

SCOTTISH LOWLANDS FOREST DISTRICT

STRATEGIC PLAN 2007 – 2017

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1 Planning framework

1.1 Introduction

Forestry in Scotland is the responsibility of Scottish Ministers and the Scottish Government. Forestry Commission Scotland (FCS) acts as the Scottish Government's Forestry Department. Forest Enterprise Scotland (FES) is an executive agency of FCS with the role of managing the national forest estate according to FCS policies. Scottish Lowlands Forest District is the part of FES with responsibility for management of the estate in central Scotland.

The aim of this Plan is to describe how the District will deliver its part of the Scottish Forestry Strategy (SFS 2006), which is the forest policy of the Scottish Government. The strategy articulates a vision for forestry in Scotland, to be met by 2025.

Scottish Forestry Strategy Vision

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

The over arching principles for the SFS 2006 are sustainability and social inclusion. Scottish forestry must contribute positively to sustainable development, and meet internationally agreed standards of sustainable forest management. Those standards are set out in the UK Forestry Standard.

Sustainable forest management recognises the need to link the social, economic and environmental values of forestry with people, based on good evidence and through effective engagement. At its simplest it means making sure that today's woodlands are still here, with the same or better benefits, for future generations.

Forestry's role is now very broad and contributes to issues as diverse as:

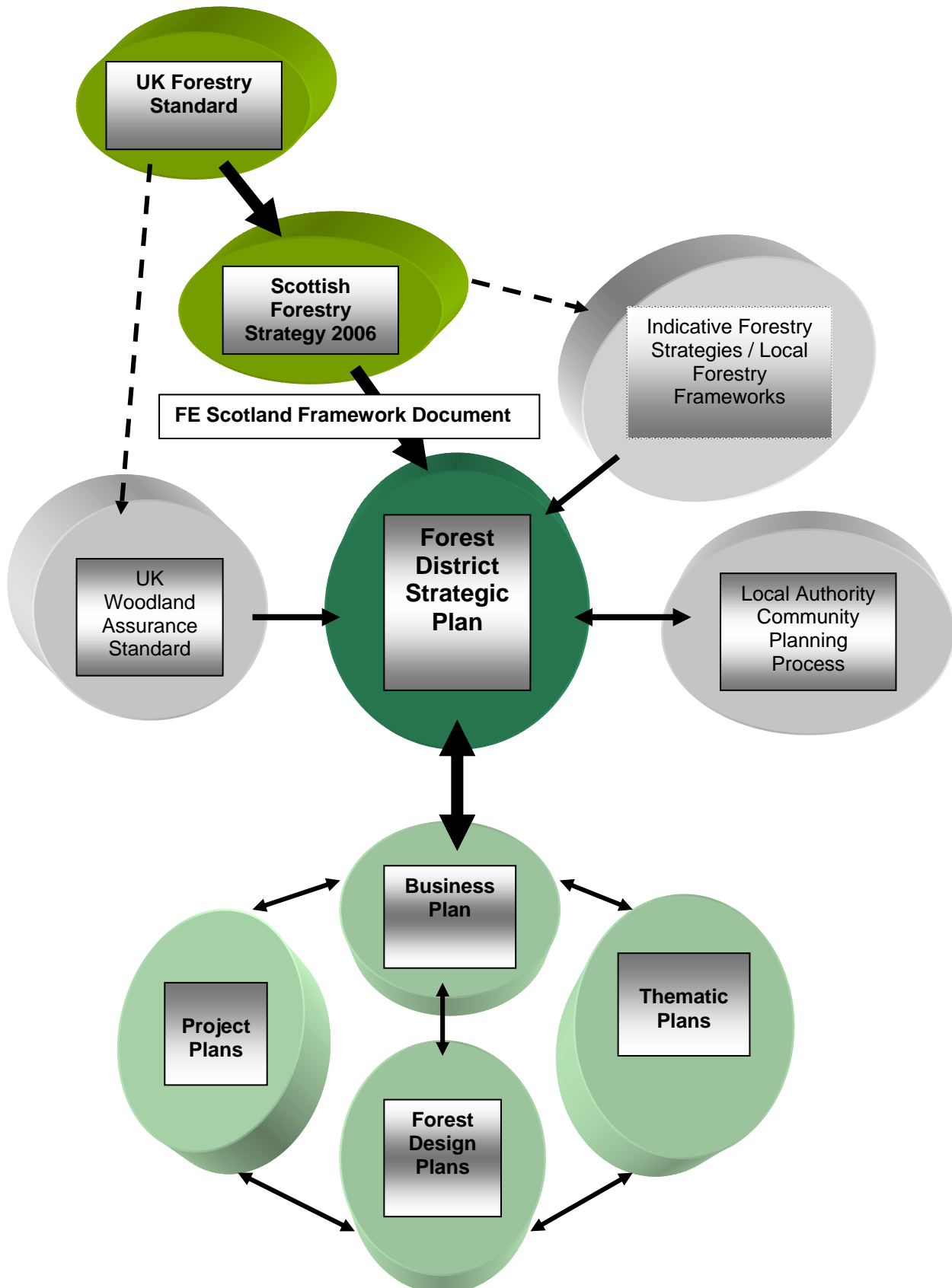
access	lifelong learning	timber production
community development	nature	tourism
education	recreation	transport
health	renewable energy	water
heritage	rural development	wildlife
landscape	sustainable development	

Scottish forestry must also help to combat social exclusion by promoting opportunities for people to participate in forestry, helping to tackle barriers to inclusion, helping young people and children to get the best possible start in life, and helping to strengthen communities and regenerate excluded communities. In essence, we seek to increase the benefits of our activities to society as a whole, and to do this more fairly than has been achieved in the past. This is in keeping with Scottish Government guidance on the general principles of Scotland's needs.

- People should not be disadvantaged by who they are or where they live ('social justice');
- People should not have to live in degraded surroundings with a poor quality of life ('environmental justice');
- Everyone should have the same opportunity to enjoy a good quality of life and access to appropriate services ('closing the opportunity gap' and 'social inclusion').

1.2 District planning framework

This Plan fits into the existing planning framework as illustrated and described below:



1.3 Elements of the planning framework

(with reference to the figure above)

- **UK Forestry Standard:** This is the UK Government's approach to sustainable forestry. The second edition was published in 2004.
- **Scottish Forestry Strategy (2006):** This is the Scottish Government's framework for taking forestry forward through the first part of the new century and beyond. It sets out a vision of Scotland renowned as a land of fine trees, woods and forests, which strengthen the economy, which enrich the environment, and which people enjoy and value.
- **Forest Enterprise Scotland framework document (2004):** This document sets out how FES will develop and manage FCS forests and woodlands in an efficient and environmentally responsible manner to meet government forestry policies, especially the SFS.
- **Indicative forestry strategies:** Indicative forestry strategies (IFS) are prepared by local authorities and identify areas preferred for forestry expansion and areas sensitive to further expansion in respect of a range of issues such as the landscape, natural and cultural heritage, communities and water quality.

The Ayrshire and Arran woodland strategy (published 2003) covers the western half of the District and also considers existing woods and developments in forest management, timber transport and community involvement. This was preceded by a local forestry framework for Arran. The forestry and woodland framework for Glasgow and the Clyde (2005) covers the central area and incorporates the forestry framework for North and South Lanarkshire Forestry (2004). Falkirk and West Lothian are also included in the forestry framework for the Central Scotland Forest (CFS). Stirling and Clackmannan (2001) and Fife (2006) have current structure plans that include forestry guidelines. Preparation of woodland plans for Edinburgh, Midlothian and East Lothian is under discussion.

Local forestry frameworks (LFF) may cover more localised areas than the IFS and look in more detail at the constraints and opportunities for forestry.

- **UK Woodland Assurance Scheme:** UKWAS is a certification standard that reflects the UK Forestry Standard, the guidelines adopted by European Forestry Ministers at Helsinki in 1993, and the Forest Stewardship Council (FSC) Standard for Great Britain. It provides consumers with independently vetted assurance of quality in respect of the environmental and social implications of forest management. The UKWAS standard was updated in September 2006.
- **Forest District Strategic Plan:** This Plan describes how national, regional and corporate strategies will be applied at a local level. The Plan identifies FES policies and priorities in the District, and the rationale behind them.
- **Local authority community planning:** Local authorities are increasingly bringing together public sector agencies (including the FES forest districts) to work in partnership and be more efficient in the delivery of local plans and services.
- **Business plan:** FES has a rolling three-year business plan that combines forest district, business unit and head office budgets. The business plan is the forest district budget available to meet the objectives of the SFS in implementing forest district strategic plans.
- **Forest design plans:** These plans relate to individual forests and groups of woodlands. They describe the woodland, place them in context with the surrounding area and identify issues that are relevant to the woodland or forest. From these, objectives are set, long-term felling and re-stocking plans prepared, and opportunities to improve the woodland for nature conservation and recreation are considered. These individual forest design plans are subject to formal consultation

processes and have to be agreed with the Forestry Commission's Conservator. The Conservator is independent of FES and oversees the promotion and regulation of forestry, in both the private as well as public sector, on behalf of the Forestry Commissioners.

- **Thematic plans:** These plans include management plans for sites of special scientific interest (SSSIs), agreed with Scottish Natural Heritage and scheduled ancient monuments (SAMs), agreed with Historic Scotland. Thematic plans may also be written for specific projects or initiatives such as Callendar Community Woodland, supported by the Millennium Forests for Scotland Trust and Drumbow-Crossrig Community Woodlands, supported through the Scottish Forest Alliance. These plans identify management objectives and prescriptions and form an integral part of forest design plans. Thematic plans are also used to describe strategy for larger forest areas, such as the Forestry Strategy for the National Forests of Arran (2003).

In some instances, national guidance or policy needs to be defined in more detail at local level, where implementation often takes place. This type of guidance needs regular updating and expansion, and the District has a series of local guidance notes that expand on, and assist in implementing the strategic plan. These plans and policies (SLGNs) are also used as a convenient format to record organisational matters for management purposes.

- **Work plans:** These include operational site plans that are prepared in advance of all major forest operations, i.e. felling, thinning, roads construction and re-stocking. The plans draw on forest design plans and identify site constraints, risk assessment, opportunities, and areas requiring special protection etc. Work plans are also used to describe, record and manage specific approved initiatives, such as recreational developments, as a local or national management control.

2 Description of the District

2.1 Introduction

The rationale for establishment of the District was that the disparate woodlands of the central lowlands had their own intrinsic and under-utilised value to the population, and that the best way to ensure management focus was to base a dedicated team in the area.

Recent funding under the FCS initiative for woods in and around towns (WIAT) has allowed the District to take on management of woodlands in partnership with local authorities and other public organisations. Agreements have been signed with Glasgow City Council, Newbattle Abbey College near Dalkeith, and City of Edinburgh Council. Others are under discussion.

The District covers central Scotland from Arran in the west to Kirkcaldy in the east, plus the Lothians, although there are no FCS forests east of Edinburgh. The area is around 3,345 square miles (8,665 square kilometres). FCS-managed land is about 150 square miles (39,000 hectares), or just under a half percent of the area.

The District includes the whole of the coal measures, the margins of the Southern Uplands to the south, and outlying upland areas to the north where the Highland Boundary Fault runs across Arran and north of Glasgow. Many of the forests are close to some of the area's most deprived communities, bringing particular opportunities and challenges to the District. Despite its name, 'Scottish Lowlands', and its location in central Scotland, many of the forests feel upland and remote in character, even those close to cities.

2.2 Natural environment

(See Appendix 4, map of the District and forest names).

2.2.1 Climate

Rainfall is high throughout the District, ranging from 1700mm (68") in Arran in the west, to 700mm (28") in the east. All the main forests are exposed to high winds, predominantly from the south-west, although there are local variations: e.g. South Carron has some topographical protection from the south-west, and Devilla and Blairadam have some from the north-east.

2.2.2 Altitude

The majority of the forests lie between 200m and 300m, but range from Devilla (50 – 90m) to Pencloe (300 – 500m).

2.2.3 Water

Catchments: The widely scattered, smaller forest areas lie in numerous river catchments and comprise only a small part of the land use cover, but the larger forests are dominant in the headwaters of certain rivers. The larger forests on Arran contain almost entire, but small, catchments. Carron Valley covers almost all of the upper reaches of the River Carron. Kyle covers some of the Nith and tributaries of the Ayr. Whitelee forms the head of the River Irvine and some of the Avon and White Cart, which feed into the Clyde.

Fisheries and water bodies: Lochs are immediately adjacent to forests in Auchineden, Crossrig, Devilla and Blairadam. Patna, Auchentorlie and Limerigg include shoreline and part of a loch. Part of Camilty feeds into the Harperrig Reservoir. Carron and Kilmannan reservoirs are almost entirely surrounded by the national forest estate and contain the full length of most of the feeder streams. Other than these, the forests contain only small portions of rivers and burns.

2.2.4 Geology and landform

Coal measures underlie the central part of the District. The predominant landform is level or rolling. The Arran woodlands are mostly on Permian sandstone, with tertiary rock intruding to form the Clachland Hills, which are higher and steeper, but rounded. Whitelee is on a gently undulating plateau of basalt and millstone grit. The Southern Uplands are steeper and have more relief, but are generally rounded in shape. Upland outliers to the north are of volcanic origin with gentler slopes on the northern flanks and escarpments on the south, formed by ice action in the last glacial period.

The solid geology is usually overlain by glacial deposits, mostly fine materials resulting in poorly drained soils. This has led to a significant accumulation of peat on many of the uplands. These deposits have a strong influence on the fertility of soils.

2.2.5 Soils

Upland peats and peaty gleys predominate with a small proportion of surface-water gleys, which are frequently poorly drained and may be indurated, as at Blairadam. The poorer peaty soils of Kyle and Whitelee are low or deficient in major nutrients. Parts of Arran, including the northern blocks, are on well-drained, thin, but not very fertile soils. Devilla and associated woods in west Fife and Clackmannanshire have sandy clay-loam soils, which are better drained.

In most forests, the soil types vary in complex patterns.

2.2.6 Landscape setting

Landscape character assessments are available for all areas. These are prepared by Scottish Natural Heritage (SNH) to highlight the main landscape issues.

The descriptions used in the landscape character assessments are mostly upland in nature, e.g. foothills, plateaux and uplands. Callendar, Clackmannanshire and East Dunbartonshire (Twechar) are classed as valley fringe/broad-valley lowland.

Although some of the forests form part of a larger matrix with private forestry, most are surrounded by agricultural grazing land. There are many links with other woodlands via conifer shelterbelts or broadleaf woodland, which are often unmanaged.

Most forests are seen in both long and short distance views from main roads and settlements as a result of the rolling landform throughout the District and intermingling of forest land and settlements. Most of the views are of only small sections or the edges of the forests.

2.2.7 Biodiversity

There are a number of UK biodiversity action plan (UKBAP) species and habitats in the forests and woodlands of the District. Local authority-led local biodiversity action plans (LBAPs) are either prepared or in preparation in all forest areas (see SLGN 11.1)

The District has 12 sites of special scientific interest (SSSIs). We draft management plans within a year of notification or acquisition for agreement with Scottish Natural Heritage (see Appendix 3). With the notable exception of the Arran Moors and Glen Dubh, and Lockshaw Mosses (actually a semi-natural woodland), the SSSIs are both small and a small proportion of the sites.

Increasing knowledge of the woodlands is revealing more habitats and species of interest, with the importance ranging from international to local level, e.g. ancient semi-natural woodlands (ASNW), lowland raised bogs, great crested newts, black grouse, red squirrel and regionally scarce lichens. Most of the emblematic Highland Scotland species are found in the District's woodlands, including wildcat, red deer, osprey, pine marten and golden eagle.

The District has 272ha of ancient woodland sites on the mainland, of which 65ha are plantations on ancient woodland sites (PAWS). Management prescriptions have been written for all these. A survey of Arran sites has been completed showing 207ha, of which 141ha are PAWS, plus some 64ha of other woods on ancient woodland sites. Further details are given in Appendix 3.

Historical land-use patterns can now create conflicts between objectives, e.g. tree cover, landscape protection and lowland raised bog restoration. Conservation management often involves partnership working with other agencies and owners.

The following local guidance notes detail practice on specific conservation issues:

SLGN 8	Deadwood
SLGN 9	Ancient & Native Woodland Plan
SLGN 11.1	Local Biodiversity Action Plans
SLGN 11.2	UK BAP Non-woodland Priority Habitats
SLGN 11.3	Moss Picking Policy
SLGN 17	Black Grouse Local Management Plan
SLGN 18	Red Squirrel Local Management Plan

2.3 Cultural environment

2.3.1 Historical context

The District encompasses a wide range of archaeological sites from Bronze Age through Iron Age to Roman, mediaeval and industrial revolution. Arran is particularly renowned for its pre-historic sites and the mainland has important sections of the Antonine Wall, which was the north-west frontier of the Roman Empire from about 140AD to 160AD¹. The District has sites from all these periods.

