Forestry Commission Scotland
Coimisean na Coillteearachd Alba

Planning

Cowal and Trossachs Forest District

Land Management Plan

Callander

Callander Land Management Plan 2015-2024

Cowal and Trossachs Forest District

CALLANDER

Land Management Plan

We manage Scotland's National Forest Estate to the United Kingdom Woodland Assurance Standard – the standard endorsed in the UK by the international Forest Stewardship Council® and the Programme for the Endorsement of Forest Certification. We are independently audited.

Our land management plans bring together key information, enable us to evaluate options and plan responsibly for the future. We welcome comments on these plans at any time.

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Approval date: 27th May 2016

Plan Reference No: 033/LMP/CAT/2015

Plan Approval Date: 27th May 2016

Plan Expiry Date: 27th May 2026

CSM 6 Appendix 1b

FOREST ENTERPRISE - Application for Land Management Plan Approvals in Scotland

Forest Enterprise - Property

Forest District:	Cowal & Trossachs
Woodland or property name:	Callander
Nearest town, village or locality:	Callander
OS Grid reference:	NN 622080
Local Authority district/unitary Authority:	Loch Lomond & The Trossachs National Park

Areas for approval

	Conifer	Broadleaf
Clear felling	26.5ha.	0ha
Selective felling		
Restocking	11.1ha	24.8ha.
New planting (complete appendix 4)		

1. I apply for Land Management Plan approval for the property described above and in the enclosed Land Management Plan.

2. I apply for an opinion under the terms of the Environmental Impact Assessment (Forestry) (Scotland) Regulations 1999 for roads, tracks and quarries as detailed in my application.

3. I confirm that the initial scoping of the plan was carried out with FC staff on 20th October 2011.

4. I confirm that the proposals contained in this plan comply with the UK Forestry Standard.

5. I confirm that the scoping, carried out and documented in the Consultation Record attached, incorporated those stakeholders which the FC agreed must be included.

6. I confirm that consultation and scoping has been carried out with all relevant stakeholders over the content of the of the land management plan. Consideration of all of the issues raised by stakeholders has been included in the process of plan preparation and the outcome recorded on the attached consultation record. I confirm that we have informed all stakeholders about the extent to which we have been able to address their concerns and, where it has not been possible to fully address their concerns, we have reminded them of the opportunity to make further comment during the public consultation process.

7. I undertake to obtain any permissions necessary for the implementation of the approved Plan.

Signed ..... Signed .....

Forest District Manager — Conservator

District ...Cowal & Trossachs FD — Conservancy ...Perth & Argyll...

Date 28th September 2015 — **Date of Approval** ...27 MAY 2016...

Date approval ends ...27 May 2026...

Environmental Impact Assessment

Scheme No C/03-220

Determination Enquiry Form

Complete this form to find out if you need consent, from the Forestry Commission (under the EIA Regulations 1999), to carry out your proposed work.

Section 1

Please tick the box to indicate the type of work you are proposing to carry out. Give the area in hectares and where appropriate the percentage of conifers and broadleaves.

Proposed work:	Afforestation	☐	ha	BL%	Con%	Forest roads	☒	0.55 ha
	Deforestation	☐	ha	BL%	Con%	Forest quarry	☐	ha

Location and district: Cowal and Trossachs Forest District

Please attach map(s) showing the boundary of the proposed work and also give details of the operations.

Section 2

Property details

Property name: Callander

Grid Ref: *(eg AB 123/789)* NN622080

Local authority: LLTNPA

Nearest town: Callander

Section 3

Applicant's category: *(please put a cross in one box)*

PE Personal occupier	☐	**PU** Public ownership	☒
BU Business occupier	☐	**OT** Other	☐
VO Voluntary organisation	☐	**CT** Crofting tenant	☐

Section 4

Applicant's type: *(please put a cross in one box)*

LS Lessee ☐ **TE** Tenant ☐ **OW** Owner ☒ **TR** Trust ☐

Section 5

Your agent or woodland manager's details

Title (Mr, Mrs, Ms, etc): Initials: Surname:

Organisation:

Address:

Postcode:

Tel: Mobile:

Fax: E-mail:

Is this the address for correspondence? ☐ YES ☐ NO

Forestry Commission

Section 6

Applicant's details

Title (Mr, Mrs, Ms, etc): Mr Initials: J Surname: Hair

Organisation: Forestry Commission Scotland

Position (eg partner, director etc) Planning Manager

Address: Cowal and Trossachs Forest District

Aberfoyle

Stirlingshire Postcode: FK8 3UX

Tel: 01877 382383 Mobile:

Fax: E-mail: john.hair@forestry.gsi.gov.uk

Is this the address for correspondence? [X] YES [ ] NO

Section 7

Sensitive Areas: Give the area of the proposal that is covered by any of the following designations:

Sensitive Area as listed in "Schedule 2" of the 1999 EIA Regulations		Area (ha)
a.	Sites of Special Scientific Interest (SSSI) or Proposed Sites of Special Scientific Interest (PSSSI)	0.00
b.	SSSI's with a Nature Conservation Order (Section 29 of the Wildlife and Countryside Act 1981)	0.00
c.	National Park (NP)	0.55
d.	The Broads	0.00
e.	World Heritage Site	0.00
f.	Scheduled Ancient Monument (SAM)	0.00
g.	Area of Outstanding Natural Beauty (AONB)	0.00
h.	"Natura 2000" site - *(European network of special areas of conservation and special protection areas under the Wild Birds Directive)*	0.00

Forestry Commission

 FCCS057

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Summary of Proposals

This is the second plan that Cowal and Trossachs Forest District have prepared as a Land Management, as opposed to a Forest Design, Plan. The change in title reflects the fact that Forest Enterprise Scotland manages a diversity of land use types and habitats, including a wide variety of open ground. Although for the time being the overall outline will be similar to design plans, the land management plan will also describe the management of non-forested parts of the plan area.

The Callander Land Management Plan (LMP) draws on the key themes of the Scottish Forestry Strategy (SFS) (2006), Forest Enterprise Scotland's Strategic Directions and Cowal & Trossachs Forest District's Strategic Plan. It consists of two distinct blocks on either side of the River Teith, Callander Crags/Balameanoch/Bracklinn to the north and Coilhallan to the south.

The objectives of the new plan, which were developed following internal and external consultation, are summarised below and emphasise the importance of recreation and landscape. There is a strong community interest in the woodlands and Forest Enterprise Scotland is willing to work with the community on potential developments. There are also significant conservation concerns and timber production remains an important consideration.

1. Maintain the overall mixed character of the woodlands providing visual and environmental diversity.
2. Establish a medium to long term programme to restore semi-natural ancient woodlands, in Coilhallan, and expand native woodland around these.
3. Maintain existing recreation facilities and promoted trails, working with the community to enhance and extend these, when funding is available.
4. Restructure woodlands in the Crags to create a resilient, mixed age, mixed species woodland, ideally with productive potential.
5. Clear remaining non-native conifer from Crags ridge and allow development of open native woodland, retaining views of surrounding area.
6. Seek opportunities to use species and planting patterns that will benefit black grouse and red squirrels.
7. Retain mixed beech woodland adjacent to the golf course and eastern entrance to Coilhallan, and other veteran beech trees. Manage natural regeneration to favour a range of species and prevent beech becoming dominant in other areas of the woodland.

8. Manage natural regeneration in Coilhallan and the Crags, retaining visual and landscape interest but also to provide a productive resource where possible.
9. Seek to retain remaining arboretum trees in Coilhallan as future specimen trees.
10. Monitor and safeguard nesting birds of conservation concern.
11. Assess status of heronry in context of surrounding woodland and manage appropriately.
12. Continue timber production by appropriate management of existing stands, restocking with productive species, where possible, and managing natural regeneration.
13. Continue working with Local Authority and neighbours to resolve access issues to all parts of the woodland.
14. Carry out pre-operational surveys and follow appropriate guidelines during operations to avoid excessive ground damage thereby minimising risk of erosion and downstream sedimentation.
15. Establish a deer control programme appropriate for a high recreation use area.
16. Continue a programme aimed at eradicating invasive, non-native species.

1.0 Introduction:

1.1 Setting and context

The Callander Land Management Plan area is adjacent to the town, after which it is named, about 14 miles north west of Stirling. There are two main blocks either side of the town and bisected by the River Teith and A84 trunk road (Figure 1.1). The woodlands straddle the Highland Boundary Fault Zone and Callander Crags form an impressive backdrop to the town. To the north is open moorland, gradually rising to the imposing summits of Ben Vorlich and Stùc a' Chroin, above Loch Earn; Coilhallan is adjacent to extensive privately owned, mainly spruce, plantations. The woodlands are entirely within the Loch Lomond and The Trossachs National Park and Callander, describing itself as the "Gateway to the Highlands", is an important tourist destination. There is a high recreational use of the woods by both tourists and locals. Travellers get glimpses of the Crags as they approach the town from the east and there are impressive and open views of them against the backdrop of the northerly mountains when coming from the south.

