currently a major issue in UK forestry generally but with a number of particularly destructive pests and diseases at the forefront in Scotland and Highland that are constraining woodland management options notably pine lappet moth (*Dendrolimus pini*), *Dothistroma* needle blight (DNB), ash dieback (*Chalara fraxinea*), Dutch elm disease and *Phytophthora ramorum*. Dothistroma in particular has caused widespread damage in parts of Highland resulting in the premature clearance of large swathes of productive forestry and associated economic losses. Pests and diseases such as Chalara also have potential impacts on native woodlands.
- **4.27** The integrity of the native flora and fauna of Highland woodlands is also threatened by invasive non-native species, particularly *Rhododendron ponticum*. National programmes to ensure its removal from Scotland's National Forest Estate are well underway locally. An integrated landscape scale approach is encouraged to tackle the issue on a multi-ownership catchment-wide basis.
- **4.28** More opportunities must be taken to diversify structural and species composition through woodland creation and restructuring proposals. This will help defend against increasing threats from pathogens and will also bolster the resilience of habitats through increasing biodiversity. Where opportunities exist every effort should be made to regenerate ash and elm in remaining refuges.

Deer Management

- **4.29** Deer management is a key issue in the Highlands where there are inherent natural tensions between the interests of landowners for whom deer stalking is a key land use and source of income and those who consider that grazing and browsing pressure, primarily by deer (but also by sheep), continues to be too high to fulfil forest management and conservation objectives.
- **4.30** In some areas however, deer densities are now in better balance with management objectives and there has been overall improvement in the proportion of designated features of nature conservation importance including native woodlands achieving favourable condition, whilst elsewhere, deer impacts are still preventing recovery or enhancement of important habitat.
- **4.32** Deer fencing is a useful short term solution to protect young or vulnerable woodland but it does not address a wider deer management issue. HFWS supports a collaborative approach towards the management of deer where fencing may be seen as only part of the longer term solution. Further guidance on deer fencing can be found here.

Community Engagement & Empowerment

- **4.33** Woodlands help foster community cohesion by creating a sense of place, connecting individuals and communities with their local identity, land and cultural heritage and help retain and support rural populations in fragile communities.
- **4.34** Forestry has also been shown to be an effective catalyst in community capacity building by providing opportunities for community ownership of woodlands that empowers communities to contribute directly to achieving locally relevant sustainable rural development, environmental, biodiversity, recreational and health benefits.
- **4.35** There are some 50 established community groups and projects across Highland many of which own and /or manage local woods ranging from ancient semi-natural woodlands to large conifer plantations and urban woods. These include Abriachan, Aigas, Culag, Dunain, Dunnet, Evanton, Glengarry and Tormore.

¹⁰ http://www.snh.org.uk/pdfs/publications/corporate/DeerManReview2016.pdf

¹¹ https://www.nature.scot/professional-advice/land-and-sea-management/managing-wildlife/managing-deer/scotlands-wild-deer-national-approach

¹² https://www.nature.scot/professional-advice/land-and-sea-management/managing-wildlife/managing-deer/code-practice-deer-management

4 Challenges and Opportunities

- 4.36 The Scottish Government's Community Empowerment Act (2015) is designed to help empower community bodies through the ownership of land and buildings and also to improve outcomes for communities by improving the process of community planning. The Highland community sector has played an influential role over the past two decades in the expansion and development of community woodland ownership for example, through use of the former National Forest Land Scheme and the successor Community Asset Transfer Scheme (CATS).
- **4.37** The CATS provides the HFWS with the opportunity and rationale for more effectively supporting and promoting the future of community land ownership and underpin its vision for increasing areas of forests and woodland in Highland that further strengthen cultural and emotional connections with its communities.
- **4.38** Furthermore, under the <u>Land Reform (Scotland) Act (2016)</u> there is a requirement for engaging with communities with an interest in forestry and woodland-related development proposals.
- **4.39** Opportunities for the creation of new Woodland Crofts should be identified in order to encourage a locally-focused approach to forestry which delivers benefits to local and often remote communities. The woodland crofts approach may help counter a number of the challenges facing forestry in Highland through more intensive management with a focus on local processing and utilisation.

Landscape

- **4.40** Highland's woodlands and forests provide integral and often iconic elements of the landscapes that attract people to live, work and visit the region. A significant proportion of landscapes that are designated as National Scenic Areas (NSA) and Special Landscape Areas (SLA) identify woodlands as being part of their special qualities.
- **4.41** Highland also contains a large proportion of Scotland's Wild Land Areas (WLAs); extensive areas of the highest wildness which are largely semi-natural that show minimal signs of human influence.
- **4.42** Whilst WLAs are not a statutory designation, they are recognised as a nationally important asset in Scottish Planning Policy. In order to safeguard their distinctiveness and qualities, appropriate protection and enhancement measures need to be considered.
- **4.43** It is recognised that protecting WLAs requires supportive management and that in many areas opportunities for appropriate enhancement often exist. In the context of a forestry and woodland strategy two aims of which are to guide woodland expansion, and encourage collaborative working so that opportunities for land use change can be realised it is appropriate to consider the potential for significant effects on the qualities of WLAs at an