The recent social history of central Scotland is of past rises in primary industry, such as mining, and consequent manufacturing, followed by dramatic decline with subsequent development of the service sector, but in different locations to the previous industry. This has led to a large disparity in wealth between communities, with some suffering high levels of deprivation and social exclusion.

¹ Breeze D.J., The Antonine Wall, John Donal (2006)

The industrial past is both a problem and an opportunity. In 2003 and 2004, the District brought together records of vacant and derelict land held by local authorities across the area to assess the potential for restoration to woodland, improving the environment for urban and peri-urban economic regeneration. Many of these projects are now being taken forward with partnership funding.

2.3.2 Heritage interest

There are 31 scheduled ancient monuments (SAMs) in the District and a further three over which FCS has rights of access. All have management plans agreed with Historic Scotland (HS). All designated monuments are listed in local guidance notes (SLGN 16), including sections of the Antonine Wall and other Roman remains in the central part of the District, the site of Wilsontown Ironworks near Forth in South Lanarkshire, an Iron Age fort and several chambered cairns and stone circles on Arran.

There are many unscheduled ancient monuments (UAMs) and sites of industrial archaeology and cultural interest in the District. Our management reflects the importance of these to local communities.

2.3.3 Pattern of settlement

Three million people, or 60% of Scotland's population, live within the District boundary. They are concentrated in Glasgow and the lower Clyde Valley and in Edinburgh, but with large towns in Ayrshire and along both sides of the Firth of Forth to Stirling. The main transport corridors between Edinburgh and Glasgow, and the Ayrshire coast are also heavily populated.

Transport links through the region are reasonable, but few forests are accessible by public transport. The assessment criteria for the FCS initiative, woods in and around towns (WIAT) targets woods within 1km of settlements of over 2,000 people, which covers over 4600ha (12%) of the District area.

2.3.4 People's relationship with forests

Contrary to the rural tradition in Scotland of forests as accessible and welcoming, many urban communities have no connection with woodlands and find them threatening. Overcoming this requires effort and new skills from District staff. This is especially important in the WIAT programme, through which the District undertakes work in cities, creating entrances and waymarked trails, clearing rubbish and tackling anti-social behaviour.

The Central Scotland Forest (CSF) was conceived in the 1980s as Scotland's community forest across a large area between Edinburgh and Glasgow, covering some or all of several local authorities. The first strategy, published in 1995, was updated in 2005. The vision for the forest in 2015 is:

"The Forest is an attractive place, which enhances the lives, and life chances, of those living, working and playing there. People's perceptions of the area have fundamentally changed for the better as the result of the creation of a new landscape which includes, within a mosaic of rural and urban land-uses, trees, woodlands and new green spaces. The rich biodiversity and quality of the environment created by the Forest are cherished by residents and are an attraction to visitors. Communities take pride in their environment, and through their involvement and stewardship, its quality is sustained. Economically-active individuals and businesses choose to migrate to the area in preference to other locations in the UK and beyond. Everyone has a positive mental image in terms of its appearance, its communities and as a place of opportunity, and will do so for generations to come. As the Forest continues to grow and mature, these benefits will grow over time".

This vision is endorsed and shared by FCS, as one of the forest partners, and is also relevant across most of the District. The District has close working relationships with the Central Scotland Forest Trust, with a concordat outlining how the two organisations will work together to achieve common goals.

Although many woodlands are used informally, there is little infrastructure. Construction of the first stages of mountain biking trail in Carron Valley has demonstrated the potential to increase use of the forests in central Scotland.

2.4 Forest resource

2.4.1 Extent and distribution

The key statistics for the District can be summarised as:

Total area (owned and leased)	39,463ha	
Acquired by purchase 2005/06 and 2006/07, awaiting forest design plans	1,006ha	Cochnohill, Knockmountain, Nethercroy, Tulliallan and East Grange
Acquired by lease 2005/06 and 2006/07	101ha	Wester Mosshat
Additional ground managed in partnership	197ha	Newbattle, Colinton, Easterhouse and Drumchapel, Auchenshuggle
Management area	39,660ha	5/07
Woodland (national forest estate only)	28,680ha	including 10 -15% roads and rides
Conifers	27,057ha	excluding new areas
Broadleaves	1,410ha	as above
Open space	9,839ha	as above, includes scrub on streambanks
Open space > 10 ha	6,237ha	as above
Thinnable	1,800ha	6% woodland
Natural reserve	560ha	2% woodland
Minimum intervention/LTR	1130ha	4% woodland
Alternatives to clearfell (ATC) (group selection)	1630ha	5½% woodland
Plantations on ancient woodland sites (Arran counted as one)	349ha	9 PAWS
Ancient semi-natural woodlands (Arran counted as one)	131ha	10 ASNWs
SSSIs (inc one also SPA and one cSAC)	2852ha	12 SSSIs, 6% area
SAMs	31	
WIAT woods	5426ha	within 1km of populations > 2,000
Woods in the CSF	6,800ha	
Programmes		
Direct staff (full-time equivalent, FTE) 2007/08	39	
Number of woods (owned by FCS)	65	
Number of WIAT woods	25	Appendix xxx
Forest design plans	52	
Re-stocking 2006/07-2010/11 (average)	580ha	650ha including Arran gross
Timber production 2006/07-2010/11 (average)	260,000m ³	including Arran SRW

Forest road length	407km	including some not up to standard
Deer cull	933	
Expenditure budget 2007/08	£4.3M	
Income budget 2007/08	£4.3M	

2.4.2 Types of forest and tree species

Soil and climatic conditions impose significant restrictions on healthy and economic tree growth over most of the forest area. This limits species choice. Most forests are almost completely conifers, with the exception of Twechar, Croyhill, Gartmorn and Dean. Current species composition is 79% (22,450ha) Sitka spruce. The 700ha of Scots pine in Devilla is the only large, contiguous area of conifer that is not Sitka spruce.

About 20% of the 1,410ha broadleaves is birch (267ha) and the majority of the remainder is mixed native broadleaves. Although beech and sycamore are not native broadleaves, they are a common landscape feature in some areas and form a component of the woodlands. Broadleaved stands with potential for timber production are rare.

Significant areas of fire damaged woodlands in West Benhar and Arns were planted in the last decade with birch, most of which is surviving, but very little is growing well.

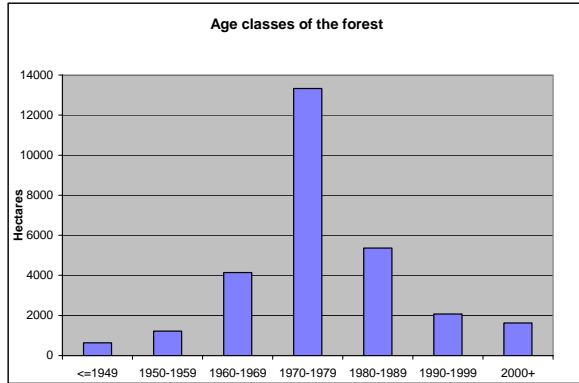
Average conifer productivity is relatively low (YC 12), but there are 7,370ha of high-yielding conifers (YC16 and over, mostly Sitka spruce) counterbalanced by 2,840ha of poor productivity (YC 6 and below). The areas of poor productivity include areas of young checked growth that are improving as tree canopy gradually closes.

2.4.3 Open space

Open space amounts to at least 9,800ha of the 39,000ha total District area. Around 3,000ha of this is in large blocks: the Arran Moors (around 2,700ha), hilltop at Mossdale, Kyle (200ha) and the Meikle Bin, Carron (70ha). More than 3,000ha is in smaller areas over 10ha, mostly watercourses and areas such as bogs. Rides, roads and other linear features make up an additional 3-4,000ha, increasingly recognised as habitat networks important for biodiversity.

2.4.4 Age

Of the 30,000 ha productive area, 44% was planted in the 1970s and 25% in the 1980s and 1990s. Less than 1% is of pre-1930 stands.



In Carron, Blairadam and Lennoxton, re-stocking after harvesting began after the substantial damage caused by the gale of January 1968 and the woods are now mostly second rotation. It is only in the last decade that replanting has begun in other forests, with 1,800ha re-stocked up to 2006. Until the last five years, coupes have generally been large and re-stocked almost purely with Sitka spruce.

Restructuring to break up the uniform age class is only just beginning in much of the District.

2.4.5 Economic contribution

The value of work paid out by the District is largely recycled in the economy of central Scotland.

The District supports 39 jobs directly and an estimated 61 contract jobs (20 forest management, 19 harvesting, 16 haulage and six roads). Another 98, mostly rural, jobs can be attributed to the District as a proportion of the employment and investment of timber customers.

Development of windfarms and mineral working in the District provides significant employment opportunities and there are new proposals in preparation, including for electricity generation from biofuels.

The forests also provide a large resource for informal recreation and organised events that help bring people to the area, particularly on Arran and in Carron Valley, or encourage local people to get outdoors at local community events. These visits generate expenditure and help sustain local jobs, directly or indirectly through shops and service providers. Other opportunities continue to develop, including Forest School, training through back-to-work schemes, and health and well-being promotion.

3 Evaluation of the previous District Strategic Plan

The District was established in April 1999 comprising the central Scotland areas of surrounding districts. The first Strategic Plan was produced in 1999 and updated in 2003. The purpose of this section is to describe whether, and how, the aspirations and commitments made in 1999 and updated in 2003 have been, or are being achieved.

Highlights and main themes are summarised in Appendix 1.

4: Identification and Analysis of Issues

The issues identified below are arranged under the seven key national themes of the Scottish Forestry Strategy, with analysis and evaluation of their local context. Pages 23-49 of the SFS list 142 actions and indicators under the heading 'What needs to be done'. There are some obvious overlaps between these, but to reflect the strategic nature of this plan, only those most relevant to the District have been included. In identifying issues, we seek to identify the key things that we can influence.

National theme: Climate change	
Most relevant SFS action	Priority issues for Scottish Lowlands Forest District
'Encourage other forms of renewable energy production on forest land ...'	<p>The District has particular renewable energy potential in the wind power and biomass sectors.</p> <p><i>Windfarms</i></p> <p>This is the most immediate demand for renewable energy developments in the District. In landscape terms, windfarms can more easily be accommodated in forests than on open hills. Careful planning is required to balance the renewable energy benefits with the extensive deforestation generally sought by developers. This can be detrimental to landscape, timber supply and national woodland expansion targets, such as in the Central Scotland Forest. But windfarms also present an important opportunity to create and manage quality new open space delivering habitat and species gains funded by developers.</p> <p>Local authorities or the Scottish Government (advised by local authorities for proposals over 50MW capacity) have responsibility for giving final approval for developments.</p> <p>We have been working with various companies on windfarm developments across the District since around 2000 and are starting to see results on the ground. Black Law windfarm was completed in summer 2006, with nine turbines on the national forest estate (NFE). Construction of the much bigger Whitelee windfarm began in August 2006, with 71 out of 140 turbines planned for the forest. Another large windfarm is proposed at Kyle Forest and will be subject to a public inquiry in 2007. We expect a planning determination for Hartwood windfarm at Murdostoun Forest (eight turbines) by summer 2007. We are also involved in discussions over a windfarm of about six turbines in southern Arran and are aware of interest at other locations still to be progressed.</p> <p>Windfarm developers will consult with local communities and specialists well in advance of planning applications so that local issues can be fed into schemes at an early stage.</p>

	<p><i>Biomass</i></p> <p>Interest in the use of biomass for energy generation is increasing and there is a wide range of supply options applicable to forestry, including:</p> <ul style="list-style-type: none"> • forest biomass (residues and roundwood); • short rotation forestry (single stemmed); • short rotation coppice (e.g. willow). <p>We are already in a position to supply quantities from the first two systems into specialist processing and supply markets through the normal market sales process.</p> <p>Marketing of timber supplies is centrally co-ordinated to ensure that large long-term contracts are met, and agreed biomass supply will be treated in this way. Although we are equipped to supply timber to merchants or end-users both standing (as tree crops) and at forest road-side or delivered-in (as felled timber), we do not carry out secondary processing such as chipping.</p> <p>Biomass can be utilised in a variety of ways to generate energy:</p> <ul style="list-style-type: none"> • co-firing as a percentage of feedstock in large-scale conventional electricity generating stations, and co-firing with municipal waste; • feedstock for specialist modern biomass electricity generation stations (fluidised bed, pyrolysis and gasification technologies); • conventional combustion facilities producing electricity or combined heat and power; • small-scale institution, light industrial heating systems; • traditional firewood or log burning stoves for heat. <p>In December 2006, Caledonian Paper announced proposals for a combined heat and power (CHP) scheme at Irvine that will use wood residues.</p> <p>Evaluation against the multiple objectives of forestry on the national forest estate guides projects to sites with the least conflicts. The full planning process then ensures consideration of all issues.</p>
<p>'Harness the carbon sequestration potential of new woodland ...'</p>	<p>The District has recently acquired significant areas of land where the carbon gains from new woodland can be realised and new woodlands can contribute to other objectives, such as woods in and around towns (WIAT). These are generally on the more fertile, low carbon soils. Bids for land purchase are approved on a case-by-case basis by FES Chief Executive.</p>

National theme: Timber	
Most relevant SFS action	Priority issues for Scottish Lowlands Forest District
'Facilitate a consistent and reliable timber supply ...'	<p>The production forecasting system allows us to predict timber supplies across the District. There are several home-grown timber-using industries in central Scotland and a good network of trunk roads. These industries rely on a regular supply of the correct quantity and quality of timber and on secure, increasing volumes to support modernisation and expansion.</p> <p>The District harvesting programme is rising from 230,000m³ per year in 2006/07 to 260,000m³ in 2009/10. In 2007/8, there is a temporary increase of 70,000m³ due to felling for short rotation forestry at Whitelee windfarm. This may be repeated in other years if new developments are approved, but these will be published in advance of marketing.</p> <p>It is critical that appropriate species are used in re-stocking and they are established at densities to ensure continuity and quality of production.</p>
'...facilitate projects that reduce the impacts of timber transport'	<p>The road infrastructure around some forests is poor and would require significant investment by local authorities to raise it to a sufficient standard for sustained use for timber transport. We have been involved in a range of measures to address this problem, including upgrading of public roads on Arran, agreeing preferred timber transport routes with local authorities and identifying alternative access routes to avoid specific problem areas, such as at Lennox Forest.</p> <p>Some forests are not adequately served by access roads across private land, where routes pass close to residential areas or are otherwise not suited for timber lorries.</p> <p>We are addressing urgent cases and have resolved the most significant problems (at Whitelee and Glenscorrodale Forests), but the process involves lengthy negotiations.</p> <p>There are opportunities to work with neighbouring landowners to share routes that will take timber traffic off the public road network or route it to avoid passing through communities.</p> <p>The Scottish Timber Transport Fund (STTF) is a challenge fund available until 2011 to assist projects of this kind. In March 2007, we were awarded £318,000 funding from STTF for a 9km internal forest road link across Arran, which could save road investment from North Ayrshire Council of around £10 million. This feeds into a 3km section of public road upgraded for timber traffic through a three-year jointly funded EU Objective 1 project completed in 2006.</p>
' ... facilitate development of uses for lower-quality timber and wood resources remote from major markets'	<p>Nearly 25% of the District's forested land is on the Isle of Arran, but the cost of transport from Arran to the mainland reduces the economic viability of harvesting. Only the log element of each tree is sold, leaving the lower-quality volume unused.</p> <p>On the mainland, stands of poor-quality lodgepole pine and some other conifers occupy land better suited to habitat improvement, but they are uneconomic to harvest and transport to more distant end-users.</p> <p>The development of markets, such as biomass, for lower-quality timber close to source has the potential to release previously uneconomic supplies, increase overall demand, support prices and reduce the cost and impact of transport.</p>

National theme: Business development	
Most relevant SFS action	Priority issues for Scottish Lowlands Forest District
<p>'Promote... woodland-related recreation and tourism infrastructure where this will make most significant economic gains...'</p>	<p>Tourism is a major part of the economy of the Isle of Arran, and the District's strategy is intended to improve the environment for this to develop. Some local businesses are already using the forests on Arran and the proposed cross-island link road could add significantly to the local recreation infrastructure through circular and longer-distance routes.</p> <p>Development of woods in and around towns (WIAT) will support wider-scale economic regeneration and will create more opportunities for local forest-related small businesses as the area and use increases and they become an asset to the community.</p> <p>The Kelty Heritage Trust has already made a significant difference to parts of Blairadam Forest. Limerigg Community Association and Falkirk Heritage Trust are funding developments around Limerigg and other new projects are possible in several places.</p> <p>We are working with FC England to include Devilla Forest in the 'Music in the Forest' programme from 2008 onwards.</p> <p>We are also considering the best ways to develop business opportunities in Carron Valley, building on the new mountain biking infrastructure, the proposals for a replica mediaeval fort complex by the Clanranald Trust and other recreation improvements to the forest through the Carron Valley Partnership.</p> <p>Communities in Ayrshire and Fife are also ambitious to use the forests to attract visitors, through improved facilities and core path networks.</p> <p>As well as benefiting from direct involvement in forest-based recreation, local economies can also gain from a general increase in visitors coming into forests throughout the year.</p>