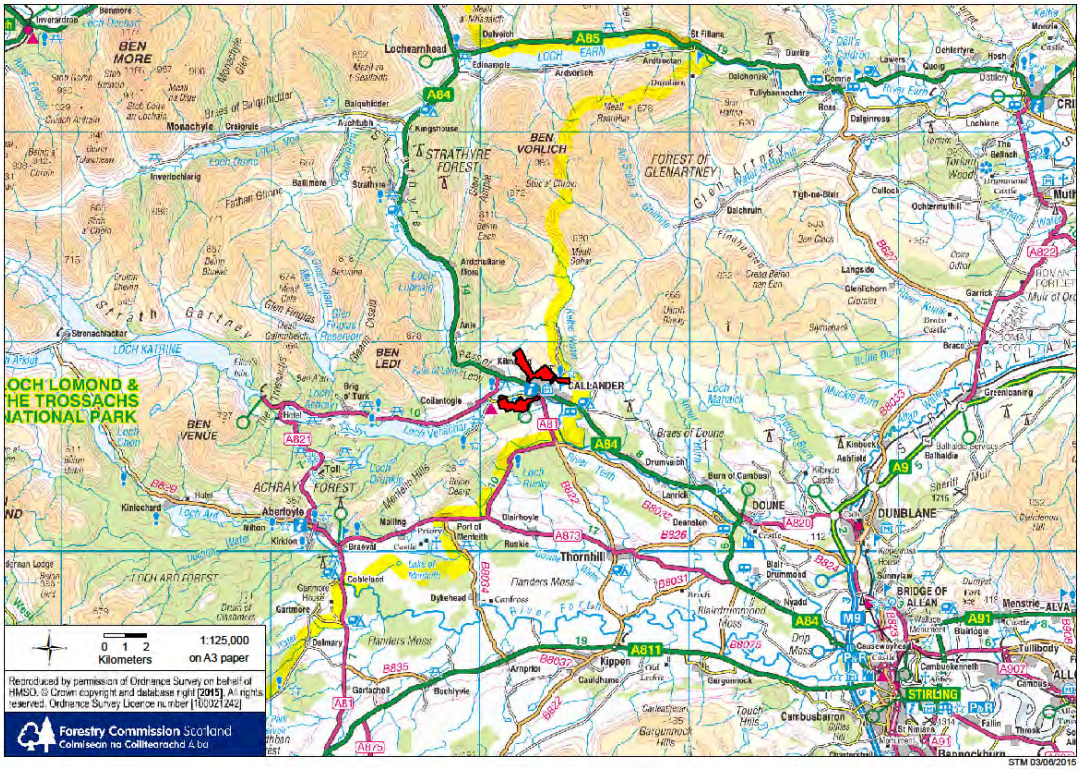


Figure 1.1 Callander: location

1.2 History of the plan

The plan area covers 203ha, 120Ha in Callander Crags/Balameanoch/Bracklinn to the north of the town and 83ha in Coilhallan to the south. There is a long history of woodland in the LMP area with significant areas of ancient semi- natural woodland in Coilhallan, identified as being present in 1750. Plantations are depicted on the first edition Ordnance Survey maps from 1860 and parts of Bracklinn and Coilhallan Woods date from at least this period, as do many individual trees. The current Forest Enterprise Scotland planting dates from the early to late 1950s. This is the second design (now land management plan) for the area and continues a general aspiration to maintain a diverse multipurpose woodland providing a wide range of benefits.

Management options for the 52ha of Balameanoch Wood are being reviewed in a separate exercise. Apart from a narrow strip adjacent to Callander Crags approval for felling and restocking is not being sought and this part of the woodlands is not being included in this LMP submission.

2.0 Analysis of previous plan

2.1 Aims of previous plan and achievements

The main objective of the previous plan was to provide a forest structure which would encourage local residents and visitors to use the forest for recreation.

This would be achieved in several ways. In Balameanoch and Coilhallan phased felling would diversify the age range of the woodlands. Thinning and group felling (up to 2ha in Coilhallan, 0.5ha in Callander) would lead to both age and species diversity whilst retaining overall forest cover. At restocking both planting and natural regeneration were to be used, concentrating on native woodland expansion. The felling and planting programmes aimed to enhance the landscape, begin the restoration of ancient woodland sites, maintain a diverse range of habitats, and provide the basis for a recreation infrastructure. By 2033 it was envisaged that the percentage of non-native conifers would be reduced by about 50% and the area of native woodland increase 8 fold.

Two coupes were approved for felling in Balameanoch, 3 in Coilhallan and 3 in Callander Crags/Bracklinn. Those in Balameanoch were not felled, largely for conservation reasons. Only one coupe was felled in Callander though this was extended because of windblow. Parts of two coupes were felled in Coilhallan and, again, one of these was extended because of windblow.

Some planting of broadleaves was carried out in Callander but other coupes were left to naturally regenerate. One of these, in Coilhallan, has recently been respaced. Approximately 6ha of native woodland was planted in Coilhallan in 2014.

Severe storms in 2011/12 and 2013 resulted in large areas of wind damage in all parts of the forest. Approximately 11ha have been cleared in Callander, retaining any stable broadleaved trees. Parts of Balameanoch, Coilhallan and Bracklinn are still to be dealt with.

2.2 How previous plan relates to today's objectives

The broad objectives of the previous plan will be retained in the new land management plan. Landscape, recreation and conservation, are the key considerations though timber production will not be excluded. The zones map indicates the relative importance of these elements, though in this plan there is a very large degree of overlap.

3.0 Background information

3.1 Physical site factors

3.1.1 Geology Soils and Landform

The Land Management Plan Area lies on the southern margin of the Highland Boundary Fault and is underlain by Devonian sediments, mainly sandstones and conglomerates. There are thin and discontinuous superficial deposits derived from and overlying the solid geology. These are largely of glacial or alluvial origin and typically consist of poorly sorted sands and gravels. Some of these deposits are deeply incised by streams, particularly in Balameanoch and the Crags. The Highland Boundary Fault imposes a linear structure on the landscape and Callander Crags provide a dramatic backdrop to the town and there are frequent small rock outcrops throughout the LMP area. Elevation ranges from 70m at the Eas Gobhain (Coilhallan) to 330m on Callander Crags.

There are a range of soil types with steeper slopes dominated by typical upland brown earths. On the glacial deposits in Coilhallan there is a tendency towards podzolisation and iron pan formation. Surface water gleys occur, associated with some more gentle slopes and flushlines. There are some small patches of deep peat, especially in Coilhallan. Soils are sometimes stony and shallow, both bedrock and induration limiting rooting depth. Particularly in the Crags, the soils could be prone to erosion due to a combination of hydrological conditions and soil texture.

Table 3.1 summarises the nutrient and moisture regimes of the main soil types. The brown earths are likely to be towards the poorer end of the nutrient spectrum, only flushed surface water gleys are likely to be medium in terms of nutrient status. Apart from areas of true podzols, moisture availability is unlikely to be a limiting factor in the plan area.

Soil type	Soil moisture	Soil nutrient
Brown earth	Slightly dry to moist	Poor to medium
Upland brown	Fresh to moist	Poor
Intergrade	Moist	Poor to very poor
Iron pan soil	Very moist	Very poor
Surface water	Very moist to wet	Poor to medium
Peaty gley	Wet to very wet	Very poor to poor
Flushed peat	Very wet	Poor to medium
Unflushed peat	Very wet	Very poor

Table 3.1 Callander: basic soil properties

3.1.2 Water

The plan area is divided by the River Teith and its tributaries the Eas Gobhain and Garbh Uisge. Large areas of open moorland are drained by the various burns running through the plan area into the Teith system. In the Crags and Balameanoch several of these burns are steep and incised into the superficial sands and gravels. There are also many intermittent streams and sub-surface flow seems to be an important feature of all of the woodlands. Some of the burns appear to have been artificially modified in the past. There is a private water supply at the eastern end of Balameanoch Wood.

3.1.3 Climate

Using the measures of warmth and wetness defined in the Ecological Site Classification (ESC, see Forestry Commission Bulletin 124) the Callander LMP area is categorized as warm and moist. The higher parts of the Crags above about 175m become cool and wet. Most of the area is sheltered, only the very highest parts becoming slightly to moderately exposed.

3.1.4 Future climate

Predicting the impact of future climate change presents one of the biggest challenges in forest planning. Analysis carried out by Forest Research indicates an overall increase in average temperatures with warmer summers and milder winters (Figure 3.1). There will be regional variation in the future rainfall pattern and distribution, with a predicted decrease in summer rainfall in the east but a predicted increase in the west of the country. This will lead to more frequent drought in the east but a reduction in moisture deficit in the west (Figure 3.1).

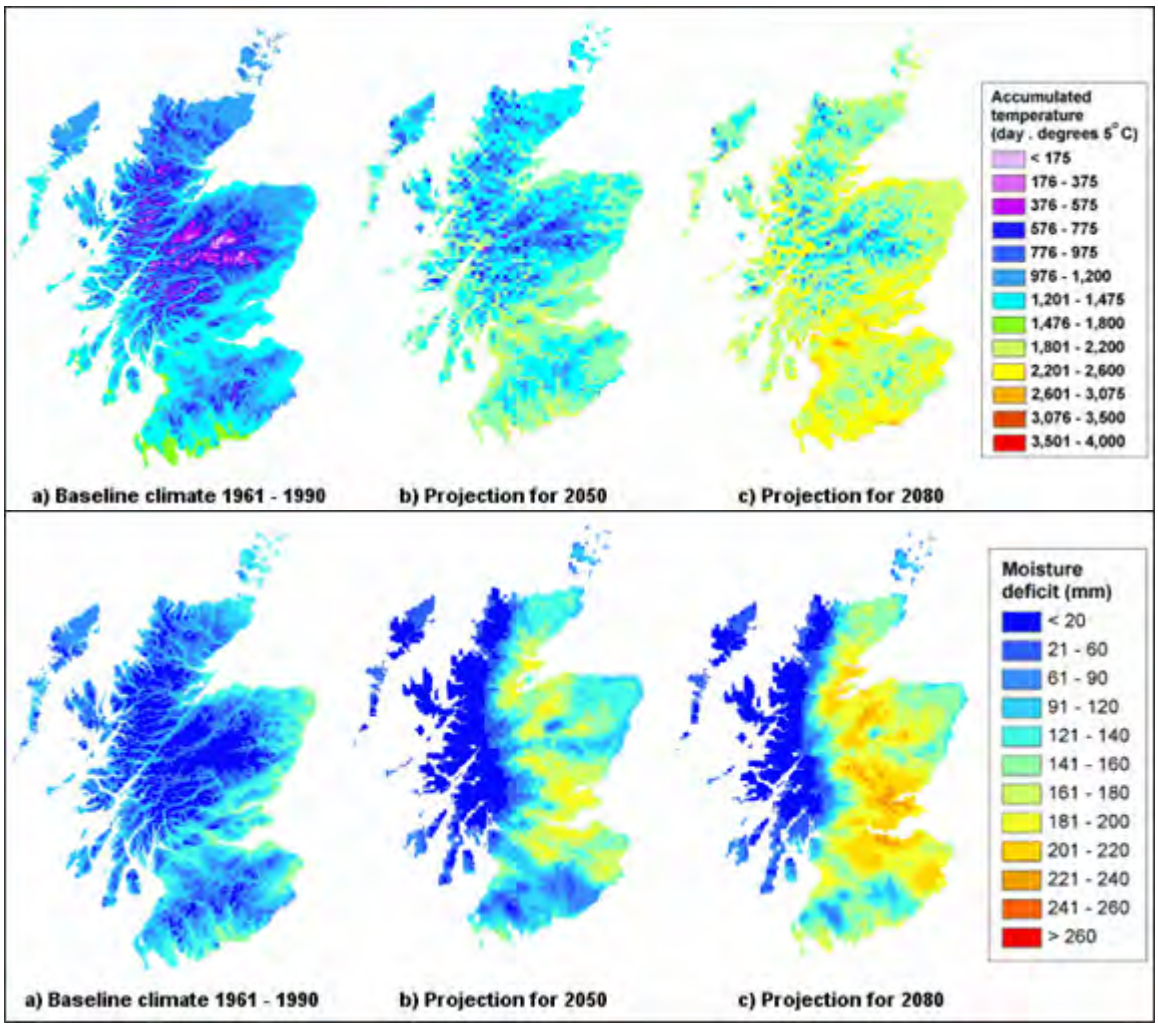


Figure 3.1 Predicted future warmth (top) and moisture deficit (bottom) – high emissions scenario

There is less confidence in predicting changes in other climatic parameters such as windiness and extreme winter cold or summer heat. However there is a general belief that the number of frost days will decrease and that the incidence and severity of extreme events (e.g. gales and heavy rain) will increase.