¹³ http://www.legislation.gov.uk/asp/2015/6/contents/enacted

¹⁴ https://scotland.forestry.gov.uk/managing/get-involved/community-asset-transfer-scheme

¹⁵ http://www.legislation.gov.uk/asp/2016/18/contents/enacted

- early stage when developing woodland creation proposals. Where appropriate and on a case-by-case basis, this will enable a proportionate assessment of any impacts to be made, which can be used to inform the detail of planting proposals.
- 4.44 Further information on Wild Land Areas, their individual descriptions along with technical guidance on assessing impacts can be found on the Scottish Natural Heritage website
 Spatial data on WLAs can be found via Scotland's Environment Web

Biodiversity

- **4.45** Our forests and woodlands also provide habitats for a variety of plants and wildlife and Highland supports over three quarters of the UK's priority habitats and species found in Scotland. Wooded areas host a rich and diverse range of flora and fauna. Ancient and other native woodlands are of particular importance, not just because of their innate biodiversity value, but for the soil structure, function and diversity of flora developed over long periods of time making them an irreplaceable resource.
- **4.46** The remnants of Scotland's Caledonian pinewoods are arguably Highland's most iconic cultural, scenic and wildlife assets. Having naturally seeded and grown since the last ice age but subject to widespread clearance and grazing over the centuries, only some 12,000 Ha currently remain, distributed over some thirty five key sites stretching from Shieldaig in the far west, to Loch Einig in Sutherland to the north, north of Loch Lomond to the south and Deeside to the east. At least twenty of these areas are designated as SSSIs, emphasising their conservation importance.
- 4.47 Highland's west coast and glens also host important remnants of Scotland's Atlantic and temperate rainforest woods including the Loch Sunart oakwoods which provide some of Europe's best examples of lichen epiphyte habitats. Classed as cool temperate rainforest, these woodlands are now highly fragmented having been widely felled in the 18th and 19th centuries and are threatened by over grazing and invasive species. These are therefore high priority conservation areas. The Atlantic Woodland Alliance has recently been established and a 10 year action plan 'Saving Scotland's Rainforest' is being prepared.
- **4.48** In hosting these and other priority habitats, Highland plays a key role in contributing to Scotland's <u>2020 Challenge for Scotland's Biodiversity (2013)</u> strategy and the <u>Highland Biodiversity Action Plan (2015)</u> (19)
- **4.49** The HFWS provides an on-going opportunity to support well-designed and sensitive woodland management and expansion proposals that will complement and restore Highland's native woodlands. This will in turn protect ancient and semi-natural woodland and maintain and enhance biodiversity.

¹⁶ https://www.nature.scot/professional-advice/landscape-change/landscape-policy-and-guidance/landscape-policy-wild-land

¹⁷ https://www.environment.gov.scot/

¹⁸ http://www.gov.scot/Resource/0042/00425276.pdf

¹⁹ http://www.highlandbiodiversity.com/highland-bap.asp

Access, Recreation & Tourism

- **4.50** The high quality environment of Highland underpins much of its economic activity including food and drink and tourism which gives the area a "natural competitive" advantage. For Highland's forests and woodlands to continue to provide their many health, recreation and tourism benefits, they need to be accessible for visitors of all abilities. There also needs to be on-going recognition of the contribution that landowners make in providing such benefits alongside their other management objectives.
- **4.51** The economic contribution of forests and woodlands to the Scottish tourism industry has been estimated at over £4.5 billion per year; in Highland, their value is becoming more clearly recognised as a key element of tourism destinations with cycling tourism, mountain biking and wildlife tourism making significant contributions.
- **4.52** Woodland paths are an important constituent of the Core Path Plans and as new woodland paths are developed there is an opportunity to extend the Core Path Network.
- 4.53 There are a number of important tourism transport corridors and destination routes in Highland, including the road routes of the A9 through Strathspey, the Great Glen, Invergarry to Skye and Inverness to Ullapool, and the designated Long Distance Routes of the West Highland, Great Glen and Speyside Ways and the more recently promoted North Coast 500 route. These provide important opportunities for further strengthening connections between tourism and Highland forests and woodlands, and with the concept of establishing more "forest parks" coming to the fore, forests such as Ardverikie, Morvern and Achnashellach that provide the visual backdrop to many of the region's tourism experiences, could also be added to this number.
- **4.54** There are also opportunities to improve the setting of important cultural heritage sites and landscapes through the removal of regeneration or past planting and by restoring woodland where the historical evidence indicates that this was present during the life of the sites.
- **4.55** The many designed landscapes, such those included in the Historic Scotland / SNH Inventory of Gardens and Designed Landscapes have a significant woodland element and their sustainable management and promotion would also contribute to cultural and tourism benefits. Likewise, the National Tree Collection of Scotland at Corrour and Lael would also add to local tourist infrastructure.
- **4.56** Such wealth of natural heritage provides Highland not only with physical "natural capital" but also significant associated economic business development opportunities.

Health and Wellbeing

4.57 There is mounting evidence which demonstrates that access to good quality green space - including trees, woodlands and nearby countryside - can make a significant contribution to improvement of physical and mental health and recovery times.