<p>'Realising economic potential'</p>	<p>The District is unusual in that it covers land with significant mineral and development resources, particularly coal but also sand and aggregates. These form a significant non-timber source of income. Areas and policies to govern the exploitation of these resources according to national need are identified in structure and local plans. Minerals are an important employer across the mainland, especially in some of the more deprived areas, and we give support where appropriate and in line with our multiple objectives. We also recognise the role that well-managed forests can have in absorbing carefully-managed mineral developments in the landscape and shielding communities from some of the effects.</p> <p>As a major land manager, we work with developers and local authorities to ensure that minerals are developed in the national interest with acceptable and the least possible impact on the environment and local communities. Developments need to contribute directly (on site) or indirectly (through income generation) to our multiple objectives particularly access, forest restructuring and creating new habitats.</p> <p>There are three active opencast coal sites in the District, plus quarry supplying nationally significant silica sand. There are also reserves of important hard rock, such as high quality whinstone.</p> <p>Windfarm developments provide significant income (see renewable energy) and opportunities to make improvements in those locations.</p> <p>There are opportunities to generate income, and sometimes environmental gain, by permitting use of small areas of forest for development needed locally such as mine-water treatment ponds and telecommunication apparatus.</p>
<p>'... economic regeneration of industrial areas through the creation of green infrastructures'</p>	<p>A pleasant environment, including open green-space and trees, is recognised as benefiting the regeneration of communities following industrial decline in central Scotland. We have managed the restoration of over 200ha of former opencast and deep mining in the District since 1999, mostly in the Central Scotland Forest area. Drawing on experience, the District can take a key role in establishing woodlands on derelict and underused land, including sites identified in our evaluation of vacant and derelict land completed in 2005 (and subsequent annual updates of the Scottish V&D land register).</p> <p>We have developed a system for measuring the relative merits of different acquisitions, considering the exemplar role, size, deprivation index, implementation challenge, urban pressure and clustering.</p> <p>Central Scotland Conservancy has the key role of promoting woodlands on such sites through local authority local and structure plans, such as at Cuningar Loop, Cambuslang, in South Lanarkshire. Central Scotland Forest Trust also has a crucial role, working closely with its local authority partners. In some cases, woodland can supply the green structure in which future development can take place. This gives the District the partnership working opportunity to deliver at site level. Sites in Edinburgh, North and South Lanarkshire and in Glasgow are currently being progressed in this way.</p>

National theme: Community development	
Most relevant SFS action	Priority issues for Scottish Lowlands Forest District
'Encourage the education sector to make greater use of woodlands for outdoor learning'	<p>Improved learning opportunities from outdoor education have been understood for many years, relating to learning styles. The District has pioneered the use of Forest School throughout a whole school year in Fauldhouse, West Lothian for primary school classes. There are clear benefits, in particular respect shown by people for their local woodlands through reduced abuse and fire-raising. The Fauldhouse 'centre of excellence' has developed skills in pupils, FCS staff, teachers, parents and school support staff, and sets an example for the wider education sector. The potential demand will always outstrip available FCS resources. Our aim is to assist with start-ups, empowering others to take the lead and, where appropriate, provide a location for activities.</p> <p>North Ayrshire Council outdoor education service has established a visionary and superbly situated 'base camp' of modern cabins high up in Glenashdale, on Arran. This is now used by some 1,200 children each year for day and overnight stays. We are working with the Council to extend the facilities to include two remote bothies.</p> <p>This and other work also supports the aims of the Forest Education Initiative.</p>
'...provision of welcoming and well-managed woodlands, in and around communities...'	<p>Many urban communities see nearby woodland as an alien environment, a place for anti-social activity and a threat to safety. Local people may not have been involved in their creation or recent management. Changing this attitude requires community engagement to help us understand the barriers to use and create a sense of ownership. Since 1999, the District has worked with partners, especially Central Scotland Forest Trust (CSFT), to develop and use community links.</p> <p>We have taken on the management of a number of local authority woodlands in Glasgow and other urban areas over the last two years under the FCS initiative, woods in and around towns (WIAT). This programme enables us to employ staff to develop community links and manage the woodlands to improve appearance and access. We have management agreements for Auchenshuggle (5ha), Bishops Estate, Easterhouse (100ha) and Drumchapel (47ha) in Glasgow and at Colinton Dell, Edinburgh (24ha).</p> <p>We have also been able to add new and existing woodlands to the national forest estate to manage in the same way. Since the District was established in 1999, we have acquired 1,600ha of land for community woodlands and multiple uses, and are leasing or managing another 250ha. Working with the Central Scotland Forest Trust (CSFT) enabled us to take over long-term management of woodlands that it has acquired and planted, freeing up resources to apply to new initiatives. We acquired around 175ha from CSFT in March 2005.</p> <p>We also have 30 woodlands in the existing national forest estate, previously owned by FCS and totalling over 5,000ha, now classed as 'woods in and around towns' (WIAT).</p>
'Maintain constructive involvement with community organisations...'	<p>We have increased our ranger force significantly to nine community/forest rangers and four wardens. We now have a good spread of people in place who are skilled at working with communities, so that the woodlands show clear benefit to local people. Accessibility is important, e.g. the ranger resident at Carron Valley has been particularly welcomed by local people. The District is unique in Scotland in offering this scale of action and opportunity.</p>

Resources are often in short supply to fulfil all the ambitions of FCS staff and communities for work in woodlands. We recognise the huge potential of voluntary effort that organised groups represent and we can help them succeed. Our community and environment rangers develop contacts with groups and organisations, ranging from 'friends' interested in their local woods to British Trust for Conservation Volunteers (BTCV) and 'back to work' volunteers.

Some groups are 'communities of interest' that may evolve from an informal gathering to a group with a constitution and even to a charity. The Carron Valley Development Group has gone through this process in developing mountain bike trails, and the Clanranald Trust for Scotland is a charity that is building a 'mediaeval' fort in the same forest. National or statutory organisations, such as the Scottish Wildlife Trust and local authorities are often at the centre of local projects to involve communities.

It can be difficult to maintain the momentum and speed of progress that communities wish to see and we have to balance budgets, staff resources, workloads and other priorities.

National theme: Access and Health	
Most relevant SFS action	Priority issues for Scottish Lowlands Forest District
‘Target appropriate woodland creation and woodland access improvements in areas where health and community need is greatest and current provision is weak’	<p>Resources are limited and there is a need to target access improvements to areas of greatest need. Well-managed community woodlands can help to address the deprivation resulting from post-industrial decline that results in poor health and lack of empowerment in communities.</p> <p>People in all communities should have access to attractive greenspace. Derelict land can become valued community woodland through co-operation between agencies, local authorities and local people. Improving derelict, underused and neglected urban woodland is often a very cost-effective way of expanding the quality and range of local outdoor access opportunities.</p>
‘Help to meet the health challenges set out in strategies ...’	<p>Scottish Government health strategies recognise the value of woodlands in improving mental and physical health. Open space, a green environment and ‘natural’ sounds reduce stress levels and increase a sense of personal well-being. Even limited physical activity can improve health dramatically. Central Scotland Conservancy employs a health advisor to promote links with the NHS. The District can provide sites to develop healthy activity and, as with education, support a wider group of people to take over the lead in promoting opportunities.</p>
‘Promote confidence in woodlands as a safe and welcoming environment ... through ... management ... recreation facilities and ranger presence’	<p>The importance of a welcoming environment is obvious, but there are still places where people feel uncomfortable because of real or perceived personal risk, or because the environment is bleak. Litter, fly-tipping, drinking dens and motorbike tracks still frequently occur in urban woods, but can readily be cleared. Relatively simple changes such as strimming, draining, thinning, clearing views and cutting back undergrowth make a huge difference.</p> <p>The more people use woodlands, the more others see the benefits and join them, so that places feel and are safer and more relaxing. Rangers and wardens have a vital role in starting the process, by being seen and by actively encouraging groups to use the woods. We have invested heavily in actively managing woodlands, by creating a widespread team of rangers and wardens (unique in FCS) as a visible and empowered presence on the ground.</p> <p>In some places, FCS can go further and manage more formal recreation facilities, such as car parks, picnic sites and mountain bike facilities, usually for a wider local or regional area. The District had very few recreation facilities when established in 1999 (although that increased when we took over management of forests on Arran). We have focused staff and cash resources on working with communities in walking distance of woods to provide access opportunities for everyday use. But there are opportunities to encourage future active recreation in key places, especially some of the larger and more accessible peri-urban forests, e.g. Carron Valley, Whitelee, Devilla and Blairadam Forests.</p> <p>The common thread running through ‘promoting confidence in woodlands ...’ is partnerships between people and organisations working for them. We have focused our finite resources on local staff, who can explore and develop proposals with partners, who then take a key role. In this way, partnerships involve people and raise money to spend</p>

	<p>in the forest on delivery of local projects. This allows us to pursue a larger number of developments and be sure that they represent value for money by having local support. Working together to deliver shared priorities can help all partners develop their capabilities.</p>
<p>'Encourage more volunteering activity in woodlands.'</p>	<p>Recognition of the value of volunteering is increasing. People gain satisfaction from seeing the results of their own physical work. Volunteering helps to develop people, groups and communities, achieves visible improvements for the wider community and makes good use of local woodlands. Various forms are available, including:</p> <ul style="list-style-type: none"> • helping recovery from alcohol or drug dependence; • working outdoors as part of back-to-work schemes; • making a difference to the local environment and personal health and well-being by joining groups for weekend work in the woods; • companies promoting corporate responsibility, team-work and personal development by 'volunteering' groups of their staff. <p>Groups need organising, and although our rangers can take the lead, many groups and organisations manage their own activities. We are developing opportunities for three types of volunteer: individuals, groups with a 'leader', and companies doing 'good work'.</p>

National theme: Environmental quality	
Most relevant SFS action	Priority issues for Scottish Lowlands Forest District
'Promote sustainable management ...'	<p>There is a large amount of baseline work associated with the delivery of sustainable management on the national forest estate. This requires embedding a whole raft of important standards, best practice national guidelines (e.g. FC forests and water guidelines) and legislation (Health and Safety at Work Act) in our daily work practices. Our performance is externally audited against the Forest Stewardship Council (FSC) approved United Kingdom Woodland Assurance Scheme (UKWAS). Our FSC certification provides third party confirmation that FCS forests are well managed.</p>
'Ensure implementation of relevant Forest Guidelines to avoid ... pollution'	<p>FC forests and water guidelines set out industry best practice and are central to any operation in forests. Water quality is one of the most important issues covered by the guidelines. There are many lochs, reservoirs and other important water abstraction sources in or near our forests. Some catchments are acid-sensitive due to their geology (Appendix 5, map 5.9) and these are assessed during forest design plan preparation so that amelioration measures may be planned if necessary (see SLGN 38).</p> <p>Safeguarding the water environment is embedded in long-established forestry practice, including:</p> <ul style="list-style-type: none"> • staff training; • site supervision; • site plans, site safety rules and site pre-commencement meetings; • pollution prevention kits carried in all FCS vehicles and on all work-sites; • contract awards score evidence of competence and history of compliance; • UKWAS certification monitoring. <p>Minerals and land restoration works are carried out through the appropriate regulatory regime (normally planning consent). These involve the Scottish Environmental Protection Agency (SEPA) in all appropriate cases. Our mineral agents carry out compliance checks and we also require independent specialist monitoring in specific cases.</p> <p>The Water Environment (Controlled Activities) (Scotland) Regulations 2005 requires various levels of authorisation for a wide range of activities that can impact on the water environment. Authorisations range from general consents (known as 'general binding rules') through registration to licensing. Forest cultivation, ponds, road bridges, culverts and other operations are covered by the regulations.</p>
'Recognise local landscape characteristics... through high standards of forest design and operational planning'	<p>The District covers a wide geographical area and very wide range of forests with their specific character, history and local setting. The number of people living near to or visiting our forests means landscape quality is a key consideration. Our first rotation 'plantation' forests are mostly now at a stage where we can improve their appearance, environment and local value by carefully planned harvesting and replanting. This process is known as 'restructuring' and is managed according to forest design plans.</p> <p>The forest planning process involves collecting as much information as possible during preparation of forest design plans to ensure that all relevant issues are taken into account. The practice includes consultation with communities, interested bodies, staff</p>

	<p>and statutory agencies. Landscape guidance is taken from the series of landscape character assessments published by Scottish Natural Heritage (SNH), and our records and local staff feed information on biodiversity, history, access and areas with any special potential into the plans.</p> <p>Information from forest design plans feeds through to operational planning, where there is further opportunity for detailed information to be included in the site plan at harvesting and replanting stages.</p>
<p>'Identify and safeguard evidence of the historic environment, including historic landscapes ...'</p>	<p>The District has a wide range of historic and cultural heritage representing periods from the pre-historic to late industrial archaeology. These include formally recognised scheduled ancient monuments (SAMs), for which we maintain management plans agreed with Historic Scotland (HS). There are also undesignated remains, which are often valued by local people as a reminder of their cultural heritage, particularly in the traditional mining areas.</p> <p>We wish to tap into interest in local history, making links with access opportunities and the environment in forest areas and supporting a sense of shared community history. Sites mean more when people know about them, so there is a need for various forms of interpretation. At best, this involves a process including identification and research, stabilising structures and improving access. We can use a range of information formats including leaflets, site boards and now websites.</p> <p>Opportunities cover:</p> <ul style="list-style-type: none"> • Stone, Bronze and Iron Age - Arran; • Iron Age - Twechar; • Mediaeval - Carron, Devilla; • Roman – Twechar and Nethercroy (Antonine Wall), Camilty; • Industrial Revolution – Blairadam, Nethercroy, Limerigg (coal mining) and Wilsontown (iron smelting), plus several more examples.
<p>'Encourage the sympathetic management of ... Garden and Designed Landscapes...'</p>	<p>There are five formally-recognised designed landscapes in the District, from Brodick Castle grounds on Arran, to Blairadam in Fife. With the exception of Blairadam, designed landscapes are already included in approved plans. We have accumulated information on much of the history and design of these areas to include in forest design plans.</p> <p>We are still making discoveries while working in the woodlands, and our list of known historic design features is growing. This gives a greater awareness of the cultural value in our forest. Features from the agricultural and industrial history of the forests are smaller, but rigg and furr (cultivated ridge and furrow systems), sheepfolds, mining relics and old buildings are now noted as important links with the people who lived and worked in the area. Modern communities often have very strong ties to this history and want to be able to pass on some of these to their descendants.</p> <p>These large and small historic landscapes - whether formally designed or accumulated through the evolution of land-use - add to the diversity of forests.</p>

National theme:	Biodiversity
Most relevant SFS action	Priority issues for Scottish Lowlands Forest District
<p>'Restore and improve the condition of native woodlands and associated open habitats in line with the UK biodiversity action plan's revised habitat action plans'</p>	<p>The District has a number of priority habitats in, and linking, our forests. Some are designated as sites of special scientific interest (SSSIs) and others as Natura sites.</p> <p>We have surveyed all our ancient woodland sites, i.e. ancient semi-natural woodlands (ASNW) and plantations on ancient woodland sites (PAWS). We have management prescriptions for those on the mainland (SLGN 9) and prescriptions are being written for those on Arran. Woodland priority habitats in the national forest estate consist of upland oakwoods, lowland mixed broadleaves and wet woodlands.</p> <p>We have also surveyed all our lowland raised bogs and prioritised them for targeted restoration.</p> <p>There are opportunities to improve the biodiversity value of our forests and associated open ground through:</p> <ul style="list-style-type: none"> • safeguarding remnants and restoring areas of PAWS to native woodlands; • safeguarding and expanding our limited areas of ASNW; • developing forest-level forest habitat networks and linking them into regional networks; • use of continuous cover silviculture in native woods and expansion into wider areas, especially on lower ground; • increasing the structural and tree species diversity of forests during restructuring; • significant use of native tree species in new woodlands and re-stocking, according to site type. <p>We cannot fulfil potential without good information and collaboration, e.g. with the local biodiversity action plan (LBAP) process. The forest design procedure is crucial, including adjustments to boundaries or species choice.</p> <p>We have a continuing programme of rhododendron clearance on the mainland and on Arran. This will be kept under review as we develop continuous cover silviculture in Devilla, particularly after the purchase of Tulliallan Forest, which has significant amounts inside and outside the national forest estate.</p>