Data for the Callander area suggest an increase in warmth of about 25% by 2050, compared to baseline 1960 – 1990 data. However for high emission scenarios the increase could be by as much as 70% by 2080. A slight decrease in annual precipitation is indicated, but up to a 30% decrease in summer rainfall is expected, this is compensated by a predicted rise of about 10% in winter precipitation. Moisture deficit is predicted to have fallen by 2050 but then rise to up to 120% of baseline in 2080. Potentially there could be an increase in growth rate in all tree species and a wider range of species become suitable, where exposure is not the limiting factor. On stony, shallow soils there may be problems with species prone to summer drought.

3.2 Biodiversity and environmental designations

There are about 155ha of ancient semi-natural or long established plantation in the LMP area (Figure 3.3). Old Scots pine, oak and beech trees give an indication of the original nature of these woodlands. The native semi-natural woodland is concentrated in Coilhallan though there are possibly small remnants in the Crags. Many of these sites have been planted with non-native conifer and remnant native species are being shaded out in places. However good remnants remain immediately below the Crags and the area below the forest road retains a native character, with ash and oak frequent in the overstory. The woodland in the Bracklinn section is dominated by beech as is the extreme eastern part of Coilhallan. Non-native conifers include Norway spruce, grand fir, noble fir, western red cedar and Japanese red cedar. Previously clearfelled sites are now filling with mainly native natural regeneration and native and non-native regeneration is developing in more open stands in Coilhallan.

Rhododendron ponticum bushes are present throughout the LMP area and a programme of control is being implemented. There are also patches of invasive piri-piri burr. Sitka spruce and western hemlock natural regeneration is also frequent and is being controlled where this is considered undesirable.

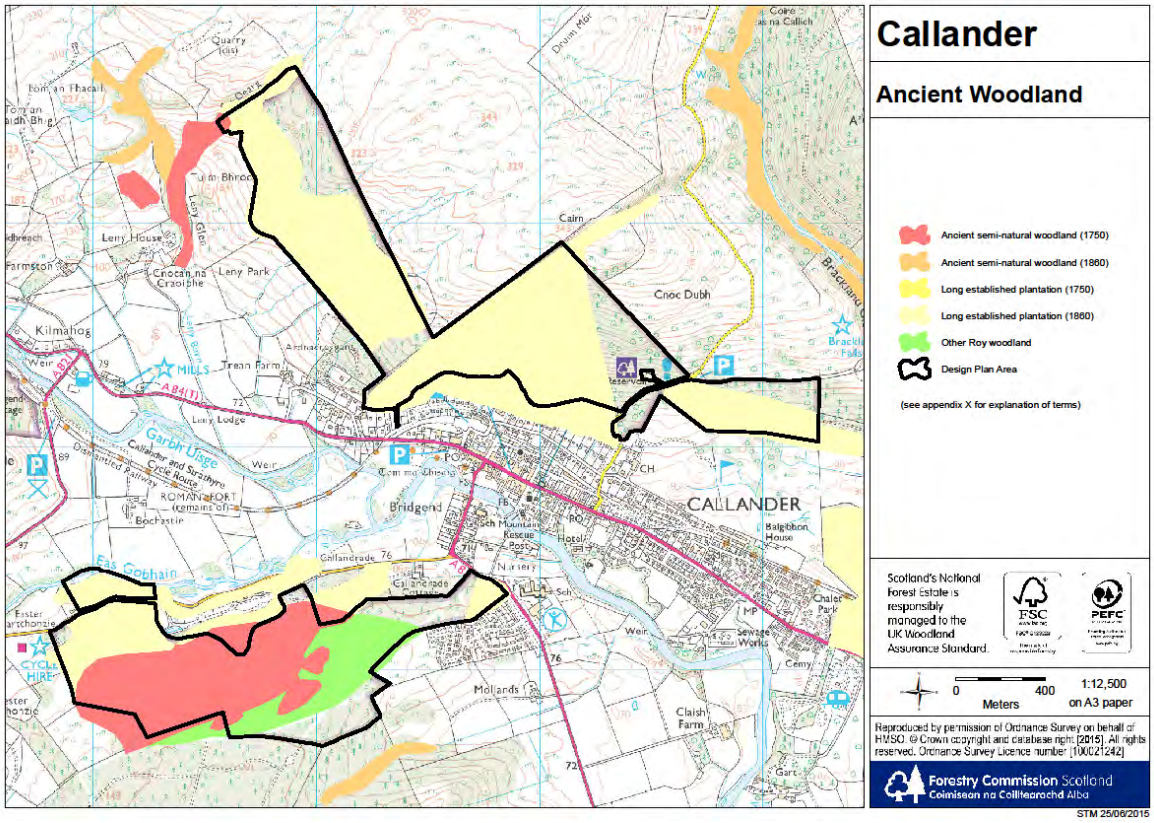


Figure 3.3 Callander: ancient woodland

Notable bird species include red kite, buzzard and sparrowhawk. Black grouse are known to use the woodland and moorland fringe. The wide range of habitats provides niches for other woodland and open habitat species. The area is important for red squirrels and pine martens are being reported more frequently in the surrounding area.

The River Teith, Garbh Uisge and Eas Gobhain are important for their fish assemblage, including three species of lamprey, and are designated Special Areas of Conservation. The Eas Gobhain is an important salmon spawning river. All the burns running through the woodlands feed into the Teith system.

3.3 The existing forest

3.3.1 Species, age structure and yield class

Table 3.2 shows the species distribution for the plan area. Larch is the most widely planted species followed by Norway and Sitka spruce. Just over three percent of the woodland is of oak. Birch natural regeneration is now well established in both Coilhallan and parts of the Crags.

Species	Area ha	Area %
Oak	7.0	3.4
Birch	26.1	12.8
Beech	12.4	6.1
Mixed broadleaves	15.1	7.4
Sitka spruce	22.3	11.0
Norway spruce	33.6	16.5
Scots pine	14.9	7.3
Larch	37.8	18.7
Fir	6.5	3.2
Mixed conifers	4.8	2.4
Open	22.8	11.2
Total	**203.3**	**100**

Table 3.2 Species diversity, Callander, 2015

Although there are older broadleaved stands dating from at least the 19th century the planted woodlands are relatively even aged, Balameanoch and parts of Coilhallan being planted in the early 1950s. The Crags and the remainder of Coilhallan and Bracklinn were planted in the late 1950s. Within the last 10 years about 25ha of natural regeneration have developed throughout the woodlands and approximately 5ha were planted in Coilhallan in 2014. Table 3.3 summarises the current age distribution which includes recently established natural regeneration.

age	area (ha)	area (%)
0-10	30.1	16.7
11-20	0.0	0.0
21-40	0.1	0.0
41-60	50.7	28.1
60+	99.6	55.2
	180.5	**100**

Table 3.3 Age distribution, Callander, 2015

Yield class, (productivity) is measured as maximum mean annual volume increment ($m^3yr^{-1}ha^{-1}$) and is potentially high in Callander. Grand fir, Sitka spruce and Norway spruce can all exceed yield class 20. Other conifers have yield classes in the range 8 – 14. Broadleaved species tend to be lower than this but managed birch and aspen stands could achieve yield classes of 10 and 14 respectively.

3.3.2 Access

Each area of forest can be accessed using the public road network, however discussion with the roads authority (already underway) will continue. The Crags are accessed from Callander off the unclassified road through Brackland Glen. Balameanoch can be accessed along Ardnacraggan road, a council-maintained road behind Leny Feus. This road has a series of hairpin bends currently unsuited for larger lorries. Bracklinn can be accessed from the east along private estate roads, meeting the public road at Keltie Bridge. Coilhallan is accessed from an unclassified road, which is a consultation route, for which a Timber Transport Management Plan will be produced prior to haulage. Forest Enterprise Scotland will discuss the use of all these roads for timber haulage with Stirling Council.

3.3.3 Potential for continuous cover forestry

Although there has been wind damage in the past, the relatively sheltered environment offers good potential for continuous cover forestry (CCF), especially where there are deeper, well drained soils. Use of appropriate harvesting and extraction techniques and deer control are also important. Evidence that good natural regeneration can be achieved is to be seen in Coilhallan, here the acceptance of non-native regeneration has to be balanced against site objectives of native woodland restoration. Increased interventions also need to be balanced with the high recreation use of the woodlands.

3.3.4 Current and potential markets

Although timber prices fluctuate, there is continued demand for softwood timber of all dimensions and it is expected that there will be a ready market for spruce from both clearfell and thinning. Future markets for hardwood and other conifer species are uncertain but expectations are that these will develop over time; in particular the demand for biomass for the woodfuel market is expected to grow.

3.4 Landscape and landuse

3.4.1 Visibility, landscape character and value

Callander is in the north eastern part of the Loch Lomond and The Trossachs National Park (LLTNP) and occupies a prominent position on the Highland Boundary Fault. The “parallel ridges” identified in the LLTNP Landscape Character Assessment are described as a unique and defining landscape. The woodlands are highly visible from the south, in particular, and the Crags dominate the town. The Crags can be seen from many vantage points and the mix of species provides year round variety and

interest. At present Coilhallan is more open and provides open views to the surrounding mountains.

3.4.2 Neighbouring land use

Callander is at a transition point between the Highlands and Lowlands. The valley of the Teith and its tributaries have a mix of pastoral and arable farming and the open moorland above the Crags provides rough grazing for sheep and hill cattle. There are also large areas of private woodland with both coniferous and broadleaved species. The town of Callander is a popular destination for tourists who benefit form all the area has to offer.