- 4.58 At a national scale, the health sector is recognising such benefits as one of the determinants of health and there are a number of initiatives that are actively working with the sector to help promote and deliver them. These include the NHS <u>Green Exercise Partnership</u> (GEP) and the FCS <u>Health Strategy</u> (21).
- **4.59** Since 2010 the GEP has provided funding to support demonstration projects across Scotland including The New Craigs Greenspace project near Inverness.
- In its Annual Report of the Director of Public Health, Highland (2014), NHS Highland recognised the opportunities to improve human mental and physical health through exercise and general enjoyment of the outdoors and called for greater investment in our natural capital to protect existing ecosystems and improve the health of our natural environment.
- 4.61 There are three NHS Highland hospitals within the HFWS area the District General Hospital at Raigmore in Inverness and two Rural General Hospitals in Wick and Fort William. There are opportunities to establish/foster stronger links and engagement between the Highland health sector, public agencies, partner organisations. and local community woodland groups to identify more ways to deliver the NHS Highland vision and contribute to the health and wellbeing of the region's communities.

Trees, Woodland & Development

- **4.62** The HFWS offers opportunities to proactively promote and integrate the benefits provided by trees, woodlands and forests in relation to development planning and management. This approach is now commonly referred to as <u>ecosystem services</u> . This could include more innovative approaches to living and working sustainably within woodlands, for example woodland crofts and hutting.
- 4.63 Scottish Planning Policy (SPP), the Highland-wide Local Development Plan and Trees,

 Woodlands and Development Supplementary Guidance will be used to guide development where it may impact on trees and woodlands. Scottish Government policy on the Control of Woodland Removal will be a consideration where proposals involve a permanent change in land use resulting in a net loss of woodland.

Forestry Sector Labour & Skills Availability

4.64 Over 25,000 people work in Scotland's forestry and related industries of which 19,500 are employed in forest management and timber processing and over 6,000 in forestry-related tourism roles.

- 20 http://www.healthscotland.com/topics/settings/nhsgreenspace/index.aspx
- 21 https://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/health-strategy
- 22 http://www.nhshighland.scot.nhs.uk/News/Pages/GreenspaceinitiativestartsatNewCraigs.aspx
- 23 http://www.nhshighland.scot.nhs.uk/Publications/Documents/ Director%20of%20Public%20Health%20Annual%20Report%202014.pdf
- 24 https://www.gov.uk/guidance/ecosystems-services
- 25 https://www.highland.gov.uk/directory_record/683412/trees_and_woodland

4 Challenges and Opportunities

- **4.65** Whilst the forest industry can be an attractive and rewarding place to work, offering a wide range of job opportunities with the capacity to double in size over the next ten years, the current forestry workforce is ageing and is not expanding at a sufficient enough rate to meet the growing demands of the sector. Furthermore, as 94% of forestry businesses have less than 10 staff, the costs of providing accessible entry points to the sector such as those offered through the Scottish Government's <u>apprenticeship programme</u> and of delivering on-going training for those within it are seen as a significant barrier for these small businesses.
- **4.66** Recognising the importance of a skilled workforce to the sustainability of Scotland's forest and timber sector, The Scottish Forest and Timber Technologies Industry Leadership Group, has established a Skills Working Group in order to develop a Skills Investment Plan, in conjunction with Skills Development Scotland, which will outline a plan of action to ensure the industry has the skilled and diverse workforce it requires to enable its continued growth.
- **4.67** Highland is well placed to contribute to these actions with its breadth of forestry, timber processing and construction businesses and its significant knowledge base in community and crofter forestry initiatives. Furthermore, the Scottish School of Forestry, Inverness College, UHI is a centre of excellence for research, promoting the sector as an attractive career choice and providing forestry training

4.68 BREXIT & Changes in Forestry Legislation & Regulation

- **4.69** The impact on the Highland forestry sector of leaving the European Union is as uncertain as it is for Scotland and UK as a whole. Confor and other forest industry representatives have identified a range of potential impacts on the forestry sector under three main themes:
 - Legislative & Regulatory Affairs (including issues such as EIA Regulations, Birds & Habitats Directives, Plant Health, Employment and Health & Safety Law);
 - Public Funding (including the support for woodland creation and management, supply chain and timber processing, community development and research);
 - Trading & Markets (including issues such goods, labour, timber & construction, renewable energy and land).
- **4.70** In terms of specific forestry legislation and regulation, with the introduction of the Forestry and Land Management (Scotland) Bill in 2018, there will be changes to forestry legislation in Scotland. Encompassing forestry and land management, the Bill recognises the wider benefits that forestry can deliver and has been designed to provide a modern approach to forestry development, support and regulation where forestry will be more fully accountable to Scottish Ministers and the Scottish Parliament.
- **4.71** It is anticipated that changes resulting from the Forestry and Land Management (Scotland) Bill would be implemented in 2019.

²⁶ https://www.apprenticeships.scot/

http://www.gov.scot/Topics/farmingrural/Forestry/completingdevolution/forestrylandmanagementbill 27

4 Challenges and Opportunities

4.72 Although traditionally geared towards long term planning, the forestry sector is well accustomed to the constantly evolving dynamics of its policy and support structures and is sufficiently resilient and sustainable to adapt. Opportunities also exist to regularly review local forestry strategies to maintain support for forestry by responding to major structural change.