<p>'Focus conservation effort on species listed in species action plans (SAPs)'</p>	<p>We can help in several priority species programmes:</p> <ul style="list-style-type: none"> • FCS priority species action plans (black grouse, red squirrel); • other SAPs (great-crested newt, song thrush, hen harrier). <p>National priority areas have been designated throughout Scotland for red squirrel and black grouse and we have already adjusted forest design plan replanting proposals to enhance habitats.</p> <p>Surveys for great-crested newts have identified high numbers in Lennoxton and Nethercroy, and enhancements are included in plans. Many of these are achieved by only minor changes to practice, which will be incorporated in forest planning or by continuing with planned restructuring to achieve more variety of age and species in the forests.</p>
<p>'Encourage exemplary and collaborative deer management ...'</p>	<p>The District has worked closely with the Deer Commission for Scotland (DCS) to ensure that we consistently apply the highest standards to protect the environment and safeguard healthy deer populations. Damage assessments are carried out annually on young plantations so that we can assess the scale of deer management needed and track changes in impact over time. We also keep records that allow us to model the scale and balance of deer populations.</p> <p>Since we manage a widely spread area, most of our deer control is through leases to qualified stalkers, monitored by our rangers. This helps to promote deer management skills available to the wider forestry sector.</p> <p>In partnership with the British Association for Shooting and Conservation (BASC), we have established a scheme on Arran that allows stalkers from across the country to develop their expertise under the control of professional staff. The initiative is now in its second year and is both increasing the pool of qualified stalkers for deer control and contributing to the local economy of Arran.</p> <p>Deer control in remoter forests is understood and accepted, but urban areas provide an increasingly difficult challenge due to public disquiet and concerns over safety. But as urban woodlands expand, the deer population has become an issue, particularly in relation to road safety. We have worked with DCS and landowners to help resolve difficulties north of Glasgow (on the A81) and are able to contribute to action in other areas.</p> <p>A workshop with DCS to help develop best-practice guidance in urban deer management and dealing with road traffic casualties was held early in 2007.</p>

5. Response to the issues, implementation and monitoring

SFS Key theme 1: Climate change			
Key local issues	Proposed response (including implementation)	Monitoring	Aspiration
Renewable energy	<p>We will continue to support well-considered proposals that can improve forests in terms of landscape, biodiversity, public access and economic value.</p> <p>We will seek a balance between creation of new open space and retention and diversification of tree cover, with a presumption against deforestation on grounds of economics only. We will promote techniques such as short rotation forestry (early felling and replanting) and use of broadleaves or slower-growing conifers, or delayed replanting after felling as an alternative to large-scale deforestation to improve windflow characteristics of forests around turbines.</p> <p>We will seek contributions from developers to off-site support such as improvements in local access.</p> <p>Our role at the District is that of land manager rather than regulator.</p> <p>The District will help facilitate market growth and emerging woodfuel entrepreneurs where existing commitments allow. We are currently working with a developer on the potential for a combustion-based electricity plant on Arran with a planning application expected in 2007.</p> <p>We will also consider proposals to use forest residues.</p> <p>We will continue to market timber at a range of scales from long-term, large-scale to one-off standing sales.</p> <p>We will work with people wishing to develop specialist processing</p>	<p>MW capacity of windpower installed on the national forest estate.</p> <p>MW capacity of biomass energy installed on the estate</p> <p>Tonnes of biomass supplied.</p> <p>Establish a short rotation coppice (SRC) and short rotation forestry (SRF) demonstration area.</p>	<p>All suitable opportunities are identified and developed.</p>

	<p>capability as the next stage in the feedstock supply chain.</p> <p>We will continue to issue permits for very small-scale firewood supply and we will consider installing a modern wood-fired heating system in our District office.</p> <p>We will establish a field-scale demonstration in our new acquisition at East Grange Farm, in Fife. We will work with Forest Research, Conservancies and others to learn and spread knowledge on the silviculture and harvesting of these crops.</p>		
New woodland	<p>We will continue to explore and evaluate opportunities for new woodland that can contribute to carbon sequestration and other strategic objectives, especially WIAT and native woodland expansion.</p> <p>Plans are in preparation for planting at Knockmountain (198ha), Cochno Hill (520ha) and East Grange (213ha) by April 2009.</p>	<p>Gross area of land acquired.</p> <p>Net area of conifers and broadleaves planted.</p>	<p>All suitable opportunities are identified and developed.</p>

SFS Key theme 2:- Timber			
Key local issues	Proposed response (including implementation)	Monitoring	Aspiration
Timber supply	<p>We will plan and deliver a harvesting programme that follows the forest production trend and smooth supply as far as possible.</p> <p>We will update forecasts of timber production each year and use them as the basis for our marketing programme.</p> <p>We will update growing stock data where necessary over the plan period.</p> <p>We will consider options to recover residues for biomass supply where justified by demand, although options are likely to be limited due to wet and heavy soils.</p> <p>Replanting of productive conifer areas will meet the minimum standard of 2500 stems/ha to ensure improved future timber quality.</p>	<p>Published production forecast.</p> <p>Achievement of required tree stocking density.</p>	<p>A sustained level of production of timber suited to markets.</p> <p>Yield class confirmed for all areas where variations are suspected.</p>

<p>Timber transport</p>	<p>Our Operations team will participate in local timber transport groups (TTGs) and consider opportunities for reducing the impact of timber traffic in problem areas with them.</p> <p>We will improve forest road access to the national forest estate to improve efficiency and reduce impacts on communities when opportunities arise. We will also consider options for neighbouring landowners as appropriate.</p> <p>We will seek planning consent for the Arran strategic link road and, if successful, will implement the project in line with Strategic Timber Transport Fund funding approval.</p> <p>We will seek to extend the Arran strategic link road by a further 6km to include Kilpatrick Forest, subject to legal agreement and funding.</p> <p>We will assist with the establishment of a local biomass generating plant in the southern block of forests on Arran, reducing the cost of transport of small roundwood to end-user, due to proximity and potential for use of red diesel.</p> <p>We will investigate ideas to lower transport costs, including use of low-pressure haulage vehicles to avoid some road upgrading costs.</p> <p>We will seek opportunities for economies of scale presented by rising programmes and ability to co-ordinate across several Districts.</p> <p>We will co-operate with neighbours and developers where appropriate to share forest road costs.</p>	<p>Success of Arran STTF application, submission of planning application and completion of the project according to timetable.</p> <p>Reduction in road miles per m3 of timber sold.</p>	<p>Extension of the Arran strategic link.</p> <p>Improvements at Kyle involving rail link or forest road connections from S Kyle to A70 agreed route. These are not currently possible due to active opencast coal mining.</p> <p>Improvement in timber access to Auchentorlie, Aucheneden and Merkins in the Kilpatrick Hills.</p> <p>Target volumes of timber harvested with an increasing margin for the primary producer.</p> <p>Minimise total and unit budget costs.</p>
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SFS Key theme 3: Business development			
Key local issues	Proposed response (including implementation)	Monitoring	Aspiration
Support for local businesses	<p>We will be open to new recreation-based business ideas. Partnerships are more likely to be successful, with the national forest estate providing the ground for projects to develop.</p> <p>We will plan a rock concert at Devilla Forest in 2008.</p> <p>We will work with the Carron Valley Partnership to agree our recreation strategy for the forest and will develop forest recreation facilities, building on established uses for walking, cycling and horse-riding.</p> <p>We will continue to encourage local contractors to supply goods and services where they are competitive.</p> <p>We will work with James Callander & Son Ltd on plans to re-locate their sawmill into Devilla Forest to help secure the future of this important local business.</p>	<p>Number of businesses involved in recreation on the national forest estate.</p> <p>Deliver a successful rock concert at Devilla Forest in 2008.</p> <p>Delivery against approved project plans at Carron Valley.</p>	<p>Forests are valued by local businesses for their contribution to the local economy through recreation and tourism.</p> <p>The District becomes a regular 'music in the forest' venue.</p> <p>The District has several large forest areas where recreation and tourism are a key management objective.</p>
Non-timber sources of income	<p>We will work with the mineral sector to develop well-planned proposals for mineral workings where they appear to be in accordance with structure and local plans, providing that they will contribute to the Scottish Forestry Strategy.</p> <p>We will seek the best and most reliable returns from developments to support our objectives locally and nationally.</p> <p>We will ensure that developers consult with local authorities and communities at an early stage in proposals and take serious account of feedback.</p> <p>We will follow and help develop best practice for planning and minerals</p>	<p>Number of active, consented mineral sites.</p> <p>Contribution to District and national funds supporting other activities.</p>	<p>The District is recognised as the leading expert in forest-based minerals development.</p> <p>Our minerals programme remains a reliable and important means of support for our main objectives.</p> <p>Mineral sites in the District are recognised as improving the local or wider area through combinations of social,</p>

	<p>developments, particularly in executing restoration, safeguarding and expanding important habitats, and promoting the recreational potential of the forests in our care.</p> <p>We will maintain and use expertise in planning and monitoring mineral developments and their restoration, through our minerals agents and staff.</p>		environmental and economic benefits.
Derelict and underused land	<p>We will continue to target acquisition and partnership working towards the more difficult derelict and underused (DUN) sites, especially where public bodies wish to involve FCS in direct delivery, such as Braehead at Fauldhouse in West Lothian.</p> <p>We will apply the WIAT acquisition criteria in selecting sites.</p> <p>We acquired 122ha at Nethercroy in 2005 and are now planning the restoration/management of the 22ha part that is listed in the Scottish vacant and derelict land register.</p> <p>We have been working on urban woodland after-use plans with the owners of the Greenoakhill landfill site at Mount Vernon, Glasgow. This project has the potential for 80ha of accessible urban woodland and greenspace in the M74/Clyde Gateway area. We are also in discussions in Renfrewshire regarding management of a community forest park of around 300ha at the former Royal Ordnance Factory, Bishopton, as a core part of a proposed 15-year remediation and development of the factory. Our staff are also working on plans for a new community woodland on 20ha of the former Boots factory at Rawyards in Airdrie, North Lanarkshire.</p> <p>We will maintain staff expertise in land restoration so that we can deliver woodlands on difficult sites where required using professional contract expertise where appropriate.</p> <p>We will take part in strategic and 'flagship' urban woodland</p>	<p>Area of vacant and derelict/DUN land restored or converted to woodlands.</p> <p>Number of former DUN-type sites in District management.</p> <p>Number of sites in development.</p>	To be seen as an expert service capable of restoring degraded sites and managing them as woodlands.

development projects where we have the capacity and can add value. In particular, we will work with the Central Scotland Forest Trust to identify new initiatives in the Central Scotland Forest.

SFS Key theme 4: Community development			
Key local issues	Proposed response (including implementation)	Monitoring	Aspiration
Education	<p>We will continue to support Forest School, directly through provision of classes given by our own staff, but increasingly indirectly by assisting in training others to deliver them.</p> <p>We have identified suitable schools close to some forests in Glasgow, North and South Lanarkshire, Midlothian and East Ayrshire and have, or will encourage them to become involved with Forest School.</p> <p>We will work with local 'schools of ambition' to help them deliver their outcomes from locally-managed woods.</p> <p>We will co-operate with Newbattle Abbey College in their promotion of outdoor learning and development at Newbattle Abbey Woods.</p> <p>Our rangers will continue to encourage schools to include visits to their local woodlands in the mainstream school year, such as at Callendar Wood in Falkirk.</p> <p>We will continue to explore opportunities for new outdoor education ventures. For example, we will work with North Ayrshire Council on plans to provide more stopover facilities for children using 'Cloudbase' facility on Arran.</p> <p>We will continue to run forest-fire awareness events with the local fire and rescue service in Ayrshire and Lanarkshire.</p>	<p>Number of Forest Schools operating on land managed by the District, and pupils involved.</p> <p>Number and proportion of primary and secondary schools within 1km of the national forest estate using the forests.</p> <p>Qualitative reduction in forest fires caused by wilful fire-raising.</p> <p>Number of outdoor education projects.</p> <p>Number of school children visiting our forests.</p>	<p>Recognition of the learning opportunities presented by forests near to communities and funding from mainstream education budgets to continue.</p>
Community engagement	<p>We will continue to explore opportunities to take on the management of local authority and other actual or potential public sector woodlands where our resources and expertise can add value for the local community.</p>	<p>Number of management agreements and area covered.</p> <p>Number and area of new</p>	<p>The District is regarded as a leading manager of urban woodlands.</p>

	<p>Subject to funds, we will continue to add new community woodlands to the national forest estate (by planting woods or bringing them under management), targeting population centres and areas of higher economic or environmental deprivation.</p> <p>We will maintain our network of local staff able and resourced to promote the appearance, accessibility and local relevance of woodlands close to settlements.</p> <p>We have added another forest ranger and two wardens to our staff in 2007/08 and in future will review workloads each summer.</p> <p>We will pursue opportunities to base staff closer to 'outlying' beats where office and home locations allow.</p> <p>We will maintain and develop staff skills to help communities realise shared aspirations for their local forests.</p> <p>We will continue trying to make contact with groups representing ethnic minority communities, who have traditionally had little connection with woodlands.</p>	<p>community woodlands acquired.</p> <p>Number of woods with community involvement.</p> <p>Number of community groups involved.</p> <p>Number of community/forest rangers and wardens.</p> <p>Number of visitors using the WIAT woods.</p> <p>Number of visits from ethnic minority communities.</p> <p>Visitor satisfaction surveys.</p>	<p>To have a reputation as approachable, supportive and able to work with communities to deliver successful projects, efficiently.</p>
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SFS Key theme 5: Access and Health

Key local issues	Proposed response (including implementation)	Monitoring	Aspiration
<p>Access</p>	<p>We will target new community woodlands to the most deprived and neglected areas.</p> <p>We will continue to use population and deprivation as key elements in selecting the projects and partnerships to develop.</p> <p>We will continue to seek acquisitions in the Central Scotland Forest (CSF) and support access and other developments where possible.</p> <p>Subject to resources, we will aim to expand our woodland and community resources into areas where there is currently no national forest estate, including Edinburgh and Midlothian, Inverclyde and the industrial areas of Ayrshire.</p> <p>We will make community woodlands accessible to a wide range of communities and promote provision suitable for all abilities.</p> <p>Through our locally based staff, we will be accessible and responsive to the wishes of communities.</p> <p>We will seek to improve access opportunities by all sections of the community to woodlands close to settlements by providing and hosting paths, multi-user routes and similar access facilities.</p>	<p>Number and area of community woodlands managed in the most deprived 20% and 50% of communities measured through the Scottish Index of Multiple Deprivation.</p> <p>Number and area of community woodlands managed in the CSF.</p> <p>Number of access facilities and length of formal paths managed in the District and in the CSF.</p> <p>Number and length of all abilities paths in the District and in the CSF.</p> <p>Number of council areas with and without FCS-managed woodland accessible to local communities</p>	<p>All FCS-managed woodlands close to settlements are easily accessible to a wide range of local people who wish to use them.</p> <p>FCS manages community woodlands in more deprived wards in all council areas.</p>
<p>Health</p>	<p>We will continue promoting health walks with local GP surgeries and health centres, and encouraging other people who lead groups in our woodlands.</p>	<p>Number of 'health walks'.</p> <p>Number of organised health-related activity visits to FCS-</p>	<p>Primary health professionals see real value in people using woodlands and work with us to develop and sustain projects</p>

	<p>We will co-operate with health professionals and specialists wishing to promote healthy living through woodland activities.</p> <p>We will promote healthy activity in woodlands through a range of aims and programmes including recreation, tourism, publicity, outdoor education and community engagement</p>	<p>managed woodland, including GP referrals.</p> <p>User satisfaction surveys.</p> <p>Number of visitors to FCS managed woods.</p>	<p>and programmes.</p> <p>Many more people use woodlands regularly for healthy activity and benefit as a result.</p>
Partnerships	<p>We will keep our emphasis on locally-based staff, dedicated to community engagement and implementing local community-based projects.</p> <p>We will continue to encourage the development and involvement of local groups in local woods.</p> <p>We will continue to be full and active partners in the Central Scotland Forest, improving and expanding our management of woodlands.</p> <p>We will work in partnership with other agencies and bodies to lever in additional resources to achieve shared aims.</p> <p>We will maintain formal partnership structures, such as the Carron Valley Partnership where there is a demand and they add value.</p> <p>We will be reasonable, polite and efficient.</p>	<p>Number of local groups actively involved in projects.</p> <p>Number of projects being developed with multi-agency involvement.</p> <p>Funds invested by FCS and partners.</p>	<p>All types of partners feel they achieve much more with us than they would without.</p>

<p>Volunteering</p>	<p>We will expand opportunities for voluntary work in woodlands accessible to communities working closely with local authorities and other organisations to facilitate activities near to those who want it. Staff have identified work required in most of our woodlands and will attempt to match it to skills available.</p> <p>We will continue to support volunteer activity groups, such as the ‘Heathland Brashers’, who enjoy physical activity by doing environmental and access work in woodlands.</p> <p>We will trial the Greenwork Mates work-place volunteering programme in West Glasgow, in partnership with the Glasgow West Regeneration Agency, and will explore opportunities to expand FCS provision of this sort.</p>	<p>Number of volunteers doing work in FCS-managed woods.</p> <p>Number of work-place volunteers doing work in FCS-managed woods.</p>	<p>To facilitate and encourage the demand for voluntary work within our forests, improving the appearance and enhancing the environment.</p> <p>FCS is providing an important work-place volunteering experience to improve work chances of excluded groups.</p>
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SFS Key theme 6: Environmental quality			
Key local issues	Proposed response (including implementation)	Monitoring	Aspiration