3.5 Social factors

3.5.1 Recreation

The woods and surrounding area lend themselves to a range of outdoor activities, including walking, cycling and horse riding. The woodlands have several formal and informal trails and the Rob Roy Way runs through Coilhallan. There are parking facilities on the Brackland Glen Road and at the west end of Coilhallan. The forest can also be accessed on foot from several other points.

3.5.2 Community

There is a strong community interest in the Callander woodlands and active engagement between the Community Council, Callander Development Trust and Forestry Enterprise Scotland. The Callander Landscape Partnership is currently seeking funding for various projects whose key themes are centred on landscape, access and heritage. The potential for the development of mountain bike trails and other all ability bike trails is also being explored. There is community concern regarding hydrology and drainage in the Crags and tree safety issues along boundaries.

3.5.3 Heritage

Despite the rich archaeological heritage of the surrounding area there are few features within the LMP area and these are all located within Balameanoch Wood however the plan proposals will have no impact on these.

3.6 Statutory requirements and key external policies

The key policy documents influencing the LMP are the UK Woodland Assurance Standard, the UK Forestry Standard (3rd Edition), the Scottish Forestry Strategy, the LLTNP Plan and the LLTNP Landscape Character Assessment.

4.0 Analysis and Concept

The analysis and concept map summarises the main issues and aspirations for the LMP area.

4.1 Analysis

- Callander is “The Gateway to the Highlands” and the Crags and Balameanoch, in particular, are visually prominent and have high landscape value.
- There are a number of popular formal and informal trails and tracks with links to other woodlands in the area. Maintenance of a trail network was a key issue raised in the 2012 Callander Charrette.
- Retention of some external views is desirable.
- There are several bird species of conservation interest using the woodlands.
- The River Teith and its main tributaries are a designated Special Area of Conservation, noted for its fish assemblage. The river is also an important salmon fishery.
- There are extensive areas of ancient woodland some of which are now planted with non-native conifers.
- There is a strong red squirrel population.
- Much of the woodland is even aged and, despite being relatively sheltered, parts of the woodland have suffered badly from damaging winds.
- Access for operations is a key issue, particularly Balameanoch Wood.
- There are concerns regarding hydrological conditions and soil stability.
- Climatic and site conditions are favourable for a range of native and non-native tree species which could be grown productively.
- There are extensive areas of native regeneration in both Coilhallan and the Crags.

4.2 Concepts of the plan

The main objectives of the plan will be centred around recreation and landscape with additional emphasis on conservation. Timber production will, however continue to play a small but important role.

- Maintain the overall mixed character of the woodlands to provide visual, recreational and environmental diversity.
- Maintain existing recreation facilities and work with the local community and interest groups to enhance and extend these where possible.
- Restructure woodlands in the Crags to create a mixed age, mixed species woodland that has productive potential.
- Develop a medium to long term programme of native woodland restoration on ancient woodland sites, using a mix of retentions, clearfelling and management of natural regeneration.
- Manage natural regeneration in Coilhallan and the Crags, retaining visual and landscape interest but also to provide a productive resource where possible.
- Expand native woodland element in Coilhallan but seek to retain remaining arboretum trees and accept some non-native species to add to visual diversity.
- Monitor and safeguard nesting birds of conservation concern.
- Assess status of heronry in context of surrounding woodland and manage appropriately.
- Use species and planting patterns that will benefit black grouse and red squirrels in selected areas.
- Continue timber production by appropriate management of existing stands, natural regeneration and restocking with productive species where possible.
- Continue working with Local Authority and neighbours to resolve access issues to all parts of the woodland.
- Carry out pre-operational surveys and follow appropriate guidelines during operations to avoid excessive ground damage to minimise erosion and sedimentation issues.

5.0 Land Management Plan Proposals

5.1 Management

Management will be guided by the key objectives of recreation, landscape and conservation. Timber production will play a smaller but still important role. The zones map illustrates the broad management intentions but should not be interpreted rigidly as all four elements might be found in any given zone.

Coupes for which approval to fell is being sought are shown in the management map and are listed in table 5.3.

All harvesting operations will be carried out in accordance with the UK Forestry Standard Guidelines, Forests and Water (5th edition).

Felling has been structured to deal with recent wind damage and provide a phased programme that will minimise future risk. In the Crags coupes 85003 and 85004 are timed to reduce the impact on the landscape and the former might be delayed if it remains windfirm without having a detrimental effect on mature broadleaved trees. Coupe 85004 will be brought forward if major damage occurs before it is due to be felled. In both these coupes broadleaved trees will be retained with benefits for biodiversity and visual impact. Remaining non-native conifers, on the Crags themselves, will be felled as part of coupe 85006. As access issues continue to cause concern the size of coupe 85006 has been much reduced: only a narrow strip adjacent to, and along the Crags, will be clearfelled. In addition non-native conifers below this strip will be removed, if they can be accessed safely and within current financial constraints. Management in the remainder of Balameanoch Wood will be reviewed in a separate exercise.

The small coupe in Bracklinn (85012) will remove the only large stand of conifer in this section, much of which has been damaged by wind.

In Coilhallan felling coupe 85018 will clear windblown larch. Approval is also sought for 85019 and ideally both coupes will be felled at the same time. Timing will take into account the presence of a heronry in 85019 and the risk of the latter being wind damaged when surrounding stands are felled. Felling coupe 85020 early in the plan period will give several benefits: existing windblow will be cleared and the boundary with neighbouring land secured; in addition removing mature western hemlock will lower the risk of this species regenerating in an ancient woodland site; early re-establishment of native woodland will also be possible. Broadleaved trees

will be retained. In the western part of the wood approval is sought for coupe 85021 where only a few mature trees remain standing following continued wind damage over several years.

Remaining coupes throughout the woodlands will be managed for amenity and conservation through retentions and low impact silviculture. In practice there may be little difference between the two approaches. The aim will be to manage mature trees and natural regeneration, productively where possible, to maintain the existing character of the woodland or move towards restoration of native woodland.

5.1.1 Low impact silvicultural systems (LISS)

Several stands of mature broadleaves will be managed using LISS principles. Actual techniques will vary and may include elements of single tree selection or small scale (<2ha) felling. Respacing of younger stands of naturally regenerating broadleaves and conifer will also be carried out. Long term management will be reviewed at a later date. Management of recently planted, productive broadleaves and native conifer will be determined as stands develop

5.2 Future habitats and species

The future habitats map shows the restocking proposals of the plan. Further detail is given in Table 5.3. A range of objectives will be met using a wider variety of species than has been used in the past.

The mixed woodland character of the Crags will be maintained, the main emphasis being on landscape and visitor experience. The prime objective is to provide a safe, high quality and positive woodland experience for visitors to the forest. Conifers and broadleaves will be planted in intimate mixture and small groups to provide year round colour. The proportions of the two groups will be approximately 50:50. Immediately below the Crags the native character will be retained and this will be extended at the northeastern boundary where birch natural regeneration is beginning to develop. In Bracklinn native species will be planted or allowed to naturally regenerate, along with a small percentage of Norway spruce; the latter will be of benefit to red squirrels. The beech woodlands above the Callander golf course will be retained.

In Coilhallan the long term aim will be to restore designated semi-natural ancient woodland sites and expand native woodlands elsewhere. In the short to medium term both mature conifer and some non-native natural regeneration will be accepted where this is not threatening native woodland remnants. The future management of these stands will be reviewed as adjacent new planting and natural regeneration develops. Some of the ancient woodland area has been recently planted at commercial densities with a range of native species and this pattern will be extended to the south eastern boundary of the block. Natural regeneration will be managed to favour native species in the eastern part of this section though some non-native species, e.g. larch, grand fir and trees planted as an arboretum will be accepted. Other species will be accepted within the limits of the tolerance table. The existing mixed woodland on the eastern edge will be retained and managed accordingly.

The presence of *Rhododendron ponticum* will be monitored and appropriate action taken to control this invasive non-native species.

5.3 Restructuring

Recent and proposed felling is a continuation of a re-structuring process that began with the previous design plan. In particular the Balameanoch section will benefit from the current proposals. The restocking proposals will add to the already diverse species structure. More details can be found in sections 5.5 and 5.6.

5.4 Future management

Table 5.1 indicates net felling area and volume figures for the plan area. These values are approximate and coupes will be surveyed to provide more precise figures prior to felling. In addition, approximately 850m^3 will be produced through thinning about 8ha of woodland over the period of the plan.

Phase	Area (ha)	Volume (m^3)
1	21.3	10,040
2	5.2	2,300
	26.5	12,340

Table 5.1 Proposed felling

Table 5.2 summarises the establishment proposals for the plan area. The figures include areas previously felled but not yet restocked, accounting for the difference between area felled and restocked. Natural regeneration has already developed in coupes 85005 and 85025.

	Mixed broadleaves	Mixed conifer	Open	Totals
Phase 1	19.8	8.5	3.5	31.8
Phase 2	5.0	2.6	1.8	9.4
Totals	24.8	11.1	5.3	41.2

Table 5.2 Proposed establishment

Where production is the key objective conifers will be planted at densities of 2700 stems per hectare (sph) aiming to achieve a 2500 sph after five years. Productive broadleaves will be established at densities of up to 3500 sph, depending on species.

Target densities for native woodland regeneration will vary depending on site objectives but aiming to achieve a density of 1100 sph. Regeneration will be monitored and future management reviewed depending on the results of this. Re-establishment should be achieved within ten years of felling and supplementary planting will be considered if this is not the case.

Table 5.3 lists those coupes for which approval is sought and gives further detail on the species to be felled and restocked.