5 Vision, Strategic Themes, Objectives & Outcomes

5.1 The HFWS sets out The Highland Council's vision, strategic themes, objectives that will form the basis of its support for the development of the Highland forest and woodland resource and its stewardship over the next 20 years and associated outcomes.

Vision

5.2 Our vision is that:

"the forests, woodlands and trees of the Highlands will be prized elements of our economic, environmental, community and cultural fabric, fulfilling valued and sustainable roles in realising their productive potential (where relevant) and enriching the quality of life for all who live, work and visit here."

Strategic Themes

5.3 The HFWS has the following eight key strategic themes that cross cut with those of the Scottish Forestry Strategy and reflect and respond to the Challenges and Opportunities set out in 4 'Challenges and Opportunities'.

Strategic Themes

Theme 1 - Woodland Expansion

Theme 2 - Economic Potential

Theme 3 - Climate Change

Theme 4 - Community Empowerment

Theme 5 - Environmental Capital

Theme 6 - Development and Tourism

Theme 7 - Health and Wellbeing

Theme 8 - Business and Skills Development

5.4 The themes are not listed in any particular order as they are seen as being of equal importance in achieving the vision. In the following sections each theme is accompanied by policy objectives that provide the focus for action over the next five years

Policy Objectives

Theme 1 – Woodland Expansion

- 5.5 Expansion of forests and woodland in Highland will be looked upon as a means of contributing to achieving national targets for increasing the areas of productive and native woodland but always subject to an appropriate scale, type, objective and overriding constraints. Due to the geographical extent of Highland, there is significant opportunity for woodland expansion, however, this brings associated challenges, for example difficult terrain and accessibility.
- **5.6** Furthermore, in order that forests and woodland can deliver their full potential of multiple economic, environmental, social and community benefits, it is the HFWS's aspiration that such woodland expansion should be integrated, diverse, inclusive, resilient, productive and better supported by regional infrastructure.
- 5.7 Where woodland expansion proposals cross local authority boundaries, or are likely to impact on the interests of the neighbouring local authority area, consultation will be carried out with reference to the relevant Forest and Woodland Strategy with opportunities for cross-border collaboration to achieve wider benefits.
- **5.8** There is a presumption that the design and subsequent management of all woodland creation and restructuring proposals will be carried out in accordance with the requirements of the UK Forestry Standard (UKFS).

- Support increased levels of productive and multi-functional woodland expansion across Highland;
- Encourage planting that contributes to integration with and expansion of native woodland and other woodland habitat networks;
- Encourage woodland expansion that delivers 'ecosystem services' relating to mitigation and adaptation to climate change, including flood plan management and protection of deep peat areas;
- Encourage a collaborative and balanced approach to deer management that support the Highland economy whilst safeguarding its forests, woodlands and wider environmental interests;
- Support woodland expansion and crofter forestry schemes that help better integrate forestry with farming and crofting through targeted funding and advice;
- Contribute to the implementation of the recommendations of the Mackinnon Report for woodland expansion.

5 Vision, Strategic Themes, Objectives & Outcomes

Theme 2 - Economic Potential

- 5.9 Sustainable management of Highland's forests and woodland will be dependent on the sector as a whole being economically viable. The HFWS strongly supports the improved management of the existing woodland resource, including productive restocking and thinning. It also supports the enhancement and expansion of native woodlands (including Montane) by regeneration and planting and encourages opportunities for increasing timber production from Scots pine and birch.
- **5.10** A key factor in helping landowners to achieve the economic viability of their woodland investment is the availability of necessary supporting infrastructure, principally pertaining to timber transport but also efficiency of access to appropriate public funding mechanisms.
- 5.11 Wood processors also require a consistent and reliable supply of timber if they are to continue to invest in the industry. There is therefore a business imperative to help 'smooth' the supply of timber from Highland forests to avoid predicted peak and troughs of timber availability. This will require a combination of good long-term planning and production forecasting, the prudent use of the national forest estate's timber resource and incentives for the phased restructuring of plantations.
- **5.12** In addition to the timber value, woodlands can provide many other economic benefits through tourism and recreation. Other ecosystem services provided by woodland, such as natural flood management, are of huge economic importance and are considered to be part of the resource.

- Support applications for planting a variety of species to ensure long-term resilience of the forestry sector.
- Continue to work with the Highland Timber Transport Group (HTTG) to facilitate forest industry collaboration to develop an effective system of communication with regard to proposed timber movements;
- Work in partnership with HTTG to identify priority road, rail and sea improvement projects through a programme of investment in timber transport infrastructure;
- In conjunction with the Highland Timber Transport Group, actively seek ways to integrate rural roads infrastructure and land-use planning;
- Encourage the wider use of local woodfuel in domestic and smaller-scale commercial settings to support the development of the Highland-wide biomass supply chain;
- Encourage a cooperative approach to the sustainable management of small woodlands under multiple ownership.
- Support the development of local hard wood products;
- Promote growth of markets for timber grown in Highland for sustainable construction.