<p>Sustainable management</p>	<p>We are firmly committed to retaining the high standards required to pass the UKWAS audit.</p> <p>We will ensure that staff and contractors are aware of the requirements and purpose of certification.</p> <p>We will promote the UKWAS, and the contribution that FCS makes in Scotland, through publicity and events.</p>	<p>Approval achieved at each audit.</p> <p>Number of minor and major corrective action requests made.</p> <p>Number and content of commendations made at audit.</p> <p>Number of District publications using FSC logo.</p>	<p>To demonstrate management beyond the minimum requirements.</p>
<p>Water quality</p>	<p>We will implement and promote industry best practice defined in FCS forests and water guidelines and related legislation (e.g. controlled activities regulations) to safeguard the water environment in forest areas and all land that we manage.</p> <p>We will carry out catchment-based assessments of planting and felling plans in all acid sensitive and adjacent areas, and adjust proposals or carry out water sampling as required.</p> <p>We will comply with regulatory processes and ensure that these are included in contracts, leases and licences.</p> <p>We will continue to improve watercourse corridors by keeping conifers back from burn edges and by encouraging broadleaves and ground vegetation to minimise erosion potential.</p>	<p>Number of pollution incidents.</p> <p>Compliance with requirements on acid-sensitive catchments, monitoring or adjustment to plans.</p> <p>Compliance with regulations and maintenance of required records.</p>	<p>The water environment in forests is effectively safeguarded.</p>
<p>Landscape quality</p>	<p>We will produce forest design plans that reflect the local character of woodlands in their landscape, environmental and historic setting.</p> <p>We will consult communities and agencies during the process to achieve consensus.</p>	<p>Proportion of consultees supporting forest design plans at formal submission stage.</p>	<p>We are able to produce forest design plans fulfilling the potential of the woodlands and achieving widespread support from communities and</p>

	<p>We will use our work plan/coupe record system to gather information for detailed site planning from relevant people before operational work begins on individual areas. We will aim to optimise the outcome of any felling or replanting, noting constraints or opportunities for enhancement.</p>		<p>agencies.</p>
<p>Cultural heritage</p>	<p>We will work with Historic Scotland (HS), the National Trust for Scotland (NTS) and others to update and improve the type, quality and scale of access to, and interpretation of, the pre-historic remains and landscape of Arran.</p> <p>We will develop proposals for interpretation of the 18th century Wilsontown Ironworks area at Heathland Forest, to include stabilisation of the upstanding remains, improvement of the local environment and access provision.</p> <p>We will work with HS and local interest groups to promote interpretation and countryside access connected with the Antonine Wall and industrial heritage at Nethercroy and Twechar.</p> <p>We will produce a network of sites in an industrial archaeology trail with associated woodland access.</p> <p>We will produce a new forest design plan for Blairadam Forest in 2007 that will recognise the designed landscape on FCS land in preparing shapes and replanting species choice.</p> <p>We will continue to investigate historical leads and amend forest design plans and operational plans in the light of new historic information.</p> <p>We will aim to protect and, as appropriate, interpret evidence of former local historical land-uses within our resources and will seek external funding for larger projects.</p>	<p>Delivery of a programme of improvements on Arran.</p> <p>Delivery of the Wilsontown Ironworks project.</p> <p>Increase in visitors and local exposure.</p> <p>Delivery of industrial archaeology trail.</p> <p>Forest design plans record and respond to all known designed and locally relevant historic landscape and associated features.</p>	<p>The national forest estate in central Scotland will be recognised as providing interesting and attractive opportunities for public access to a wide range of historical locations.</p> <p>We are aware of and protect the historic value of the landscapes that we manage and wherever practicable sites are accessible. Appropriate interpretation is provided.</p>

SFS Key theme 7: Biodiversity

Key local issues	Proposed response (including implementation)	Monitoring	Aspiration
<p>Priority habitats</p>	<p>We will aim to achieve favourable conservation status in all our SSSIs and Natura sites, and to achieve 80% in the favourable or unfavourable (or unfavourable - recovering) category by 2008, and 95% by 2010.</p> <p>We will restore 25% of our mainland PAWS within 10 years and seek to exceed this on Arran.</p> <p>We will manage our ASNW sites to maintain or improve their condition and will take opportunities for expansion, especially on Arran.</p> <p>We will seek to create and enhance functional forest habitat networks and other habitats in our woodlands that, wherever possible, also contribute to landscape-scale networks.</p> <p>We will seek to restore selected lowland raised bogs (LRBs) according to national and regional priorities and our developing LRB plan for the District, subject to funding.</p> <p>We will extensively use low-impact silvicultural systems (LISS) in Devilla Forest and will review opportunities across the District at forest design plan revision, with the aim of expanding our use of continuous cover forestry.</p> <p>There will be a presumption in favour of using native broadleaves in new planting and re-stocking, according to underlying national vegetation classification (NVC), subject to requirements in specific cases, such as growing quality broadleaves or in designed landscapes.</p> <p>We will maintain our three recently-established lowland meadows and seek opportunities to expand this habitat where appropriate.</p>	<p>In general, forest design plans.</p> <p>Percent of SSSIs/ Natura sites in the favourable or favourable- recovering categories.</p> <p>Percent of PAWS under restoration and restored.</p> <p>Complete a LRB plan.</p> <p>Percentage of forest managed under LISS.</p> <p>Percent of broadleaves of predominantly native species.</p> <p>Number of forest design plans with LBAP priorities and enhancements delivered or in process.</p>	<p>The national forest estate is increasingly rich in habitats, and is a haven and reservoir for these priority species.</p>

	<p>We will include site habitat survey and appropriate management prescriptions in our forest design process for newly acquired land.</p> <p>We will seek to optimise the contribution of wetlands in our management of existing and new woodlands.</p> <p>We will work with local LBAP groups to identify opportunities for habitat enhancement at the forest and site level during forest planning, and will implement where feasible.</p> <p>We will continue and review our programme of rhododendron control, which mainly affects Devilla, Callendar Wood and parts of Arran.</p> <p>Larger-scale improvements need additional funding and we will seek this where the greatest benefits can be expected.</p>		
<p>Priority species</p>	<p>We will develop and implement specific projects as part of the national programme to support populations of red squirrel and black grouse in areas identified as nationally relevant. In doing so, we will target our efforts to maximum effect to make the best use of limited resources.</p> <p>We will implement the forest design plans at Kyle and Pencloe that were adjusted to give maximum potential habitat improvements for red squirrels as part of the designated Galloway core area.</p> <p>We will review open ground habitat within 1 km of all known black grouse lek sites and target our management accordingly.</p> <p>We will develop and implement plans to safeguard regionally important populations, initially of great-crested newt and other amphibians and the relevant mosaic of habitats at Nethercroy. Sites at Lennoxton are already included in the forest design plan and these sites will be enhanced by felling and re-stocking plans.</p> <p>We will ensure that the needs of wildlife species of national, regional or local importance are considered during forest planning and</p>	<p>Implementation of red squirrel and black grouse plans.</p> <p>Write and implement a management plan for great-crested newt at Nethercroy.</p>	<p>A healthy and expanding population of the relevant priority species.</p>

	operations, including hen harrier in particular in the special protection area (SPA) on Arran.		
Habitat networks	<p>We will continue the development of forest habitat networks (FHN) in our re-stocking programme, using native broadleaf species and Scots pine with other conifers to create stable landscape features and diversify the habitats.</p> <p>We will keep up to date with research findings on optimum arrangements to allow development of forest and open land habitats together.</p> <p>We will work with neighbours to optimise benefits from habitat links outside the national forest estate.</p>	<p>FHN considered in all coupe plans.</p> <p>Successful establishment of planted networks.</p> <p>Success of ground vegetation establishment on restored open habitat areas.</p>	A matrix of linked habitats surrounding islands of productive timber crops
Deer management	<p>We will maintain deer management as a core activity and ensure sufficient resources are allocated to protect woodlands and habitats from widespread damage.</p> <p>Animal and deer population welfare will remain an underpinning commitment.</p> <p>We will seek to maintain the health of deer populations, including the maintenance of the genetically distinct herd of Sika in the Devilla area.</p> <p>We will support schemes to increase the number of skilled stalkers available in the forest industry, primarily through encouraging provision of well-managed and designed shooting lets.</p> <p>We will plan carefully and work with Central Scotland Forest Trust and other stakeholders to ensure proper management of deer in urban and peri-urban areas.</p> <p>We will work with CSFT and other partners to reduce the impact of deer on the wider environment and particularly road safety.</p>	<p>Achievement of deer cull targets based on population and damage assessments.</p> <p>Number of deer lets and number of stalkers involved.</p> <p>Deer management programmes in place for WIAT woods having potentially growing deer populations.</p> <p>Road-traffic accidents resulting from collisions with deer.</p>	Deer populations are healthy and in balance with the environment across the District

The key issues listed above are grouped into the seven themes in the Scottish Forestry Strategy (SFS). Appendix 5 shows how these key issues cross-reference to other themes.

In a number of areas, projects or programmes have been identified as not currently resourced. Before external funding is pursued or internal resources are re-allocated, these will be subject to a project planning process for approval by the FES Management Board. Part of this process is to measure the project or programme against national priorities and to identify funding for initiation and construction, and issues such as future funding for maintenance.

From the key issues listed above there are four key areas that, due to the opportunities in this area, we would like to become regarded as having made a significant contribution to the national delivery against the SFS:

- Renewable energy (wind and biomass);
- Urban forestry and community support;
- New woodlands (WIAT and carbon sequestration);
- Mineral development and restoration.

Appendix 1: Evaluation of achievements (1999 – 2006) under previous Strategic Plan

SFS Priority for Action 1: To maximise the value of the wood resource			
Target description and planned achievement date	Target achieved (yes/no/partial)?	Comments	Should this target be updated and carried forward to new District Strategic Plan?
1 Manage existing woodlands.	Yes	<p>The District was established on 1 April 1999 with this as one of three main objectives. All woods now under active management.</p> <p>Plans for deer management; fire prevention and protection; forest design plan preparation; recreation, conservation and heritage (RCH) issues cover all areas. Project costings prepared and submitted for 2005/06 business plan.</p> <p>Clearance of fly-tipping regular and ongoing.</p> <p>Development of Arran Strategy to improve viability of harvesting and options for future management.</p> <p>Professional deer management, fire prevention and protection, report tree ill-health.</p>	No. Now the way that the District is developing is clearer, this should be subsumed into other priorities.
2 Promote efficiency/sustainability with private forestry neighbours.	Partial	<p>Pencloe link road proposal.</p> <p>Balance private and public interests.</p>	Yes, as opportunities arise.
3 Develop improved timber quality through thinning	Partial	<p>Thinning plan completed 2003, reviewed annually, programme completed to target figures. Plans included in each forest design plan review.</p>	Yes.

		Clarity of purpose for forest stands in each forest design plan and site plan. Full-density planting only in stands for commercial production. Assess all sites for thinning and develop plans for them.	
4 Produce an updated periodic forecast of timber production and ensure delivery of harvesting programme to achieve that.	Yes	Produced annually. Significant rise from 145,000 in 2004/05 to 230,000 in 2006/07 business plan. Potential effects of windfarm construction agreed as additional 70,000/year in 2007/08. 10-year programme set out and funds obtained to provide survey data.	Yes.

SFS Priority for Action 2: To create a diverse forest resource for the future			
Target description and planned achievement date	Target achieved (yes/no/partial)?	Comments	Should this target be updated and carried forward to new District Strategic Plan?
5 Approved forest design plans after full consultation.	Partial	<p>No issues have remained outstanding at approval.</p> <p>Preparation methods used as examples of best practice.</p> <p>All work carried out under approved plans.</p> <p>Public open days at Carron, Lennox, Devilla.</p> <p>Production of forest design plans now on CD for ease of distributing to maximum number of people.</p> <p>Two environment panels, promote community involvement, published plans for restoration sites, ecological impact assessment (EIA) if required, new roads criteria and construction period.</p>	Yes. This may be incorporated into UK Forestry Standard. Mainland consultation not using environment panel due to diversity of consultees.
6 Ensure management meets UK Forestry Standard.	Yes	<p>Met requirements of UKWAS auditors in 2000 and 2003.</p> <p>Forest design plan coverage at 93% at 31 March 2006, but meeting target of 100% by April 2008 will be challenging.</p> <p>Continuous cover forestry, natural reserves, long-term retention (LTR), species proportions all met in plans to date (first three figures at District not individual forest plan level).</p> <p>No reported incidents of contravention of H&S legislation or guidelines.</p> <p>Ongoing staff training and personal development.</p>	Yes, Devilla now proposed for all as ATC; implementation of deadwood policy needs work. May need more recording of categories (e.g. natural

		Forest plan coverage, continuous cover forestry options – Devilla 170ha, natural reserves, (woodland where biodiversity is a prime objective) LTR, Spp proportions, environmental monitoring, fallow period, follow industry guidelines, H&S and training, tree safety.	reserve) and review of actuals against forecasts of production.
7 Management of designated sites.	Partial	<p>100% coverage of SSSIs and SAMs with plans approved by SNH/HS. Ongoing management work at Twechar and Carron.</p> <p>Plans prepared for all PAWS, 3.5ha restoration begun to 31/3/06, plus 38ha of expansion from ASNW.</p> <p>Developed coupe record system to maximise opportunities when other operations are underway.</p> <p>Pre-felling surveys on Arran for archaeological features.</p> <p>Agreed plans with SNH/HS, ASNW/PAWS.</p>	Yes, but also include intentions for non-designated sites, such as UAMs.

SFS Priority for Action 3: To make a positive contribution to the environment			
Target description and planned achievement date	Target achieved (yes/no/partial)?	Comments	Should this target be updated and carried forward to new District Strategic Plan?
8 Restore opencast and other mineral sites on national forest estate.	Yes	Woodmuir/West Mosshat completed, Byelawhill ongoing. Co-operation and learning led to contributing to Forest Training Services courses. No pollution incidents. Develop expertise/learning with others, use independent site monitoring, use of filter cake.	Yes, but not just on estate. Use expertise to help others, or lease land.
9 Investigate vacant and derelict land resource.	Yes	Portfolio completed and results used in business plan preparations and negotiations to acquire/manage - Nether Croy, Bishopton, Braehead. Working on alternative funding options by partnerships, e.g. Woodmuir. Information shared to ensure best value for others outwith FCS. Improvements faster/cheaper/more secure than private sector (market failure), portfolio by April 2004, promote with Central Scotland Forest Trust, partnerships and alternatives for funding to increase outputs.	No, implementation phase is now ongoing, so part of restoration, above.
10 Arran Strategy	Yes	Arran Strategy agreed with all statutory consultees November 2003 and implementation on new Operations sites. EU funding for county road improvements (phases 1, 2 and 3 now complete) and interpretation for in-forest cycle routes. Partnership with Royal Society for the Protection of Birds (RSPB)/Scottish Natural Heritage (SNH)/FCS on Arran hen harriers.	No. Implementation is part of UKFS/forest design plans. Continued efficiencies may

		<p>New leaflet.</p> <p>In line with SNH natural heritage zones (NHZs).</p>	<p>be added under 'Maintain an efficient and effective organisation.'</p> <p>Reconsider if biofuels plant goes ahead.</p>
<p>11 Further local biodiversity action plan (LBAP)/habitat action plan (HAP)/species action plan (SAP) process</p>	<p>Yes</p>	<p>Active participation in LBAP groups. All new forest plans include LBAP priorities. Business plan submissions prepared 2005. Open ground surveys commissioned spring 2006. Newt surveys, Nether Croy; black grouse and lowland raised bog surveys and habitat improvements. Ancient woodland site at Callendar Wood back into active management.</p> <p>Wildflower meadows created at Forth, Callendar and Blairadam.</p> <p>Incorporate in all new/resubmitted forest design plans.</p> <p>Survey and report on habitats, black grouse and red squirrel plans, lowland and upland heath, blanket and lowland raised bog plans by 2004.</p>	<p>Yes. More guidance needed on quantity, location and funding if to be considered in the overall Scottish context.</p>
<p>12 Sustainable management</p>	<p>Partial</p>	<p>Co-operation with windfarm developers, Whitelee, Kyle, Kingshill, Heathland, Murdostoun, Arran etc.</p> <p>Possible biomass plant on Arran.</p> <p>Implementation of FCS policy on use of biodegradable lubricants, waste management, chemical reduction.</p> <p>Fire awareness campaign (14 schools over five days, input at Forest School and other talks).</p> <p>Quick removal of burnt-out cars, litter-picking, cooperation with police etc.</p> <p>Moss surveys pre- and post-harvesting to monitor recovery.</p>	<p>Yes, but such a large subject, could be considered as a series of targets.</p>

		Biodegradable lubricants, chemical reduction strategy, fly-tipping and cars removal, waste management plan, pollution plan, deadwood strategy, Windpower generation, particularly using short rotation forestry.	
13 Acquisitions for carbon sequestration targets.	Partial	Knockmountain, Cochno Loch, East Grange successful, others under consideration.	Yes, only just started.