Coupe	Gross Area	Felling		Establishment	
		Species	Area	Species	Area
85002	10.9	n/a	n/a	Mixed Broadleaves	5.4
				Mixed Conifer	4.4
				Open	1.1
85004	6.5	NS	2.4	Mixed Broadleaves	3.3
		Larch	2.1	Mixed Conifer	2.6
		MC	0.4	Open	0.6
85006*	4.1	SS	0.4	Mixed Broadleaves	1.8
		NS	0.6	Open	1.1
		Larch	1.1	-	-
		WH	0.1	-	-
85012	2.9	NS	2.8	BI	1.1
		MC	0.1	OK	0.6
				NS	0.6
				MC	0.3
				Open	0.3
85018	2.9	SS	0.2	BI	0.6
		NS	0.1	OK	0.9
		Larch	2.5	Mixed Broadleaves	0.6
				Mixed Conifer	0.5
				Open	0.3
85019	2.9	SS	1.5	BI	0.9
		Larch	0.5	OK	0.9
				Mixed Broadleaves	0.3
				Mixed Conifer	0.3
				Open	0.5
85020	7.6	SS	0.2	OK	2.3
		NS	0.6	BI	1.5
				Mixed Broadleaves	1.5
		MC	5	Mixed Conifer	1.5
				Open	0.8
85021	4.6	SS	0.4	BI	0.9
		NS	0.8	OK	1.4
		Larch	3.1	Mixed Broadleaves	0.9
				SP	0.9
				Open	0.5

Table 5.3 Coupes for which approval for felling and restocking is being sought (*restock figure excludes 1.2ha of Balameanoch Wood for which approval is not sought)

5.5 Species tables

Table 5.4 and Figure 5.1 indicate the change in relative species composition between 2005 and 2035. The figures are expressed as a percentage of the plan area, and include permanent and temporary open space. The figures indicate a marked reduction in the percentage of Sitka spruce and larch, the reason being that neither species will be replanted over the next few years. For Sitka this is because there is a preference to plant alternative species and this is likely to remain a long term aspiration. Larch, however, is currently not being planted for tree health reasons however this might change in the future. The apparent reduction in other named conifer species will be compensated by the inclusion of these in the mixed conifer element. The percentage of all broadleaves will rise significantly. The amount of open space recorded includes temporary open areas that have just been felled and are awaiting establishment of the next generation of trees.

5.6 Age structure

Table 5.5 and Figure 5.2 show the change in relative age structure between 2005 and 2035. The extreme even aged nature of the woodlands in 2005 is clearly evident and though some trees had been felled, slow recruitment of natural regeneration has kept the area of younger trees very low. With relatively large areas now being cleared because of windblow the importance of retaining older stable stands is evident. It will take several decades to achieve a more balanced age structure.

Species	2005	2015	2025	2035
Sitka spruce	17.3	11.0	2.9	1.2
Norway spruce	10.6	16.5	3.8	3.6
Scots pine	7.7	7.3	5.3	3.8
Larch	22.0	18.6	8.7	5.8
Douglas fir	1.1	0.9	0.8	0.8
Grand fir	2.6	2.3	0.2	0.2
Mixed conifer	2.7	2.4	9.8	13.2
Birch	0.1	0.5	10.3	11.2
Oak	3.4	3.4	6.0	6.0
Beech	7.0	6.1	5.0	5.0
Mixed broadleaves	7.7	15.8	26.7	29.9
Open	17.8	15.2	20.5	19.3
	100.0	100.0	100.0	100.0

Table 5.4 Change in species diversity over time in Callander (percentage of plan area)

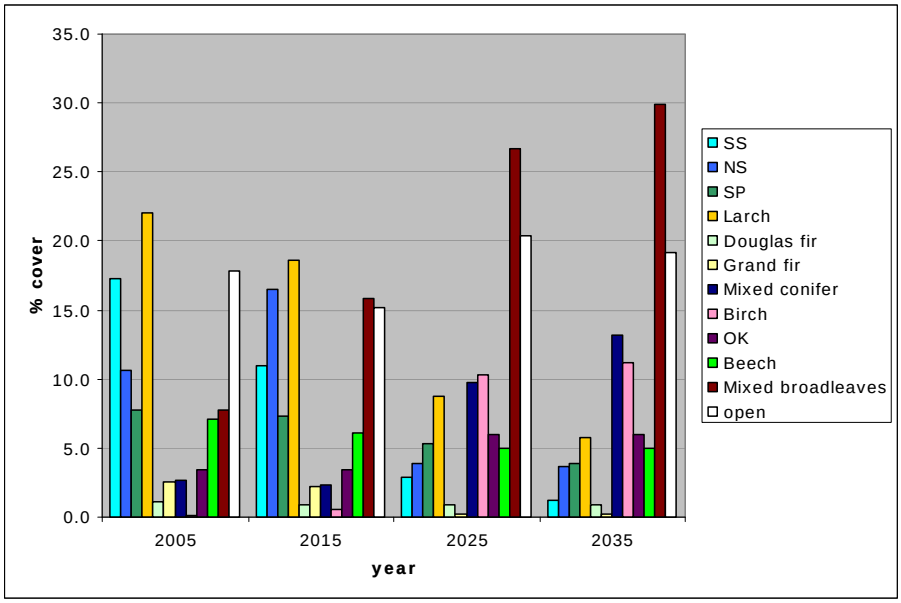


Figure 5.1 Change in species diversity over time in Callander (percentage of plan area)

Age Class	2005	2015	2025	2035
0-10	0.0	16.7	41.3	9.0
11-20	0.1	0.0	17.9	40.7
21-40	0.0	0.1	0.1	17.6
41-60	84.2	28.0	0.0	0.0
60+	15.7	55.2	40.7	32.7
	100.0	100.0	100.0	100.0

Table 5.5 Age structure in Callander (percentage of forested area)

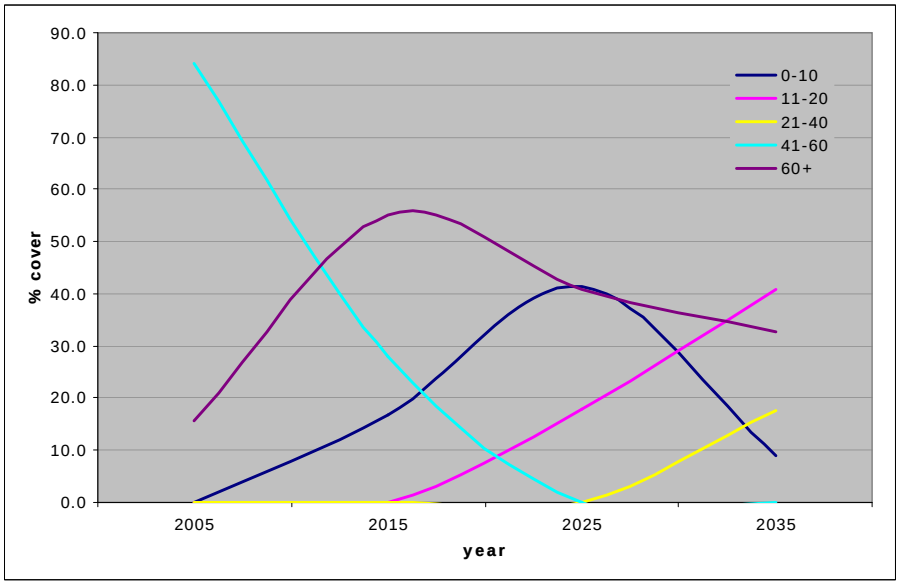


Figure 5.2 Age structure in Callander (percentage of forested area)

5.7 Management of open land

	2005	2015	2025	2035
Open	17.8	15.2	20.4	19.2
Forest	82.2	84.8	79.6	80.8

Table 5.6 Relative area of open ground and forest (%).

Table 5.6 summarises the relative distribution of open ground to forest in 10 year intervals between 2005 and 2035. The figures are slightly inflated as they coincide with felling years. Following successful restocking the figure for open space will be between 10% and 15%. About 10ha of the open space will be taken up by the road system and a buffer zone around this will be kept clear of dense tree growth. Permanent wayleaves make up a small percentage of the area and these will be managed in association with the relevant utility company. Open land is also incorporated into most of the restocking coupes though this is not identified specifically in the plan. Some areas may be kept permanently open for either landscape or bio-diversity reasons but apart from priority habitats the amount and location of open areas are likely to vary.

5.8 Deer management

Callander LMP is covered by two Deer Management Units, Strathyre East (Balameanoch, Crags and Bracklinn) and Letter (Coilhallan). The management plans for this Unit outline the approach to deer control in the forest (see appendix VII). The vulnerability of broadleaved trees and “soft” conifers to deer browsing is recognised and control will aim to keep this to a minimum. Fencing may be required in some instances. The nearness of the town of Callander and the heavy recreation use are highlighted as particular issues.

5.9 Access

A number of ramps will be required to enable harvesting machinery to access felling coupes. The precise location of these will be determined during operational planning but the expectation is that there will be one or two ramps per felling coupe. Ramps will be approximately 3m wide and generally less than 15m long; they will not be treated as permanent features. Longer tracks may be required for coupe 85004 and 85018 and a more permanent feature will be built along the bottom edge of 85003. In addition about 900m of ATV tracks will be required to facilitate silvicultural operations and deer management on coupes to be restocked. These tracks will be approximately 2m wide and there will be a minimum amount of

disturbance when they are being constructed. They will not be treated as permanent features and will be allowed to grass over once restocking is complete. Indicative positions of the tracks are shown in the roads and quarries map. Final position will be within ± 100m of the indicated positions and the nominal area amounts to 5.0ha. An EIA determination form for roads and tracks is to be found at the front of this document. A written request can be found in appendix V and a summary in Appendix VI.

The roads and tracks map indicates access points and haulage routes in and out of the woodlands, with approximate volumes. Timber from the Crags will be brought to the A84 via the road to Brackland Glen and Forest Enterprise Scotland will inform Stirling Council of timber movements before operations begin. Forest Enterprise Scotland will liaise with the land owner regarding extraction of timber from Bracklinn.

Extraction of timber from Balameanoch Wood and the adjacent part of the Crags will be down Ardnacraggan Road and Leny Feus, at the western end of Callander. The precise route and method of haulage has yet to be decided.

The unclassified road to Invertrossachs will be used to haul timber from Coilhallan. This is an excluded route but defaults to “consultation” as there is no other feasible access from this site.

Appendix I: Land Management Plan Consultation Record

Consultee	Date contacted	Date response received	Issue raised	Forest District Response
Forestry Commission Scotland	04/07/13	Attended scoping meeting 31/07/13	Plan should refer to Callander Charrette, community links and opportunities for involvement in projects. Management of Coilhallan should take account of recreation and landscape but not leave too much open space. Pointed out access and conservation issues in management of Balameanoch, in particular. Asked for a commitment to pre-operational surveys to be undertaken before any major work in the Crags. Asked for a number of viewpoints to be considered for visualisation of future management. Suggested a drop in session might be useful and all agreed.	FD will comply. FD will manage regeneration as noted below. FD will continue to work with residents, neighbours and Stirling Council to resolve access issues. Timber from Bracklinn would be taken south east through Auchenlaich Farm and from the Crags down Bracklinn Road. FD will comply. Up to seven viewpoints noted at the meeting will be used. FD will organise a drop in session later in the year.
Loch Lomond and The Trossachs National Park	04/07/13	Attended scoping meeting 31/07/13	Suggested retaining mature conifers in the western half of Coilhallan at least until young broadleaved trees have become established. Windblow can be dealt with if it occurs.	FD will retain conifer, if they remain windfirm and manage appropriately.