Theme 3 - Climate Change

- **5.13** This theme centres on the roles of Highland forests and woodland in helping to reduce the impact of climate change and better equipping Highland to adapt to those changes.
- **5.14** Woodland creation and management should continue to support the principles of the EU Water Framework Directive, River Basin Management Planning and flood risk management aims, including Groundwater Dependent Terrestrial Ecosystems (GWDTE), together with protection of soils and slope stability and species diversification.

- Support forestry proposals that enhance environmental and soil protection through sustainable flood and catchment management;
- Support increasing use of woodfuel for renewable energy;
- Continue to encourage age and species diversity within woodland creation and long term forest plans to adapt to climate change and improve resilience against pests and disease;
- Promote increased use of home-grown sustainably produced timber and timber products for construction and house building through Highland Council's sustainable procurement policy;
- Raise awareness of Voluntary Carbon Standards such as the Woodland Carbon Code as mechanisms for help to realise the benefits of carbon sequestration;
- Continue to implement SG Policy on the Control of Woodland Removal when considering development proposals that involve the loss of trees and woodland;
- Encourage wider use of Low Impact Silvicultural Systems (LISS) where appropriate to increase long term carbon retention;
- Support opportunities for peatland habitat restoration in combination with "peatland edge" and "transition" type woodland and habitat connectivity as part of restructuring / long term forest plan proposals.

5 Vision, Strategic Themes, Objectives & Outcomes

Theme 4 – Community Empowerment

- 5.15 The HFWS's vision incorporates not only physically increasing areas of forests and woodland in Highland but also further strengthening cultural and emotional connections between communities and the forests and woodlands themselves.
- **5.16** Enabling mechanisms such as the 2015 Community Empowerment Act, and the Community Assets Transfer Scheme (CATS) will continue to help community groups to meet their aspirations for local woodland ownership and achieving ways to providing increased public benefits and opportunities

- Continue to support asset transfer, community woodland ownership and management within Highland;
- Encourage local engagement in scoping meetings relating to Forest Plans and woodland creation proposals to deliver local benefits;
- Encourage community owned wood-related energy projects in woodlands;
- Encourage and promote community led affordable housing within appropriate woodland settings as described in The Highland's Council Trees, Woodland & Development Supplementary Guidance;
- Support accessible access and recreational facilities, local employment, rural skills and community energy projects.
- Opportunities for the creation of new Woodland Crofts and woodland crofting communities should be identified in order to encourage a locally focused approach to forestry which delivers benefits to local and often remote communities.

Theme 5 - Environmental Capital

- **5.17** The quality and diversity of Highland's landscapes, biodiversity and cultural heritage its Environmental Capital is a key asset, underpinning the area's attractiveness as a place to live, work, visit and invest. The region's forests and woodlands already make a substantial contribution to the landscapes and biodiversity of Highland, providing a range of natural and semi-natural habitats and forming an integral part of the area's historic environment and cultural heritage.
- **5.18** This Theme's objectives focus on ways of further enhancing this contribution.

- Promote woodland management and expansion that restores, enhances and safeguards biodiversity and habitat connectivity;
- Support sustainable forest management proposals that meet the UK Forestry Standard as a minimum standard and promote the UK Woodland Assurance Scheme (UKWAS);
- In conjunction with other partners, promote the benefits of incremental restoration of Plantation on Ancient Woodland (PAWS) sites and other important woodland types including Atlantic woodlands and Montane;
- Ensure that woodland expansion proposals and long-term management plans protect and promote Highland's historic environment and cultural heritage, including gardens and designed landscapes and heritage trees.

5 Vision, Strategic Themes, Objectives & Outcomes

Theme 6 - Development and Tourism

- **5.19** Trees and woodlands make an important contribution to place making and their interaction with good quality development can create attractive and functional places for people to live and work as exemplified in many European countries.
- **5.20** Well planned and designed planting and forest restructuring also ensures that new development makes a positive contribution to the wider environment, safeguarding and reinforcing habitat networks, enhancing tourism corridors and integrating development within the wider landscape.
- **5.21** Settlements of more than 2,000 inhabitants may be eligible for the Forestry Grant Scheme's Woodland In and Around Towns (WIAT) programme. Enhanced and sustainable management of woodlands in and around towns and villages and the integration of woodlands with new developments can improve their character and setting as well as providing opportunities for better access and community participation.

- Ensure that provision for new planting and /or management of existing tree cover are incorporated as integral elements of development briefs and master plans for new development and regeneration proposals across Highland;
- Support sensitive development in woodlands in accordance with Scottish Planning Policy and Highland-wide Local Development Plan and Supplementary Guidance on Trees, Woodland and Development;
- Promote opportunities for funding streams such as WIAT to contribute to enhancement of urban fringe areas through improvements to local woodlands, particularly those in or near deprived areas;
- Work with woodland owners, managers and other stakeholders to identify and develop the potential of strategically located new and existing Highland woodlands (for example, forest parks) as future visitor and tourism attractions and destinations;
- Encourage woodland tourism initiatives to sign up to Visit Scotland Welcome Schemes;
- Support opportunities for linking accessible and active outdoor access/recreation and tourism in and between Highland forests and woodlands, including hutting developments, mountain biking, walking and activities such as orienteering and eco- tourism;
- Support the restructuring of woodland and forestry along tourism corridors;