SFS Priority for Action 4: To create opportunities for more people to enjoy trees, woods and forests			
Target description and planned achievement date	Target achieved (yes/no/partial)?	Comments	Should this target be updated and carried forward to new District Strategic Plan?
14 Create new woodlands (access priority).	Yes	Drumbow, Crossrigg, West Mosshat (Horberry) all include significant, quality access tracks. Plans agreed before planting. All in Central Scotland Forest Trust area. Use landscape character assessments (LCA), criteria to benefit local and strategic objectives, target CSF area	Yes. See also carbon sequestration.
15 Recreation facilities.	Partial	>16km path created in Blairadam, Forth, Patna, Easterhouse, Limerigg, Callendar Wood, Nether Croy, Garbad, Sannox and Glenrickard. Mowing and weeding to maintain existing routes. Ranger living at Carron greatly appreciated by local community. Purpose-built mountain bike trails and Clanranald Fort with toilet block at Carron. Partnership set up to manage continuing developments. Volunteer groups at Heathland, Easterhouse, Kelty, Callendar Wood, Carron. Horse trails at Patna and Lennox, Forth reedbed and all-ability trail, Fauldhouse boardwalk and fishing platform. Improvements due to harvesting/replanting make visits more attractive and add to infrastructure. River Ayr walk source-to-sea (unique), through Stair. Managing issues with motor bikes and all-terrain vehicles. Glenashdale viewing platform.	Yes. Major issue with resources and finding alternative ways of funding, given FCS limits.

		Proposal for concert venue in Devilla. Plans for resources submitted in 2006/07 business plan. Safety, resources, social exclusion, health, specialist,	
16 Educational opportunities. (Data for two years, recorded from April 2004).	Yes	District taken lead in FCS in development of Forest School, running 2,870 pupil-days in two years and contributing to developmental guidelines for FCS staff. Total of 4,280 children attended other events, including fire prevention talks in Ayrshire and careers seminars. Easterhouse enhancements. Wilsontown Ironworks bid. Visits to schools and woodlands, familiarisation, caring for, Forest School.	Yes.
17 Events. (Data for two years, recorded from April 2004).	Yes	Total of 4,730 visitors to local events, around 130,000 visitors to regional events, such as Treefest.	Yes
18 Local consultation events and taking copies of forest design plans to neighbours etc.	Yes	Carron, Lennox, Devilla, Heathland. Plans now produced on CDs making multiple copying easier.	Yes, as appropriate.

SFS Priority for Action 5: To help communities benefit from woods and forests			
Target description and planned achievement date	Target achieved (yes/no/partial)?	Comments	Should this target be updated and carried forward to new District Strategic Plan?
19 Partnership working (developments fund continuation of District activity?)	Yes	<p>Purchase of Central Scotland Forest Trust (CSFT) woodlands, March 2005. Scottish Forestry Alliance at Crossrigg and Drumbow.</p> <p>Business plan approved on basis of income generated from windfarms, coal etc.</p> <p>Co-operation to access other funds to fulfil others' needs on national forest estate, e.g. Blairadam, Cardenden, Limerigg, Callendar Wood, Carron, Patna, Stair and Rankinston.</p> <p>Alternative ways of funding to reduce call on FCS resources - facilitating?</p> <p>Hen harriers on Arran.</p> <p>Best Woods Award for Blairadam.</p> <p>Fauldhouse schools award for Forest School project.</p> <p>Mineral and other developments include improvements, access resources to create/maintain facilities, Central Scotland Forest Trust/District concordat 2003, restoration back to forest.</p>	Yes. Covers many parts of our activities, so maybe should be part of thinking in all projects, not just a separate activity.
20 Communication/information	Yes	<p>Contact details on name boards, reliable staff, professional behaviour. Ranger 'stickers' and web address on vehicles.</p> <p>New signs board at Carron; signs at Croy; mountain bike leaflet; Blairadam, Fauldhouse, Central Scotland, Forth leaflets.</p>	Yes, always more to do.

		<p>Web pages on District and Central Scotland Conservancy sites.</p> <p>Future work notification, signs etc, contact numbers on boards, local tendering opportunities, police/fire liaison.</p>	
21 Cultural heritage	Partial	<p>Acquired expertise to identify sites, consulted relevant communities and professionals. Incorporated in forest plans and coupe records.</p> <p>Whitelee Oral History Project.</p> <p>Interpretation ongoing for Arran SAMs.</p> <p>Working with communities and local societies to improve access to sites and safeguard monuments, e.g. Kyle memorial stone and Covenanters brass plaque.</p> <p>Identify, protect, interpret.</p>	Yes.
22 New Deal opportunities	Yes	<p>Callendar Wood and Blairadam improvements (26 participants at Blairadam went on to full-time employment.</p>	Yes, as opportunity arises.

6 Maintain an efficient and effective organisation			
Target description and planned achievement date	Target achieved (yes/no/partial)?	Comments	Should this target be updated and carried forward to new District Strategic Plan?
23 Rationalise national forest estate to maximise delivery options	Partial	Rationalise estate with extra ground from CSFT and other purchases. Excambion Polkemmet/Braehead. Devilla/Tulliallan. purchase of Keir Farmhouse. Work on repositioning criteria.	Yes
24 Manage change effectively	Partial	District communication group established to acknowledge increased difficulties of a larger number of staff.	Yes
25 Improving IT access for outstationed staff.	Yes	Computer facilities installed in Arran, Carron, Clydebank, Newbattle and Kelty. GIS capability in some.	Yes
26 Staff contributing to development of FCS training courses and national guidelines.	Yes	Examples include reclamation of derelict land and implementation of Educational Strategy for Scotland.	Yes

Appendix 2

Local plans and guidance

Scottish Lowlands FD guidance notes

SL 1	Forest Design Plan Production System
SL 2	Policy on Whole Tree Harvesting
SL 3	Policy on Windblow
SL 4	Policy on Thinning
SL 5	Policy on Use of Chemicals
SL 6	Thinnings Plan
SL 7	Policy on Christmas Trees
SL 8	Local Guidance on Deadwood Provision
SL 9	Native and Ancient Woodland Plan
SL 10	Consultation Strategy
SL 11.1	Local Biodiversity Action Plans
SL 11.2	Biodiversity Management of Non Woodland Sites
SL 11.3	Moss Picking Policy
SL 12	New Forest Roads and Roads Maintenance
SL 13	Species Choice & Open Space Rationale
SL 14	Management of Developments
SL 15	Deer Management Strategy
SL 16	The Management of Scheduled and Unscheduled Ancient Monuments
SL 17	Black Grouse Local Management Plan
SL 18	Red Squirrel Local Management Plan
SL 19	Recreation Strategy
SL 20	First Aid and Emergency Procedures
SL 21	System for Issuing Official Permissions
SL 23	Provision of Natural Reserves
SL 24	Fly-tipping, Hazardous waste and Abandoned Cars
SL 25	Monitoring of Tree Health
SL 26	Pollution Contingency Plan
SL 27	Education Strategy
SL 28	Fire and Emergency Contact Plan
SL 29	Child Protection Policy
SL 30	Tree Safety Management System
SL 31	Contingency Plan
SL 32	Driving at Work
SL 33	Working with Schools
SL 34	Rights of Access and FC Bylaws
SL 35	Strategic Timber Security Risk Assessment
SL 36	Smoke Free Policy Statement
SL 37	Implementation of NCSA
SL 38	Acid Sensitive Areas
SL 39	Buildings Fire and Emergency Plan

Other thematic plans

Callendar Wood Management Plan 2001-2006

Carron Valley Forest, Recreation Strategy 2006 – 2009 (in prep)

Crossrig Management Plan (in prep)

Drumbow Management Plan 2003-2008

Recreation Plan (see SLGN 19)

Sales Plan

SAM Management Plans (see Appendix 3)

SSSI Management Plans (see Appendix 3)

Strategy for the National Forests of Arran (2003)

Thinning Plan (see SLGN 6)

Appendix 3

Scheduled ancient monuments (SAMs), sites of special scientific interest (SSSIs) and ancient woodland sites (PAWS)

Scheduled ancient monuments

Reference	Monument name
ENV 13/1/2980	Camilty Harperigg Cairn
ENV 13/1/1165	Camilty Hill Enclosure
ENV 13/1/1933	Camilty - Roman Fortlet
ENV 13/1/1138	Camp Wood Roman Fort
ENV 13/1/3903	Couthally Castle
ENV 13/1/2654	Wilsontown Ironworks
ENV 13/1/90008**	Antonine Wall - Bar Hill Roman Fort & Military Way
ENV 13/1/7074*	Antonine Wall - Strone to Giral Hill
ENV 13/1/7528*	Antonine Wall - Giral Hill to B802
ENV 13/1/7054*	Antonine Wall - Twechar To Bar Hill
ENV 13/1/7639	Antonine Wall - B802 to N of Cuilmuir View, Croy
ENV 13/1/7680	Antonine Wall - Camp, fortlet, fort and settlement, Croy Hill
ENV 13/1/2911	Kilpatricks - Gallangad Burn - Long Cairn
ENV 13/1/8549	Devilla - Bogside - Castle Hill enclosure
ENV 13/1/3492	Arran - North Sannox - Cairn
ENV 13/1/3974	Arran - Tormore hut circle 450m ENE of Torr Righ Mor
ENV 13/1/3976	Arran - Tormore hut circle 450m SE of Torr Righ Beag
ENV 13/1/3979	Arran - Tormore hut circle 510m ESE of Torr Righ Beag
ENV 13/1/401	Arran - Lamlash Road - Stone Circle
ENV 13/1/7267	Arran - Torran Loisgte Chambered Cairn
ENV 13/1/396	Arran - Dunan Beag- Long Cairn and Standing Stone
ENV 13/1/90186	Arran - Kilpatrick Hut Circles (one not FCS)
ENV 13/1/90051	Arran - Carn ban - Chambered Cairn
ENV 13/1/4433	Arran - Aucheleffan stones
ENV 13/1/398	Arran - Giants Graves
ENV 13/1/5657	Arran - Glenashdale Wood Fort
ENV 13/1/403	Arran - Meallach's Grave - Long Cairn
ENV 13/1/4601	Arran - Bealach Gaothar - Ring Cairn
ENV 13/1/4278	Carron - Sir John de Graham's Castle
ENV 13/1/2719	Carron - Waterhead - two Standing Stones
ENV 13/1/11227	Woodmuir Farm Coke Ovens and Reservoir
ENV 13/1/8550	Blairadam - Roscobie Hut Circles

* Access rights over land only. Not FCS managed land

** Under HS guardianship

Sites of special scientific interest

Location	Name	Status	Area
Arran	Arran Moors (also SPA)	F/m	2,474ha
Arran, Glenrickard	Gleann Dubh	F/m*	309ha
Arran, Glen Loig	Ard Bheinn	F/m	10ha
Auchentorlie	Glenarbuck	n/a	<1ha
Auchentorlie	Hawcraig and Glenarbuck	n/a	1ha
Auchentorlie	Lang Craigs	n/a	<1ha
Camilty	Cobbinshaw Moss (also cSAC)	UF/r	1ha
Carron	Endrick Water	n/a 4ha	
East Grange	Lockshaw Mosses	n/a	38ha
Gimmerscroft	Lady Bell's Moss	n/a	2ha
Knockmountain	Dargavel Burn	n/a	10ha
West Benhar	Haddockrigg Mosses, North Shotts Moss	UF/d	4ha
Total			2,852 ha

F/m = Favourable, maintained

UF/r = Unfavourable, recovering

UF/d = Unfavourable, declining

N/a = not assessed or assessment not yet available

* = some features not assessed

Ancient woodland sites

Mainland

Name and forest block	Grid reference	SAWI antiquity (in blocks)	Ha	Class	Condition class
Auchentorlie Glen, Auchentorlie	NS441740	1a	7.7	ASNW	(1)
Balgownie	NS991884	1a	15.5 ²	PAWS	(3 and 4)
Black Hill, Pendreich	NS807981, 807981	1a and 1b (62.1 and 10.4ha)	14.6 57.9	ASNW PAWS	(2,3,4)
Callendar Wood	NS895788	1a	27.0 50.0 ³	ASNW PAWS	(1,2,3,4)
Fairy Glen, Wester Dunsyston	NS794627, 797627	1a and 2a (2.6 and 3.1ha)	5.7	ASNW	(1)
Garshellach	NS734937, 728940	1a	13.8	PAWS	(3)
Coalpots Wood, Hamilton Wood, Gartmorn	NS913946, 909950	1b (12.7ha)	0.4 12.3	ASNW PAWS	(2,3,4) (1)
Manroy Hill, Rankinston	NS439136	2a (1.4ha)	1.4	ASNW	(1)
Muirsmill Glen, Patna	NS376085	2a (1.2ha)	1.2	ASNW	(1)
Praybrae, Keir Plantation, Devilla	NS963889, 971883, 950887	1a and 1b (3.0 and 46.7ha)	49.7	PAWS	(4)
Twechar	NS712764	2a (3.7ha)	3.7	PAWS	(2, 3,4)
Wellflat Bank, Stair	NS439242	2a (5.2ha)	5.2	ASNW	(1)

² This total includes 1a - 13.8ha and 3 – 1.7ha, where 3 is assumed to be 1a after site visit, possibly a difficulty from the mapping process in the past.

³ In line with management plan, recent GIS layer states the area of 1a as 75.6ha.

Wilsontown Glen, Heathland	NS952544	2a (1.5ha)	1.5	ASNW	(1)
Woodmuir	NS962596	2a (4.8ha)	4.8	PAWS	(4)
			272.4 ha		

Totals for ancient woodland sites (mainland):

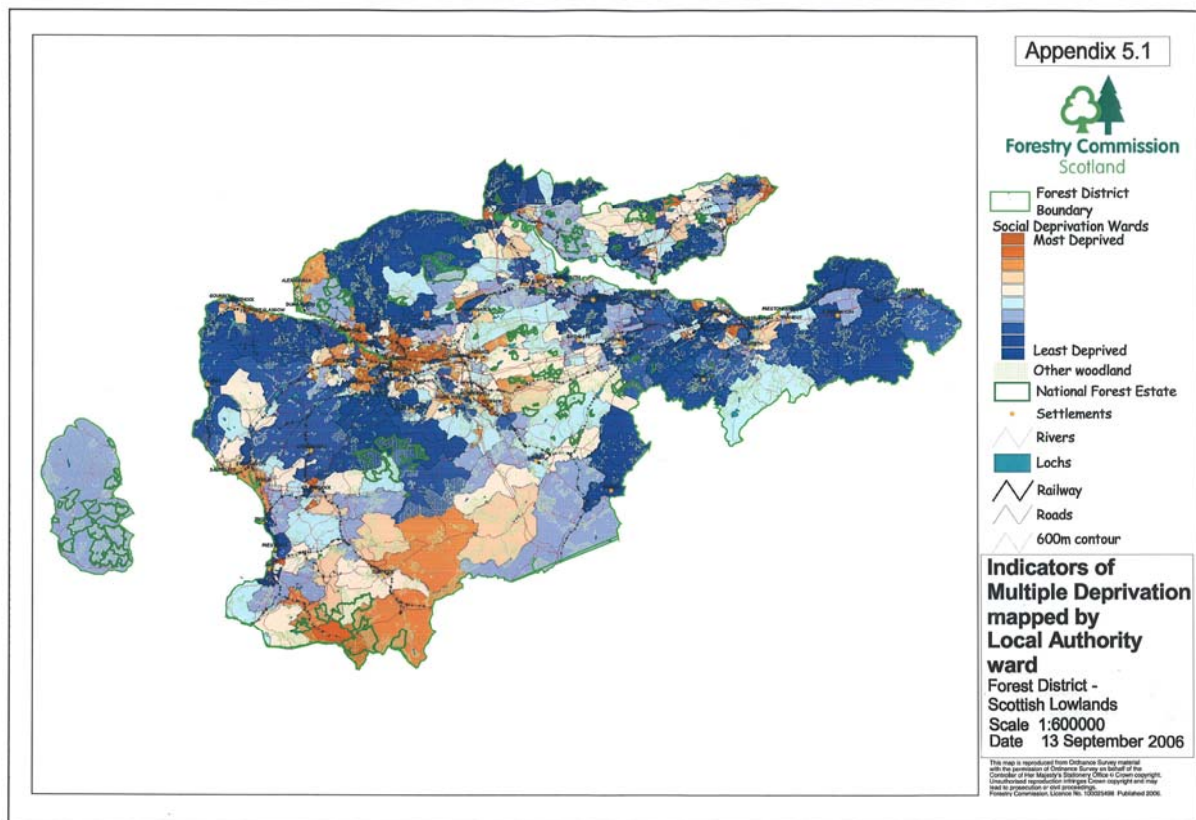
1a	181ha
1b	70ha
2a	21ha
Total	272ha
Currently plantation (PAWS)	208ha
Currently semi-natural (ASNW)	66ha