			Asked about management in Balameanoch Wood and would like to see greater diversity at restocking.	Thinning and small scale clearfells are options but there is an increasing risk of windblow. FD will seek to diversify tree species at restocking.
Stirling Council	04/07/13	Did not attend scoping meeting. Email correspondence.	Pointed out access difficulties to Balameanoch; Bracklinn Road is a consultation route; Invertrossachs Road is believed to be an excluded route and alternative access to Coilhallan needs to be considered. Requested further information on likely tonnage and access options as plan develops.	FD will consult with Council re access to Balameanoch. Will also seek clarification of status of Invertrossachs Road. Will update Council with haulage requirements as plan develops.
SEPA	04/07/13	No response received		
SSE	04/07/13	Did not attend scoping meeting. Email correspondence.	Maintenance of wayleaves is important.	FD will work with utilities companies to maintain secure wayleaves.
RSPB	04/07/13	Attended scoping meeting 31/07/13	Supported the idea of more open woodland including broadleaves and larch at the upper margins of the woodlands.	FD will seek opportunity to diversify woodland margins.
Callander Community Council	04/07/13	Did not attend scoping meeting. Email correspondence.	Requested removal of conifers from Crags ridgeline. Balameanoch Wood ought to be restructured. Sensible deer control is required. Noted that the Eas Gobhain is an important sea trout spawning stream.	FD noted different opinions on this but will review options as suggested by FCS. FD will review options for management in light of access and conservation issues. FD note the difficulty of deer control in such a well used area but will follow good practice. FD will manage adjacent woodlands to avoid damaging important habitats.

Callander's Countryside	19/07/13	Attended scoping meeting 31/07/13	Asked if Callander could not be dealt with at the same time as plans for other local woodlands. Expressed concern at a lack of communication regarding footpath management and would like re-instatement of some woodland walks.	Agreed with FCS comment that important issues unique to Callander might be overlooked. There are budgetary issues surrounding creation and maintenance of trails but communication and community involvement are important aspects of the LMP process and implementation of works. FD supports groups applying for external funding for projects.
			Reflected all parties' aspiration to maintain some external views, particularly of Ben Ledi from Coilhallan. Also the unsightliness of windblown trees and how this might be managed.	Recognise the potential for viewpoints in Coilhallan and will seek to manage regeneration to maintain some of these. Windblow is difficult to predict and mitigate for. Management will aim to minimise risk and options for dealing with blow considered when developing the plan.
			Reflected all parties' aspiration that Coilhallan be maintained as amenity woodland, natural regeneration encouraged, gorse and broom managed and arboretum trees retained if possible. Favoured management by thinning and restricting clearfelling, at least till adjacent areas have regenerated or been planted. Consultation with Community Council prior to felling is desirable. Ground and water conditions are a concern in the Crags.	Regeneration will be managed as above and arboretum trees retained where possible. Visual impact of any clearfells will be assessed. Request to consult will be considered. FD will carry out pre-operational surveys and follow best practice guidelines during operations.

Drumardoch Estate	19/07/13	Attended scoping meeting 31/07/13	Asked about budgeting for operations. Would like to see more Scots pine planted but considers restocking should not be restricted to native species (general agreement on this). Balameanoch could be opened out at restocking and linked to neighbouring black grouse projects.	Budgets are determined at District level. FD will seek opportunities to diversify tree species and create linkages to neighbouring projects.
Cambusmore Estate	04/07/13	Did not attend scoping meeting. Email correspondence.	Generally supportive of stated objectives and would support removal of conifers from ridgeline	
Drummond Estates		No response received		
Scottish Water	04/07/13	No response received.		
Forth District Salmon Fisheries Board	04/07/13	No response received		
Invertrossachs Estate	04/07/13	Did not attend scoping meeting. Email correspondence.	No issues raised.	
Friends of Loch Lomond and the Trossachs	04/07/13	No response received.		
Mountaineering Council of Scotland	04/07/13	Did not attend scoping meeting. Email correspondence.	No issues raised.	

Appendix II. Scoping Meeting Minutes

Callander Land Management Plan
Minutes of scoping meeting held on Wednesday 31st July 2013

Attendees: Mr Graeme Auty (LLTNP); Ms Kate Beauchamp (Forest Research); Mr Tony Cameron (Farmston and Drumardoch Estate); Mr Tom Davies (FCS); Ms Lisa Duggan (LLTNP); Mr Stephen Murphy (FES); Paul Prescott (Callander's Countryside); Doug Shapley (RSPB); John Snodin (Callander's Countryside): Mr Rowan Stuart (FCS)

In addition Mr Kenny Auld (LLTNP), Mr John Hair (FCS); Ms Sara Melville (LLTNP) attended a field visit held prior to the indoor meeting;

Apologies: Mr Mike Baillie Hamilton (Cambusmore Estate); Callander Community Council; Mr Ninian Clark (SSE) Mr Jim McGregor (Stirling Council, Roads); Mr Colin MacNair (Invertrossachs Estate); Mountaineering Council of Scotland; Stirling Council, Land Services)

Invited: Drummond Estates; Forth District Salmon Fisheries Board; Friends of Loch Lomond and Trossachs; Scottish Water; SEPA

The meeting convened at 1.15pm.

All present introduced themselves.

TD described the mechanics of the Forest Design Plan (FDP) process and that the objective of the meeting was to scope out issues of concern in developing a new design plan. If it was thought useful a further public drop in session could be held to gain wider opinion. He explained that the FDP process is a key tool in delivering sustainable forest management. the plan itself is a strategic document through which Forest Enterprise will get approval for felling and restocking over the ten year life of the plan. It is not an operational plan which is dealt with through a detailed our work plan system.

SM gave a short presention a showing various aspects of the current design plan using images from the three sections of Callander's woods managed by Forest Enterprise - Coilhallan Wood, Callander Crags and Trean (aka Balameanoch Woods). He stressed the various threads and policy documents which inform the development of the

plan and illustrated key issues relating to climate change, timber, business development, community development; He also explained the use of landscape perspectives and future forest projections in analysing changes to forest structure. The current felling and restocking proposals were also shown and a brief review of recent management given.

PP questioned why all the woods local to Callander could not be part of the same FDP. He felt that there was no consistency and mentioned Leny Woods as an example. It was included in the local FC Recreation Plan for the Callander area but is not part of the Callander Crags FDP.

TD explained that if Callander Crags was included within part of a larger FDP there would be a danger that other issues, such as important landscape and diversity detail, may be lost.

SM explained the current issues including recreation, conservation, landscape, timber production and access. The objectives included maintaining the landscape diversity, increasing the recreation and conservation potential of the woods and involving the local community.

JS expressed his concern that in the past there was a lack of communication between parties and he felt that the agreement was not being utilised in the way it was set up to do. He mentioned issues with 'finger posts' and boardwalks along an old footpath that had been 'ripped' up with no local discussion taking place.

PP agreed and would like to see the reinstatement of the Upper Wood Walk.

JS mentioned the removal of waymarker posts along some of the footpaths and asked whether these paths will still be maintained.

TD suggested that with current government budget cuts this was unlikely but gave assurance that discussions over access would feed into the FDP process.

SM explained that the FDP process encourages involvement by the community, as seen previously in the establishment of the arboretum in Coilhallan. Externally funded projects such as local footpath links were supported by the previous plan.

PP mentioned the Callander Charrette workshop held by the National Park in November 2012 and one of the key priorities for action was to maintain a network of well maintained local paths.

LD mentioned that the report was available to anyone who wants a copy.

TD noted that this report, the strong community links and opportunities for involvement in projects should be referred to in the new plan.

TD asked for thoughts on the landscape diversity in the area.

All felt that internal views should be kept where possible, particularly views of Ben Ledi from Coilhallan.

JS raised concerns about the forest regeneration adjacent to paths which are beginning to impede some of the views in Coilhallan.

PP stressed that this key path was now part of the Rob Roy Way.

SM noted the potential for viewpoints along the path. Some management might be necessary and their location could be determined as planted trees and natural regeneration grew to maturity.

All There followed some discussion on the issue of windblow and its visual impact, and it was agreed that this is often unsightly. As well as existing damage, the risk of more blow will increase as trees get older and taller. It was recognised that the older stands in Coilhallan, for example, would ultimately blow down.

JS asked whether selective felling (thinning) would be an option to consider. He also wondered whether cutting up windblow and leaving it on site for wildlife was a more cost effective way of dealing with the problem.

SM explained that windblow was quite difficult to predict and there are various management options to mitigate risk. None of these are without risk themselves, for example clearfelling might de-stabilise adjacent trees, and selective thinning might temporarily destabilise the remaining standing trees. There can also be practical difficulties when thinning stands.

LD suggested, and it was generally agreed, that the stands of large firs in Coilhallan should be retained in the short to medium term, at least until young broadleaved stands become well established. The same should apply to the larch on the south western boundary. This would help retain an element of visual diversity and continuity with the forested ground to the south. If windblow occurs it can then be dealt with at the time and a decision made then on any remaining trees.

TC queried the economic constraints and suggested this should be one of the main considerations for any management plan. He wondered whether the money from the harvesting operation could help fund the local woodlands.

SM agreed that there are some scenarios where it is costing the taxpayer to carry out felling operations. Options for dealing with windblow will be given full consideration when developing the plan.

TD also agreed but pointed out that objectives for the woodlands around Callander are very different to those in parts of Loch Ard forest where public use is much more limited.

SM sought views on the future of the 'arboretum' area. He mentioned a range of opinions expressed from previous discussions ranging from 'developing nicely – leave it alone' to 'it's a complete mess'. Options to consider would be to flail whole area or perhaps leave the natural regeneration where this is out-competing the gorse.

TD suggested given the importance of recreation perhaps restricting the gorse scrub, plant broadleaves in areas without trees whilst maintaining some internal views. He pointed out that there is an obligation under the 1967 Forestry Act to replant and not leave too much open space.

All It was generally felt that Coilhallan should be retained and maintained as amenity woodland. Outwith the native woodland area, some of the Sitka spruce regeneration, gorse and broom could be removed to facilitate replanting or natural regeneration of favoured species. The trees in the existing arboretum could be retained and improvements made by planting other broadleaved and conifer species.