Theme 7- Health and Wellbeing

- **5.22** Projects and plans designed to bring physical and mental health benefits to Highland communities through linkages with forests and woodlands will continue to be a priority over the lifetime of the HFWS, for example the Highland Local Outcome Improvement Plan. Similarly existing initiatives and new partnerships with NHS Highland, local community groups and other health sector partners can be consolidated and expanded.
- **5.23** The access opportunities that woodlands provide have a significant role in health improvement and are robust environments for outdoor activities, with the capacity to absorb large numbers of people while still maintaining the all-important "sense of place". Community woodlands have a particularly important role to play in this respect.
- **5.24** The potential range and scale of woodland-linked access and recreation opportunities is high, as demonstrated by the growth in cycling tourism and mountain biking within forests such as Laggan and Golspie.
- **5.25** Access rights exercised under the Land Reform (Scotland) Act 2016 and the Scottish Outdoor Access Code provide landowners and the public with legal and advisory frameworks for taking responsible access.
- 5.26 The potential for local woodlands to be used as 'natural classrooms' thus embracing education as a route to reconnecting people, particularly schoolchildren, with their forests and thereby helping to create a forest culture will be encouraged through delivery by well-established mechanisms such as Forest School and the Highland OWL (Outdoor Woodland Learning) groups.

- Support Continue to work with the Highland health sector and other stakeholders to raise awareness of the role of trees and woodlands in provision of health benefits;
- Support and extend the benefits of joint health initiatives such as "Branching Out" and the Green Exercise Partnership" across Highland;
- Promote the role of woodlands in providing a resource for physical activity close to where people live and work;
- Support and promote development and management of the Highland Core Paths network;
- Ensure that provision for responsible public access to forests and woodlands is embedded in woodland creation proposals and maintained within existing woodlands using the frameworks of the Scottish Outdoor Access Code and Land Reform Act;
- Encourage and promote the use of Highland forests and woodlands for outdoor learning through Forest School and Highland OWL.

5 Vision, Strategic Themes, Objectives & Outcomes

- **5.27** Theme 8 Business and Skills Development
- **5.28** Delivering the full benefits of multifunctional and sustainable forest management requires a diverse, well-trained, highly skilled and motivated workforce. This is a key role of universities and higher education establishments; within Highland, the Scottish School of Forestry, Inverness College, UHI, is the principal institution for forestry education and training.
- **5.29** Encouraging people to consider working in the forest industry requires effective marketing and communication strategies which will showcase the sector as a vibrant and progressive industry with opportunities for rewarding careers.
- **5.30** Offering new entrants a clear route into the industry requires the development of flexible, accessible and stimulating apprenticeship schemes, together with the encouragement of employers to engage in such programmes.
- 5.31 Providing opportunities for the emerging and existing workforce to learn and continually develop skills which will enable them to meet the diverse demands of the sector and to maximise links with other industries requires a curriculum which is up-to-date and appropriate to the needs of the industry, a recognition of the role of continual professional development, the provision of relevant training programmes and a willingness to exchange knowledge and identify cross-cutting opportunities with other sectors.

- Working collaboratively with industry and education partners across Highland and the Scottish Forest and Timber Technologies Skills Group, promote the sector as a potential career choice to new entrants;
- Improve links between schools, FE/HE institutions and industry through the support, development and delivery of rural skills and apprenticeship programmes and active engagement with Developing the Young Workforce;
- Support curriculum and training provision in the Highlands to ensure they are up-to-date, appropriate and meet the needs of the industry;
- In partnership with industry initiatives such as the Highland Forest Industry Cluster, explore and promote the development of accessible and stimulating apprenticeship schemes across the Highlands and encourage employer engagement with such programmes;
- Support knowledge exchange and explore cross-cutting opportunities with other land based sectors operating within the Highlands.

Strategy Outcomes

5.32 It is envisaged that over its initial 20-year lifespan, the HFWS will have delivered the following key outcomes:

Strategic Outcomes

Theme 1: Woodland expansion at appropriate locations in Highland will have contributed strongly towards achieving national targets.

Theme 2: Realisation of the economic potential of the Highland forest resource including timber supply, tourism, recreation and other ecosystem services.

Theme 3: Highland forest and woodland are more resilient to the effects of climate change.

Theme 4: More Highland communities are empowered through woodland ownership and management providing opportunities for skills development and employment.

Theme 5: Forests and woodland are highly valued for their role in enhancing and protecting Highland's iconic environmental capital.

Theme 6: Appropriate and sensitively sited sustainable rural development and tourism is integrated with Highland forests and woodland.

Theme 7: The health and wellbeing development derived from forests and woodland are firmly embedded within Highland's health sector.

Theme 8: Highland is widely recognised as a centre of excellence for forestry education, skills and business innovation.