Arran

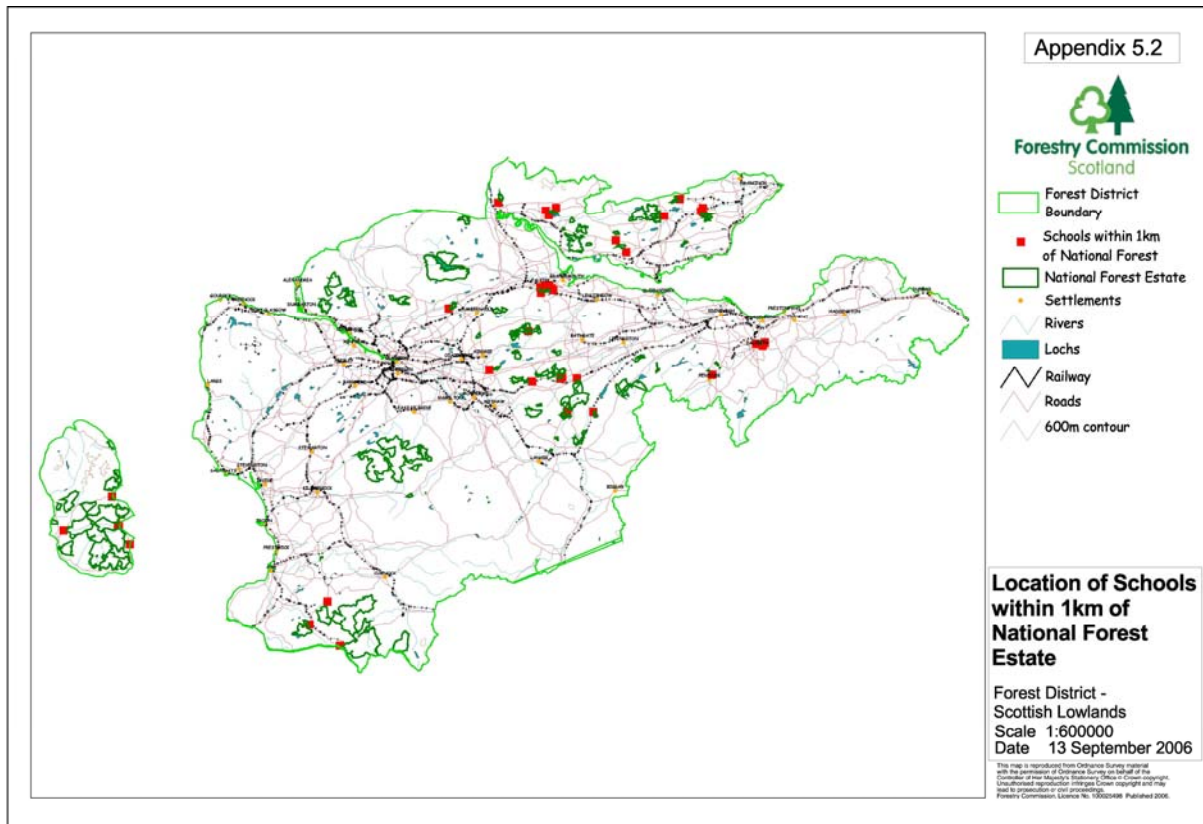
ASNW	66ha
PAWS	141ha
Sub Total	207ha
Other semi-natural woodland	1ha
Scattered native <20% canopy on AWS	5ha
Felled or open on AWS	39ha
>50% native canopy new planted on AWS	19ha
Total ancient woodland sites on Arran	271ha

Appendix 5 Supporting maps

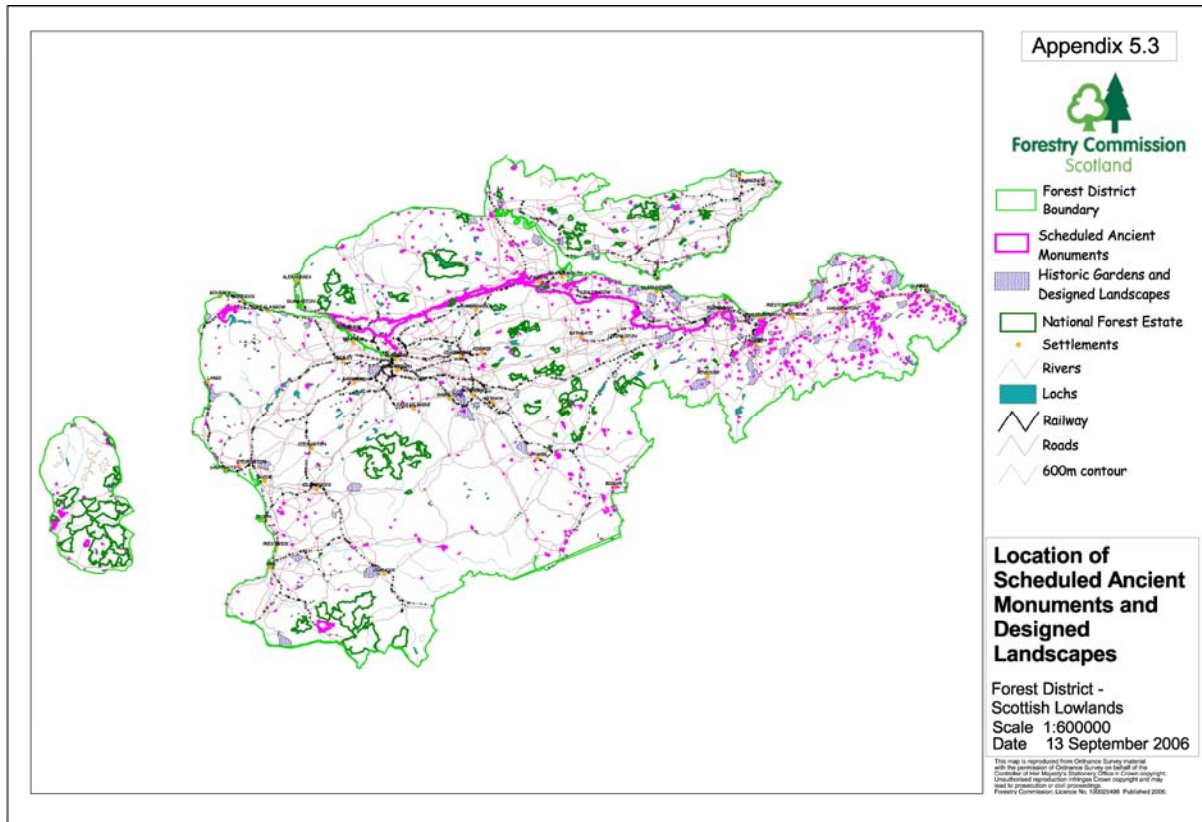
5.1 Indicators of multiple deprivation mapped by local authority electoral ward



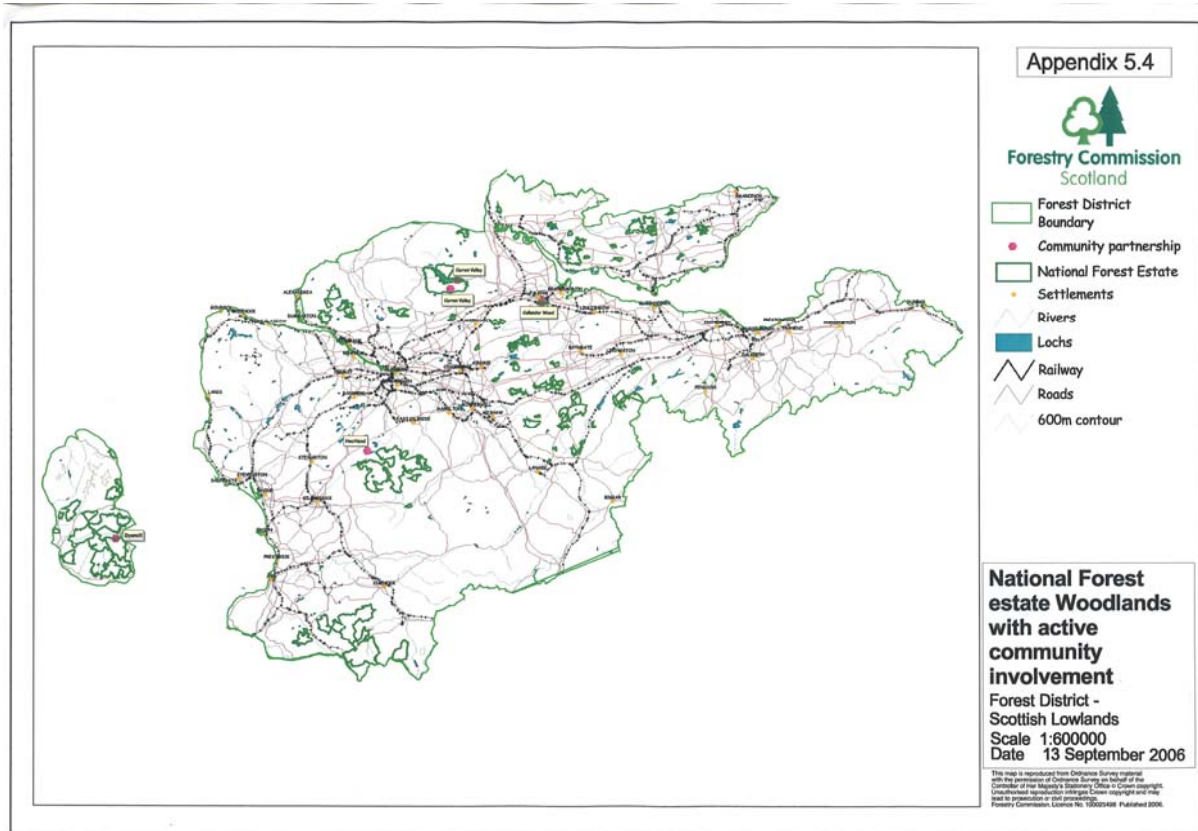
5.2 Location of schools within 1 km of national forest estate



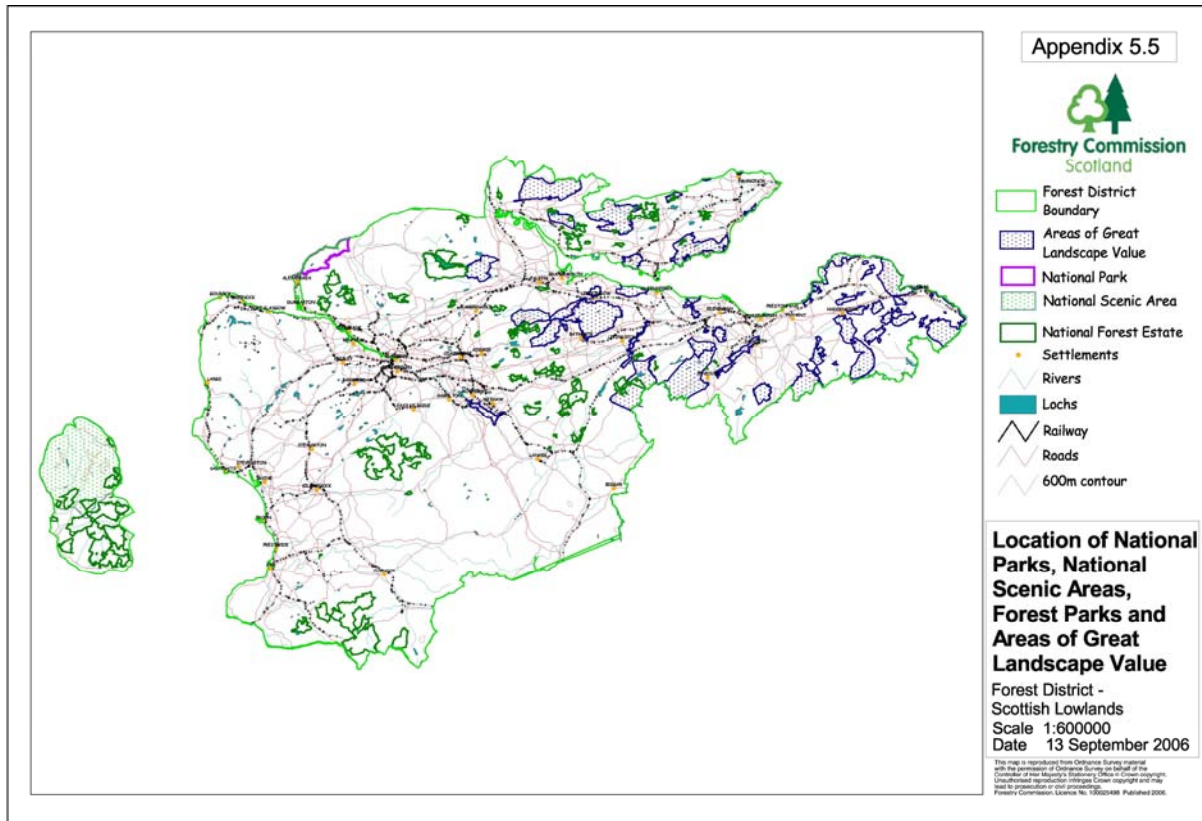
5.3 Location of scheduled ancient monuments and designed landscapes



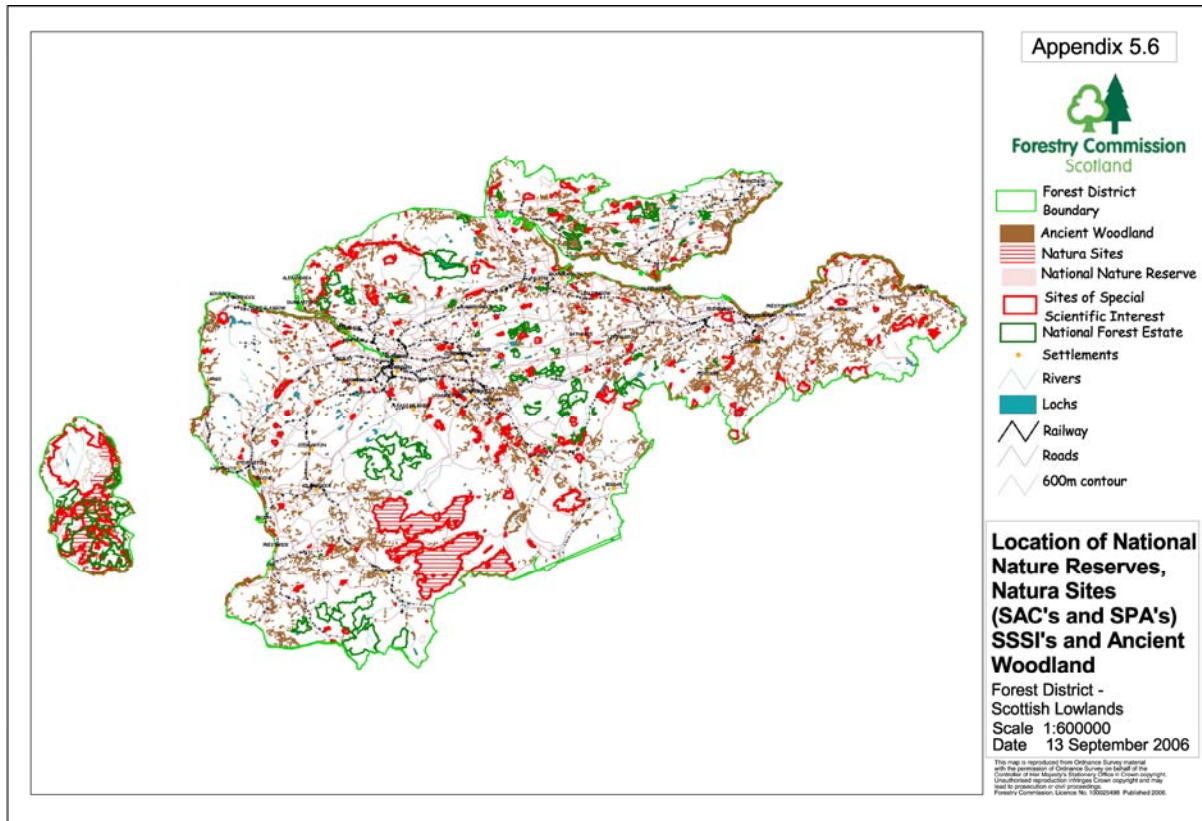
5.4 National forest estate woodlands with active community involvement