JS observed that the amount of brash left on a felled site adjacent to paths reflects badly on the woodland appearance. The example given was the clearfell in Callander Crags carried out a few years previously and still showing heavy brash covering in places.

LD asked if Trean is due for felling and would like to see greater diversity and variety in the woodland when replanted..

SM replied that the is due to be thinned and small scale clearfells are also an option. The risk of windblow is likely to increase.

TC said he would like to see more Scots pine planted, though he was of the opinion that replanting should not be restricted to indigenous species.

All The general consensus was that restocking should aim towards increased diversity including a mixture of indigenous and exotic broadleaves and conifers.

JS gave brief update on the WIAT project in Low Wood. The Norway spruce adjacent to houses at the western end of Callander Crags has been felled but other trees retained wherever possible. He felt that

was still a lot to be done to enhance the public's enjoyment of the woodland.

TD sought opinion on the visual impact of potential clearfell coupes.

JS would favour thinning and no further felling should take place until previous sections have regenerated. He also felt the Community Council should be consulted prior to making a decision on felling.

SM said that FE would analyse a range of options and assess the visual impact of proposed clearfells. The request to consult with the Community Council will be given due consideration.

TC would like to see the Trean section opened out a little and mentioned the Black grouse project on neighbouring Drumardoch Estate.

DS would favour the opportunity to diversify and have more open groups of broadleaves along the upper edges of all the woodland.

TD summarised the main issues in Trean as timber haulage and Red kites. He felt that until these two problems are resolved harvesting operations would not take place.

All agreed that a public drop in meeting to seek wider opinion was a good idea.

JS brought up the topic of flooding and the damage caused to properties below the Crags. This is a big issue, debated at Community Council meetings, and needs to be addressed.

TD would like to see a commitment to pre-operational surveys, undertaken before any major works are carried out.

SM said that operations were carried out in accordance with the United Kingdom Forestry Standard (UKFS) which includes sections on water management. This is a requirement for sustainable forest management and certification. He also gave an assurance that the design plan would take flooding into account and consideration given to implementing pre-operational surveys.

TD asked from which viewpoints the plan should be analysed. After some discussion the following were felt to be the most appropriate: the southern end of the Mollands Road, the Meadows, Cambusmore, above Mollands Farm, Samson's Stone, the Coilhallan path and the Crags Not all need be used.

TD invited discussion over the question of timber haulage.

SM confirmed that timber from the woods adjacent to the Bracklinn Falls path would be taken south east past Auchenlaich Farm towards Bridge of Keltie. There is only one access to the woods below the Crags and timber will be taken from there over the railway bridge

and onto the main road near to the Dental surgery. Communication is important and FES will keep the community and Stirling Council informed of their intentions. The acess to Trean will be investigated further.

TD asked if there were any other issues anyone wished to raise.

JS mentioned the strip of conifer trees along the top of the Crags. There is divided opinion on whether these should be felled or retained. He suggested this question should be put to the Community Council.

TD recommended a feasibility study to explore all the available options.

DS would like to retain any larch along the upper edges for Black grouse.

TD asked that comments received by stakeholders be included in the minutes and thanked everyone for their attendance. He again mentioned that a drop-in meeting will be arranged as part of the FDP process and that the Community Council ought to be involved.

The meeting closed at 14.45.

In addition the following comments were received by email or telephone.

Callander Community Council:

1. a request to remove conifers from the ridge;
2. re-structure Balameanoch Wood (Trean); good communication important;
3. sensible deer control following good practice;
4. Eas Gobhain is a sea trout spawning area.

SSE:

1. Clear power lines of trees as soon as possible, especially along the Bracklinn Road;
2. Widen wayleaves, leaving sterilisation strip to mitigate against future problems.

Mike Baillie Hamilton (Cambusmore Estate):

1. supportive of stated objectives;
2. supports removal of thin strip of conifer from ridgeline

Jim McGregor (Stirling Council, Roads):

1. Pointed out difficulty of access to Balameanoch (Trean) Woods and the need to consider alternative options;

2. Bracklinn road is a consultation route and large vehicle access needs to be examined.
3. Invertrossachs Road is an excluded route, alternative extraction routes from Coilhallan should be considered.
4. Request for further information on proposed routes and tonnage as plan is developed.

NB: All forests managed by FCS are certified under the UK Woodland Assurance Scheme (UKWAS), which requires forests to be managed sustainably. The UKWAS is part of the Forest Stewardship Council (FSC) scheme, which allows timber sourced from certified forests to carry the FSC label. Callander FDP will incorporate the various requirements of UKWAS within its proposals.

Public Drop In

In addition to the scoping meeting a public drop in session was held in Callander Kirk Hall on 17th October 2013.

At the session a series of maps and posters were displayed illustrating and explaining the planning process and issues relating to management of the Callander woodlands. Comments were invited and District staff were available to answer questions and discuss issues raised by those attending the session. A questionnaire was produced and attendees invited to complete and return this.

An explanation of the purpose of the session, the questionnaire and a summary of responses are provided below.

Callander Forest Design Plan
Public Consultation Questionnaire
17th October 2013

Summary of responses

16 people attended the event and 13 questionnaires were completed. All respondents lived in Callander or its immediate area.

In general there was a favourable attitude to the work being carried out by FC Scotland.

Most respondents used the woods on a regular basis, arriving on foot and appreciating the closeness and ease of access. Walking

(with or without a dog) and wildlife observation were the most frequent activities. A few people ran or cycled.

The setting of the woodlands in the landscape, the views from the woods and the variety and mix of tree species were all appreciated, as were the peace and quiet of the woods. One person highlighted the pines along the ridge as a desirable feature.

The most frequently mentioned dislikes were the amount of litter and dog mess. Poor path maintenance was also a concern, and poor access off tracks was mentioned once. One respondent did not like the multi-use of tracks pointing out that bikes and walkers don't mix.

Windblow, large conifer blocks, the amount of deadwood (standing and lying) and poor natural regeneration were also mentioned as dislikes by a few people.

What would people change?

Improved maintenance and extension of the path network were frequent requests. In particular re-instatement of the "Upper Woods" path. Improved access into Coilhallan and a path through Balameanoch linking to the Crags path were mentioned. There was a suggestion to provide a link between the lower car park and Bracklinn car park, so as to avoid walking on the road.

The mix of trees was generally seen as acceptable though there were one or two requests to reduce the amount of, or remove, Sitka spruce. There were differing views on other exotic species, some people wanting to see a reduction in exotic conifers and beech. However there was a feeling that the mix of species should promote wildlife (and especially red squirrels), see increased use of native species, including Scots pine and aspen, and provide autumn colour. There was one request to remove the remnants of the "arboretum" in Coilhallan Wood, to remove non-native regeneration and encourage more native regeneration. A suggestion to open out the ridge above Callander by removal of pine was countered by another to safeguard these. It was suggested that Balameanoch be thinned and managed for long term retention. There was a request to reduce deer numbers.

Other suggestions were to increase partnership working with the National Park and local community, maintenance of views from the Mollands estate and the provision of bins for dog dirt at woodland entrances.

Purpose of the Consultation

All forests managed by Forest Enterprise Scotland are certified under the United Kingdom Woodland Assurance Scheme (UKWAS), which requires forests to be managed sustainably. The UKWAS is part of the Forest Stewardship Council (FSC) scheme, which allows timber sourced from certified forests to carry the FSC label.

In order to meet its legal obligations, forests managed by Forest Enterprise Scotland must have an approved Forest Design Plan which is reviewed and revised every 10 years.

Through the Design Plan process Forest Enterprise Scotland will be seeking approval to fell and replant sections of the woodlands over the next 10 years. Callander FDP will incorporate the various requirements of UKWAS within its proposals.

The Design Plan also provides a strategic outline of overall objectives and management proposals for the woodlands, balancing social, environmental and economic issues that might be of concern. Although primarily concerned with the period 2013 to 2023 there should be continuity with the past and further into the future.

The Design Plan for the woodlands around Callander, outlined in red on the maps, expires in March 2014 and we are now reviewing the achievements of the past ten years, examining the issues affecting management of the woodlands and starting the development of a new plan.

The purpose of the drop in session is to give us the opportunity to ask you about the woodlands and for you to point out and comment on issues which you think we should consider when drawing up the plan.

Please look at the maps and photographs which illustrate some of the main features of the woodlands. Feel free to ask questions and discuss your concerns with members of staff. There are post-it notes, stickers and pencils. Feel free to annotate the maps to show your favourite walk, view, feature etc.

Thank you for coming along.

Callander Forest Design Plan
Public Consultation Questionnaire
17th October 2013

1. **Where do you live?.....**

2. **How often do you visit the woods?**
   Every day once or twice a week occasionally

3. **Which part?**
   Coilhallan……..Ballameanoch……..Crags……..Bracklinn

4. **How do you get here?.....**

5. **What do you do?**
   Dog walking walk run cycle other

6. **What do you like most?.....**
   ……
7. **What do you dislike?.....**
   ……
8. **What would you change?.....**
   ……
9. **What is the most important feature of the woods?.....**
   ……
10. **What do you think of the mix of tree species……..**
    ……
11. **Would you like to see changes to this mix?.....**
    ……
12. **Are you aware of Callander's Countryside?.....**

13. **How did you find out about this drop in?**
    BLV Poster (town) Poster (woods) Other……..

14. **Are there any other comments you would like to make?……**
    ……
    ……

Appendix III. Land Management Plan Brief

The land management plan will take into account the key themes of the Scottish Forestry Strategy and the objectives are outlined below:

1. Maintain the overall mixed character of the woodlands providing visual and environmental diversity.
2. Establish a medium to long term programme to restore semi-natural ancient woodlands, in Coilhallan, and expand native woodland around these.
3. Maintain existing recreation facilities and promoted trails, working with community to enhance and extend these, when funding is available.
4. Restructure woodlands in the Crags to create a resilient, mixed age, mixed species woodland, ideally with productive potential.
5. Clear remaining non-native conifer from Crags ridge and allow development of open native woodland, retaining views of surrounding area.
6. Seek opportunities to use species and planting patterns that will benefit black grouse and red squirrels.
7. Retain mixed beech woodland adjacent to the golf course and eastern entrance to Coilhallan, and other veteran beech trees. Manage natural regeneration to favour a range of species and prevent beech becoming dominant in other areas of the woodland.
8. Manage natural regeneration in Coilhallan and the Crags, retaining visual and landscape interest but also to provide a productive resource where possible.
9. Seek to retain remaining arboretum trees in Coilhallan as future specimen trees.
10. Monitor and safeguard nesting birds of conservation concern.
11. Assess status of heronry in context of surrounding woodland and manage appropriately.
12. Continue timber production by appropriate management of existing stands, restocking with productive species, where possible, and managing natural regeneration.
13. Continue working with Local Authority and neighbours to resolve access issues to all parts of the woodland.
14. Carry out pre-operational surveys and follow appropriate guidelines during operations to avoid excessive ground damage thereby minimising risk of erosion and downstream sedimentation.
15. Establish a deer control programme appropriate for a high recreation use area.
16. Continue a programme aimed at eradicating invasive, non-native species.