Spatial Mapping Guidance for Woodland Expansion in Highland

- 6.1 A key strategic aim of the HFWS is the expansion of forests and woodlands in Highland supported by the overarching principle that such expansion should be looked upon favourably, albeit subject to appropriate scale, woodland type, objective, policy and legislative considerations and other overriding constraints.
- The classification of land sensitivity to woodland expansion provided in the 2006 Strategy's "Policy Map" has been updated using the guidance provided by the Scottish Government's guidance on 'The Right Tree in the Right Place' 1. It retains the three main categories of "Preferred", "Potential" and "Sensitive" but, in order to reflect Highland's diversity, also includes two additional categories; "Potential with Sensitivities" and "Land above 550m".
- 6.3 The provision of this updated spatial guidance is intended to enable, rather than constrain woodland expansion. The classification is a strategic process, giving a general impression of an area's suitability or otherwise for woodland expansion that will help maximise benefits and integrate with adjacent land uses.
- 6.4 The refreshed Policy Map (see Map 1 'Spatial mapping guidance for woodland expansion in Highland') illustrates the general level of opportunity for woodland expansion not land which the HFWS proposes should be planted. Given that woodland is one of many possible uses for much of the region's land, inclusion within one or other of the land categories should not be interpreted as precluding other viable and environmentally acceptable land uses.
- 6.5 As such the Map 1 'Spatial mapping guidance for woodland expansion in Highland' is therefore intended only to guide stakeholders towards potentially suitable sites and does not automatically mean that a planting proposal would proceed. On detailed examination there will inevitably be small areas that could readily fall into a different category.

The importance of site-specific assessment of individual proposals for woodland expansion, or woodland removal remains paramount and for this reason it is critical to emphasis that the classifications are indicative rather than prescriptive.

¹ https://www.forestry.gov.uk/pdf/fcfc129.pdf/\$FILE/fcfc129.pdf

6.6 The 5 land sensitivity categories are defined as below:

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Land which is suitable for a range of woodland types and objectives. It should be possible to address site specific issues with well-designed proposals which meet the UK Forestry Standard and associated guidelines.

Potential

Land which offers considerable potential for a range of woodland types which integrate with other land uses. The design of schemes will require careful consideration to address limited sensitivities and in particular, follow FCS Guidance on Woodland Creation on Agricultural Land.

Potential with sensitivities

Land which offers potential for woodland types which predominantly deliver biodiversity, landscape and/or amenity objectives. The design of schemes will require more careful consideration to address a wider range of sensitivities.

Sensitive

Land which offers limited potential for woodland types which predominantly deliver biodiversity, landscape and/or amenity objectives. A combination of known sensitivities are only likely to support woodland of a scale and character which can be accommodated without likely significant adverse effects on sensitivities, and/or where it would enhance features of local, regional, national and international interest.

Land above 550m

Land offering limited potential for predominately montane woodland type. A combination of known sensitivities and altitude are only likely to support woodland of a scale and character which can be accommodated without likely significant adverse effects on sensitivities, and/or where it would enhance features of local, regional, national and international interest.

- 6.7 In addition to the above, Map 1 'Spatial mapping guidance for woodland expansion in Highland' (2) identifies existing woodland, lochs and water courses and larger urban areas considered unsuitable for woodland.
- 6.8 In general, the more sensitive the classification, the more numerous and significant are likely to be the issues that will need to be addressed in considering woodland expansion proposals and the greater the likelihood that an Environmental Impact Assessment will be required. A Habitats Regulations Assessment will be required for all proposals which could have a significant effect on Natura 2000 sites.

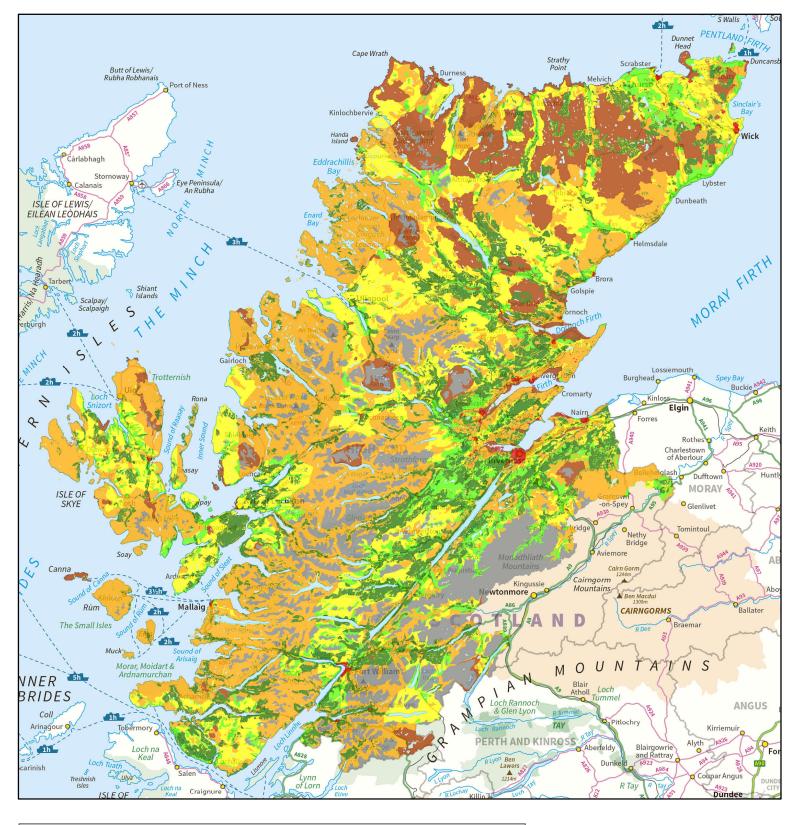
² Please note that this spatial mapping is intended to provide indicative rather than prescriptive guidance and should not therefore be interrogated at scales of less than 1:250,000. All woodland creation proposals will be subject to a site specific assessment in order to determine suitability.