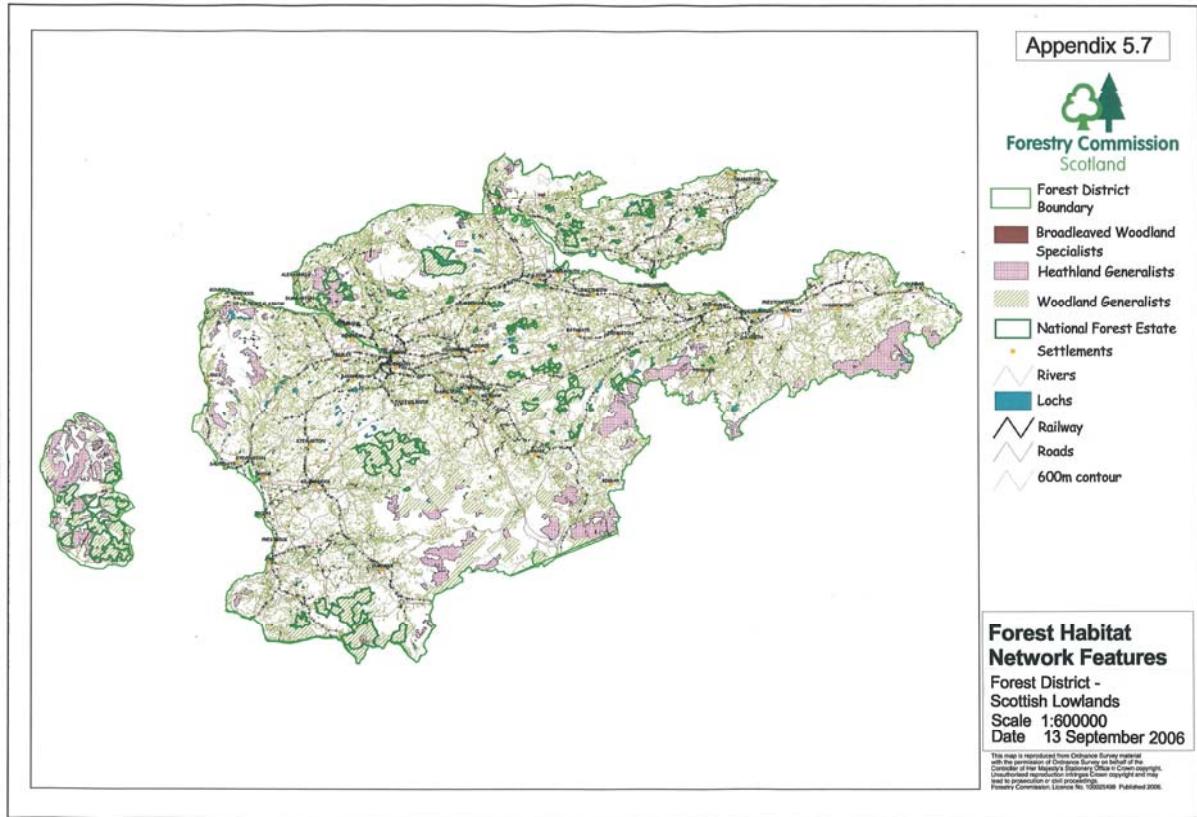
5.5 Location of national parks, national scenic areas, forest parks and areas of great landscape value



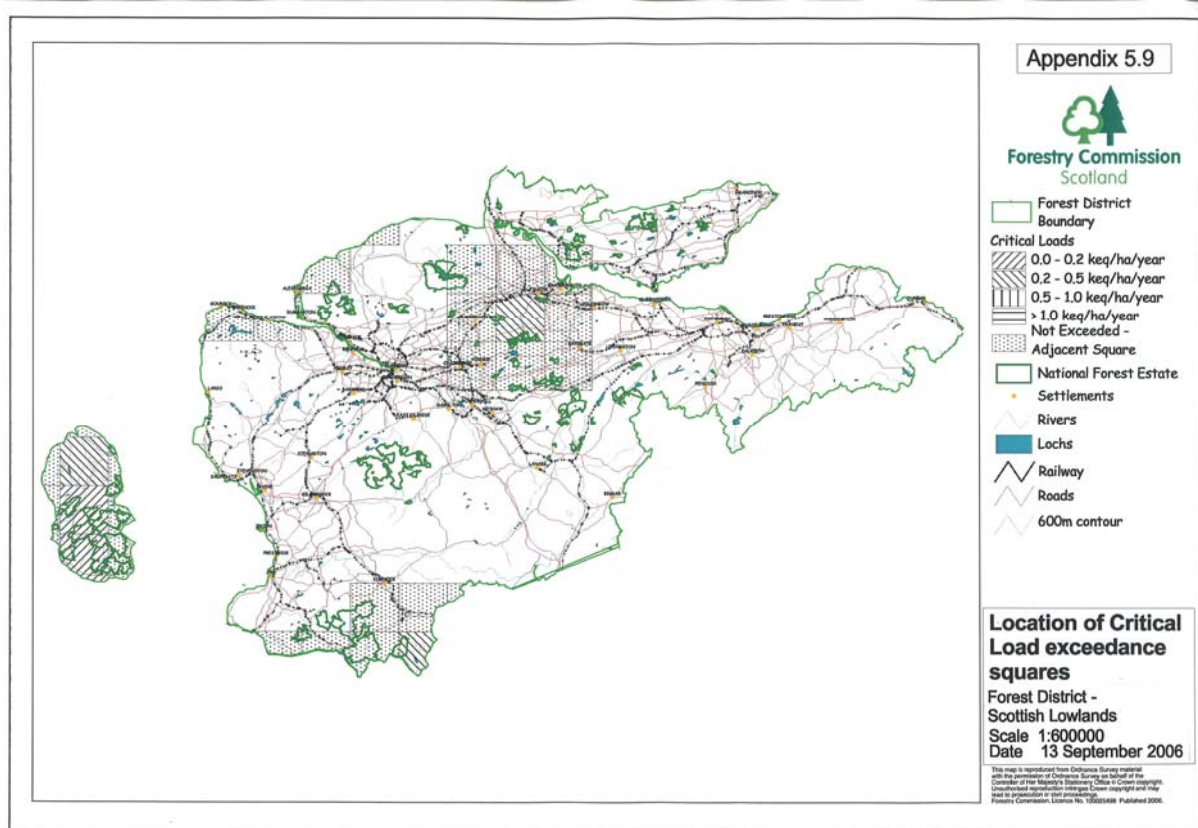
5.6 Location of national nature reserves, Natura sites, sites of special scientific interest and ancient woodland



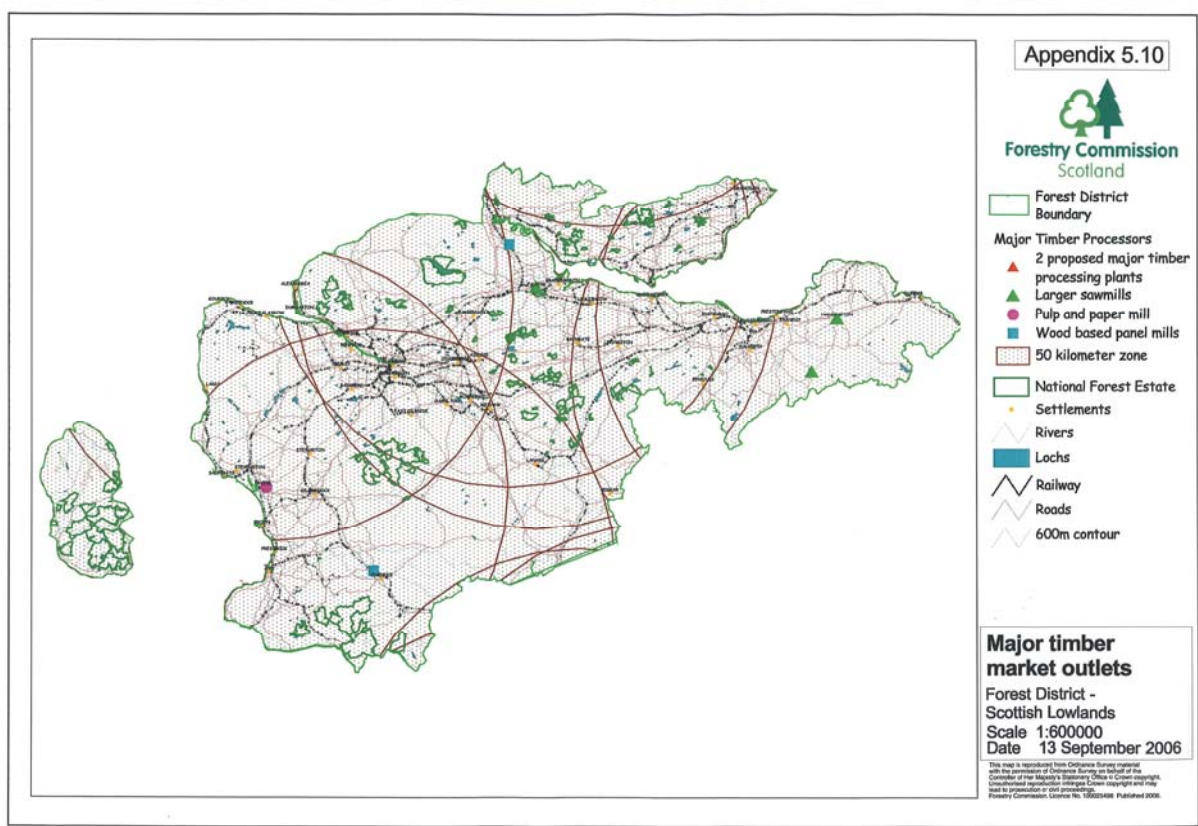
5.7 Forest habitat network features



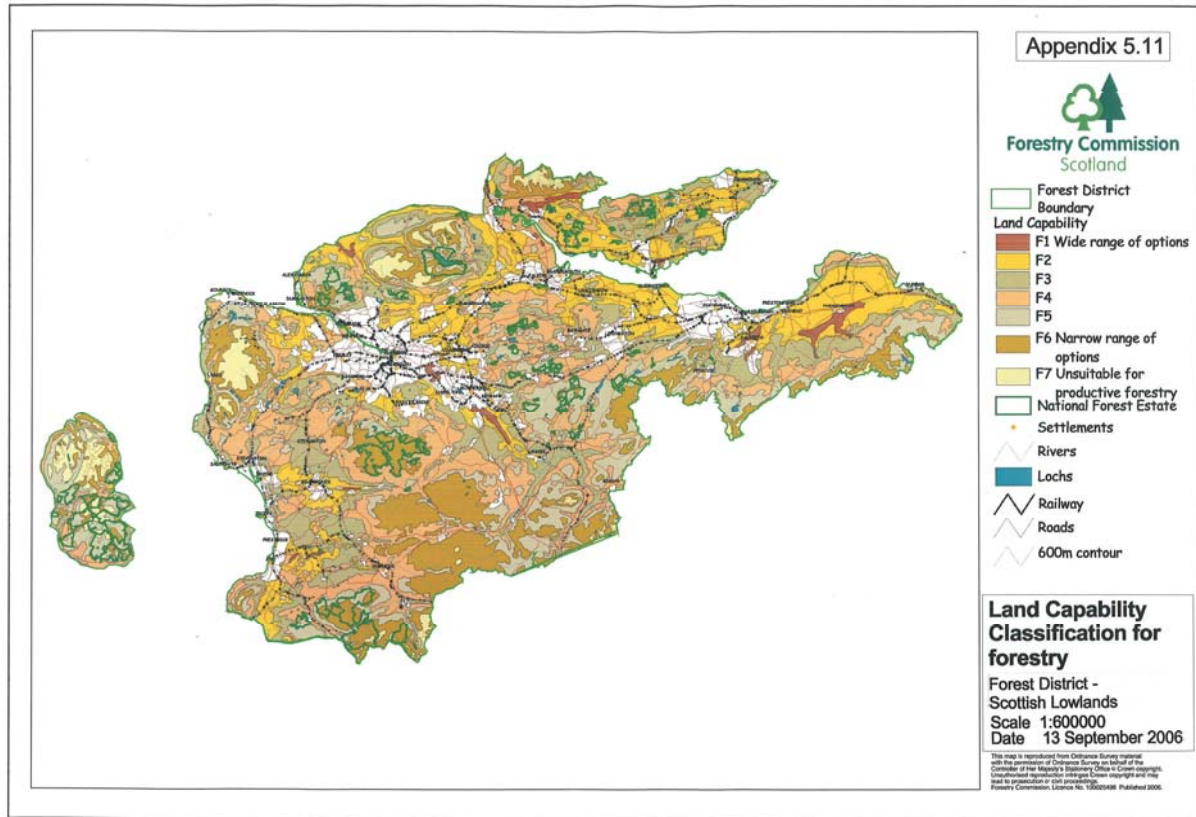
5.9 Location of critical loads exceedance squares



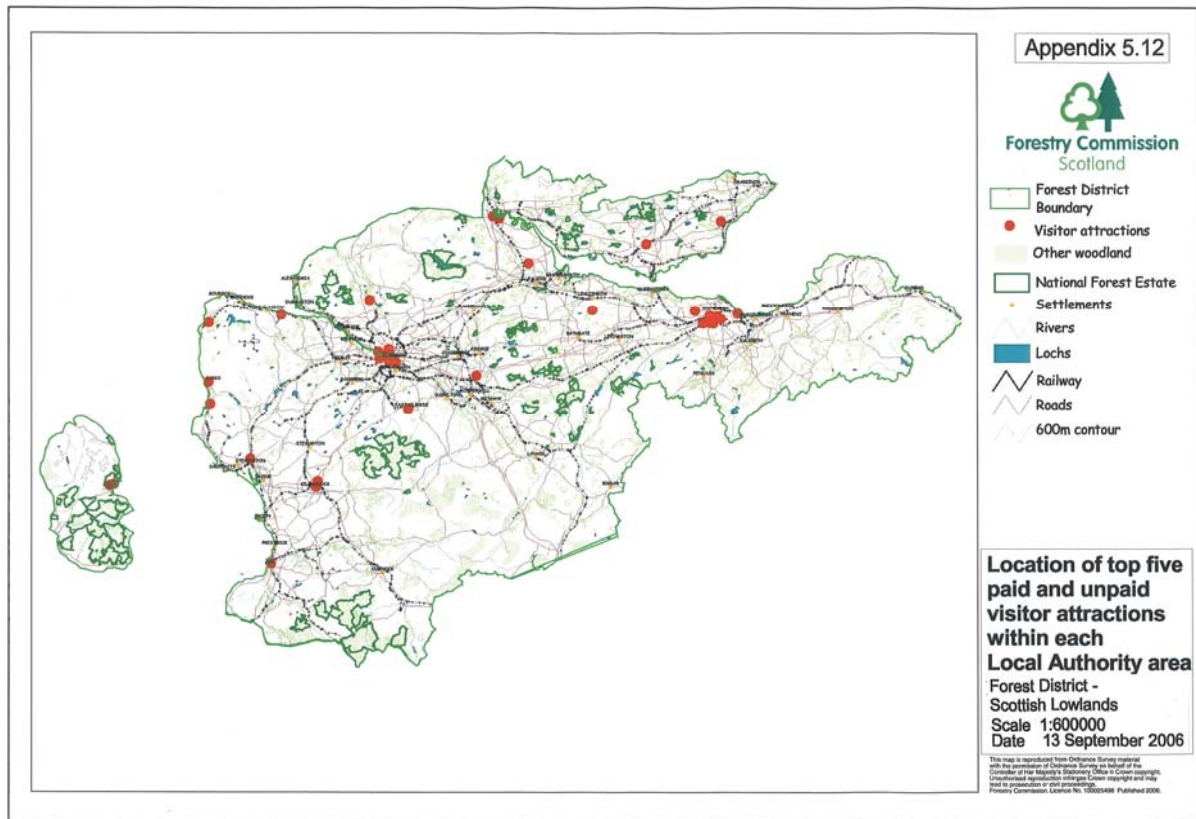
5.10 Major timber market outlets



5.11 Land capability classification for forestry



5.12 Location of top five paid and unpaid visitor attractions in each local authority area



Appendix 6 Key issues cross-referenced to Scottish Forestry Strategy themes

	Climate change	Timber	Business development	Community development	Access and health	Environmental quality	Biodiversity
Renewable energy	4	4	4			4	4
New woodland	4	4	4	4	4	4	4
Timber supply		4	4			4	
Timber transport		4	4	4	4	4	
Support for local businesses		4	4	4			
Non-timber sources of income	4		4	4			
Derelict and underused land	4	4	4	4	4	4	4
Education				4	4	4	
Community engagement			4	4	4	4	
Access			4	4	4	4	
Health				4	4	4	
Partnerships			4	4	4	4	4
Volunteering	4		4	4	4	4	
Sustainable management	4	4	4	4	4	4	4
Water quality		4	4	4		4	4
Landscape quality		4	4	4	4	4	4
Cultural heritage				4	4	4	
Priority habitats	4			4		4	4
Priority species				4		4	4
Habitat networks	4		4	4	4	4	4
Deer management		4	4		4	4	4