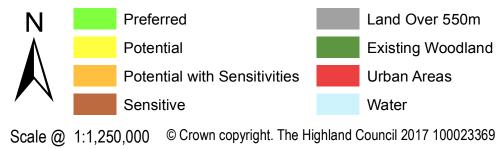
6 Delivering the Strategy

CRITERIA	INFORMATION LAYER	MAP CATEGORY/COLOUR	
No significant constraints	None of the below	Preferred	
Agricultural land	Macaulay (JHI) Land Capability for Agriculture Class 3.2 land	Potential – see <u>Woodland Creation on</u> Agricultural Land	
	Macaulay (JHI) Land Capability for Agriculture prime quality land (Classes 1, 2 and 3.1)	Potential with sensitivities	
Cultural Heritage	Designed Landscapes and Gardens	Potential with sensitivities	
	Scheduled Ancient Monuments (with 20m buffer)	Potential with sensitivities	
	Battlefields	Potential with sensitivities	
Carbon rich soils	SNH Carbon & Peatland Map (2016) derived from JHI soil carbon data	Potential with sensitivities – see <u>Forestry and Peatland Habitats</u> (4)	
Natural heritage sites / environmental	Local Nature Reserves	Potential with sensitivities	
designations / landscapes	National Nature Reserves	Potential with sensitivities	
The sites within the designations have been assessed and split into two	National Scenic Areas	Potential with sensitivities	
groups according to their level of	RAMSAR sites	Potential with sensitivities	
sensitivity.	Special Areas of Conservation	Potential with sensitivities	
	Special Landscape Areas	Potential with sensitivities	
	Sites of Special Scientific Interest	Potential with sensitivities	
	Special Protection Areas	Potential with sensitivities	
	RAMSAR sites	Sensitive	
	Special Areas of Conservation	Sensitive	
	Special Landscape Areas	Sensitive	
	Sites of Special Scientific Interest	Sensitive	
	Special Protection Areas	Sensitive	
Land over 550m	Elevation data	May be available for montane woodland creation in certain locations	
Existing woodland	National Forest Inventory Scotland (2013)	Not available for woodland creation	
	Native woodland survey of Scotland		
Urban (built up) areas	Land Capability for Forestry Category 20	Not available for woodland creation	
Lochs and water	OS mapping	Not available for woodland creation	

Table 1 Summary of spatial mapping criteria and information layers

- 1. All other Macaulay Land Capability classes above 3.2 (i.e. 4.1 to 7) are categorised as "Preferred" where no other constraints apply
- $2. \qquad https://scotland.forestry.gov.uk/images/corporate/pdf/GuidanceAboutWoodlandCreationOnAgriculturalLand.pdf\\$
- 3. The "Potential with sensitivities" categorisation given the Scheduled Monuments is a means of identifying the 20m buffer round these sites as sensitive to new planting. The actual monuments themselves, which are generally too small to show on the map, will be "Unsuitable" for planting.
- $4. \qquad https://scotland.forestry.gov.uk/images/corporate/pdf/peatland-habitats-supplementary-guidance-june-2016.pdf$
- 5. Conservation designations have been assessed by SNH and landscape designations have been assessed by Highland Council





Please note that this spatial mapping is intended to provide indicative rather than prescriptive guidance and should not therefore be interrogated at scales of less than 1:250,000. All woodland creation proposals will be subject to a site specific assessment in order to determine suitability.

Enabling Woodland Expansion

- **6.9** This refreshed HFWS has highlighted the key issues and opportunities in relation to forestry and woodlands in Highland together with the Councils' vision for how forestry will help contribute towards enhancing the environmental, economic and community fabric of Highland sustainably.
- **6.10** Delivery of woodland expansion will require promotion and targeting of appropriate grants and incentives.
- **6.11** As a follow on from formal adoption of the refreshed HFWS, it is therefore recommended that an implementation process take place using the issues and opportunities, strategic themes and objectives already identified in this document as the baseline.
- **6.12** The output of the implementation process could be an Action Plan showing ownership for leading or partnering the delivery of each action by relevant agencies or organisations.
- **6.13** The Highland Council would lead on approaching relevant public and private sector stakeholders through bodies including the Highland and Islands Forestry Forum and Forestry Commission Scotland.

Monitoring & Review

- **6.14** The HFWS is a dynamic document, capable of being reviewed and updated as appropriate in response to changing circumstances and priorities.
- **6.15** An important aspect of the Strategy process is therefore to agree with key public and private partners and other stakeholders the responsibilities for maintaining and updating the policy context and accuracy of the underlying data to the spatial mapping guidance and for monitoring progress towards indicators and targets within the Strategy.
- **6.16** These modifications can then be fed into periodic reviews in order to keep the Strategy relevant, responsive and consistent with prevailing Scottish Government and Highland Council policies and strategies over its lifetime.
- **6.17** The overall HFWS will therefore be reviewed on a five yearly basis in line with Supplementary Guidance cycles.