Appendix IV: Tolerance Table.

	Adjustment to felling coupe boundaries	Timing of restocking	Change to species (including boundaries)	Windthrow response	Changes to road lines
FC Approval not normally required	Up to 1ha or 10% of coupe - whichever is less	For productive species, up to 3 planting seasons after felling Up to 10 planting seasons for natural regeneration	Change within species group i.e. diverse conifers; broadleaves; Sitka spruce. Non native conifers in native woodland areas and designated open space up to 400 stems/ha. <20% increase in area of Sitka spruce	Up to 2ha as a single unit with >50%windblow	
Approval by exchange of letters and map	1ha to 5ha or 20% of coupe - whichever is less	For productive species, 3 – 5 years after felling	>20% increase in area of Sitka spruce	2ha to 20ha as a single unit with >50% windblow	Additional felling of trees not agreed in plan Departures of >60m in either direction from centre line of road
Approval by formal plan amendment	> 5ha or 10% of coupe	For productive species, over 5 planting seasons after felling	Change from specified native species Change between species groups	>20ha as a single unit	As above, depending on sensitivity

Appendix V. EIA Determination request

CALLANDER LMP –roads, tracks and ramps

This is a request for an EIA determination for works covering construction of roads, tracks and ramps in Callander LMP area. The request covers proposals for the full ten year period of the plan which will offer some flexibility with the work programme without the necessity of having to re-submit a determination. Any work to be carried out in the second half of the plan period will be preceded by a new EIA determination request.

Approximately 100m of new road will be constructed during the plan period. This road has already been the subject of an EIA determination request which is reprinted below. The outcome of the request was that an EIA would not be required.

Approximately 900m of ATV and 560m of forwarder tracks will be required to access harvesting sites and to facilitate harvesting, silvicultural and deer management operations. In addition up to 6 ramps will be required to allow harvester/forwarder access into coupes that are to be felled during the design plan period.

Tracks will be constructed in line with the principles described in the SNH guidance on Constructed Tracks in the Scottish Uplands. Construction will also conform to the Forests and Water Guidelines (Fifth Edition) and special care will be taken in the coupes below Callander Crags. During construction ground disturbance will be kept to a minimum. Some tracks have the potential to be incorporated into the existing trail network but otherwise they will not be treated as permanent features. Once operations are complete tracks will be allowed to grass over and the running surface and side batters will be left in a condition that will promote vegetation regeneration. Tracks will be constructed with a top-side drain and will have regular drainage cut-offs to prevent erosion of the trackside drain. No water from the trackside drains will discharge directly into any watercourse.

Indicative positions of the tracks are shown on the roads and tracks map and final positions will be within ± 100m of these. The actual line will be planned to minimise landscape impact and ground disturbance, reflecting existing topography, avoiding steep gradients where possible and avoiding sensitive habitats. ATV tracks will be approximately 2m wide and the nominal area amounts to 0.2ha.

Forwarder tracks will be of similar construction to roads, with a permanent stone core, but without a final surfacing. A detailed assessment of position and route will be made prior to construction and a tolerance of ±60m adhered to. The footprint of these tracks will be approximately 7m and the nominal area amounts to approximately

0.4ha. Forwarder tracks will be left in place but either fully or partially covered and allowed to grass over. This will mean they are available to be used in the future.

Ramps will be approximately 3m wide and up to about 20m long. They will not be treated as permanent features and will be removed following operations. The final number and location of the ramps will be determined at the time of operations but we believe one ramp per 100m of road/coupe interface will be sufficient.

An EIA determination request form is to be found at the front of this document and a summary of proposed works in Appendix VI. A revised EIA determination will be sought if any specific sensitive issues are encountered before construction.

1	Landscape	There are no major landscape issues with either tracks or ramps.
2	Watercourses	All work will conform to the 5th edition of the UK Forestry Standard Guidelines “Forests and Water”, and especial care taken in coupe sbelow Callander Crags.
3	Archaeology	No major issues.
4	Biodiversity	Work carried out will be sensitive to permanent and temporary features of conservation value (e.g. spawning frogs and toads in roadside drains).
5	Access	There are no major access issues.
6	Recreation	No major issues.
7	Material	ATV tracks will use material from on site. Material suitable for forwarder tracks and ramps will be sourced from local quarries.

Forestry Commission Scotland
Coimisean na Coilltearachd Alba

Perth and Argyll Conservancy
Upper Battleby
Redgorton
Perth
PH1 3EN

Tel 01738 442830
Fax 01738 441787
panda.cons@forestry.gsi.gov.uk

Conservator
Syd House

Andy Malcolm
Cowal and Trossachs Forest District
Aberfoyle
Stirling
FK8 3UX

10 December 2014

Dear Andy Malcolm

ENVIRONMENTAL IMPACT ASSESSMENT (FORESTRY) (SCOTLAND) REGULATIONS 1999
Cowal and Trossachs Batch EIA Determinations (December 2014): EIA Numbers 143, 144, 145, 146, 154, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168 and 169

I refer to your application for our opinion as to whether the work you are proposing in the above EIA determination requests will require our consent.

Following our screening meeting on 20 November 2014 and subsequent amendments to the EIA determination documents I can confirm that the works you propose will **not** require our consent under these regulations. Our opinion has been given on the assumption that the works proposed will follow the protocols outlined in the submitted EIA Determination documents and all relevant guidelins.

Under the terms of the Regulations, our decision is valid for a period of 5 years from the date of this letter and shall cease to have effect beyond 10 December 2019. If you propose to carry out any of the work in your application beyond this 5 year period, you should apply again for our Opinion as to whether our consent is required.

Yours sincerely

Catherine Kennedy
Woodland Officer

Environmental Impact Assessment

Determination Enquiry Form

Complete this form to find out if you need consent from the Forestry Commission (under the EIA Regulations 1999) to carry out your proposed work.

Section 1

Please tick the box to indicate the type of work you are proposing to carry out. Give the appropriate, the percentage of conifers and broadleaves.

Proposed Work: Afforestation		ha	BL%	Con%	Forest Roads	0.2	ha
Deforestation		ha	BL%	Con%	Forest Quarry		ha

Location and District: Cowal & Trossachs District. Callander Design Plan Area.

Please attached map(s) showing the boundary of the proposed work and also give details of the operations.

Section 2

Property Details

Property Name: Bracklin

Grid Ref: (eg AB 123/789): NN524200

Local Authority: LLTNP

Nearest Town: Callander

Section 3

Applicant's category: (please put a cross in one box)

PE Personal occupier		PU Public ownership	X
BU Business occupier		OT Other	
VO Voluntary organisation		CT Crofting tenant	

Section 4

Applicant's type: (please put a cross in one)

LS Lessee		TE Tenant		OW Owner	X	TR Trust	

Section 5

Your agent or woodland manager's details

Title: Mr Mrs Ms etc Initials: Surname:

Organisation:

Address:

Postcode: Tel: Mobile

Fax: Email:

Is this the address for correspondence? YES NO

Forestry Commission

Section 6

Applicant's details:

Title (Mr, Mrs, Ms, etc): **Mr** Initials: **A** Surname: **Malcolm**

Organisation: **Forestry Commission Scotland**

Position (eg partner, director etc): **Planning Forester**

Address: **Cowal & Trossachs Forest District**

Tel:

Fax:

Is this the address for correspondence? [X] YES [ ] NO

Section 7

Sensitive Areas: Give the area of the proosal that is covered by any of the following designations.

Sensitive Area as listed in "Schedule 2" of the 1999 EIA Regulations

a. Sites of Special Scientific Interest (SSSI) or Proposed Sites of Special Scientific interest (PSSSI)	
b. SSSI's with a Nature Conservation Order (Section 29 of the Wildlife and Countryside Act 1981)	
c. National Park	0.2ha
d. The Broads	
e. World Heritage Site	
f. Scheduled Ancient Monument	
g. Area of Outstanding Natural Beauty (AONB)	
h. "Natura 2000" site – *(European network of special areas of conservation and special protection areas under the Wild Birds Directive)*	

Forestry Commission

TITLE.: WIDENING OF A CORNER AND A JUNCTION ON AN EXISTING FOREST ROAD AND THE CONSTRUCTION OF 100 METERS OF NEW FOREST ROAD.

COWAL & TROSSACHS FOREST DISTRICT.

EIA Determination Number 167.

Design Plan Area: Callander

Design Plan Ref: A/S/95(48)

GR: NN524200

Description of work

Upgrade and extension of an existing forest road to provide the necessary access for harvesting and haulage.

The road is on a neighbours land and with his permission the plan is to widen one road junction and widen 1 corner on the existing road. The proposal also includes a 100 meters of new road linking the existing road with the coupe which is to be harvested.

The finished new road section will be 4.0 metres wide. The road junction and corner will be widened sufficiently to allow lorry access

Comment added after 20.11.14 EIA Determination screening meeting.

The existing forest road is a promoted path. Every effort will be made to carry out the works required to widen the road junction and the corner, as described above, without closing the road. In the event that a short road closure is required, it will be notified in advance through site signage.

Possible Environmental Impact

Proposed works will have no impact on the environment.

Landscape.

The Proposed roadline is an extension of an existing road. The line has been selected to minimise gradient. Finishing works will ensure that batter angles are shallow enough to promote ground vegetation regeneration, ie a maximum of 1:3.

Watercourses and Catchments.

The proposed works will have no impact on any watercourse.

Construction

The road will be constructed to the standard forest road specification (see attached).

Materials will be brought in from the closest working Forestry Commission Scotland quarry which is at Kingshouse.

Archaeology

None.

Biodiversity

The additional works will have no impact on biodiversity.

Soils:

As noted above, finishing works will ensure soil stability along the length of the new road. The road specification also requires regular ‘cut-offs’ which minimises the volume of water running in the roadside drains and therefore reduces the likelihood of any soil issues.

Recreation

The proposal will have no impact on recreation.

Designations:

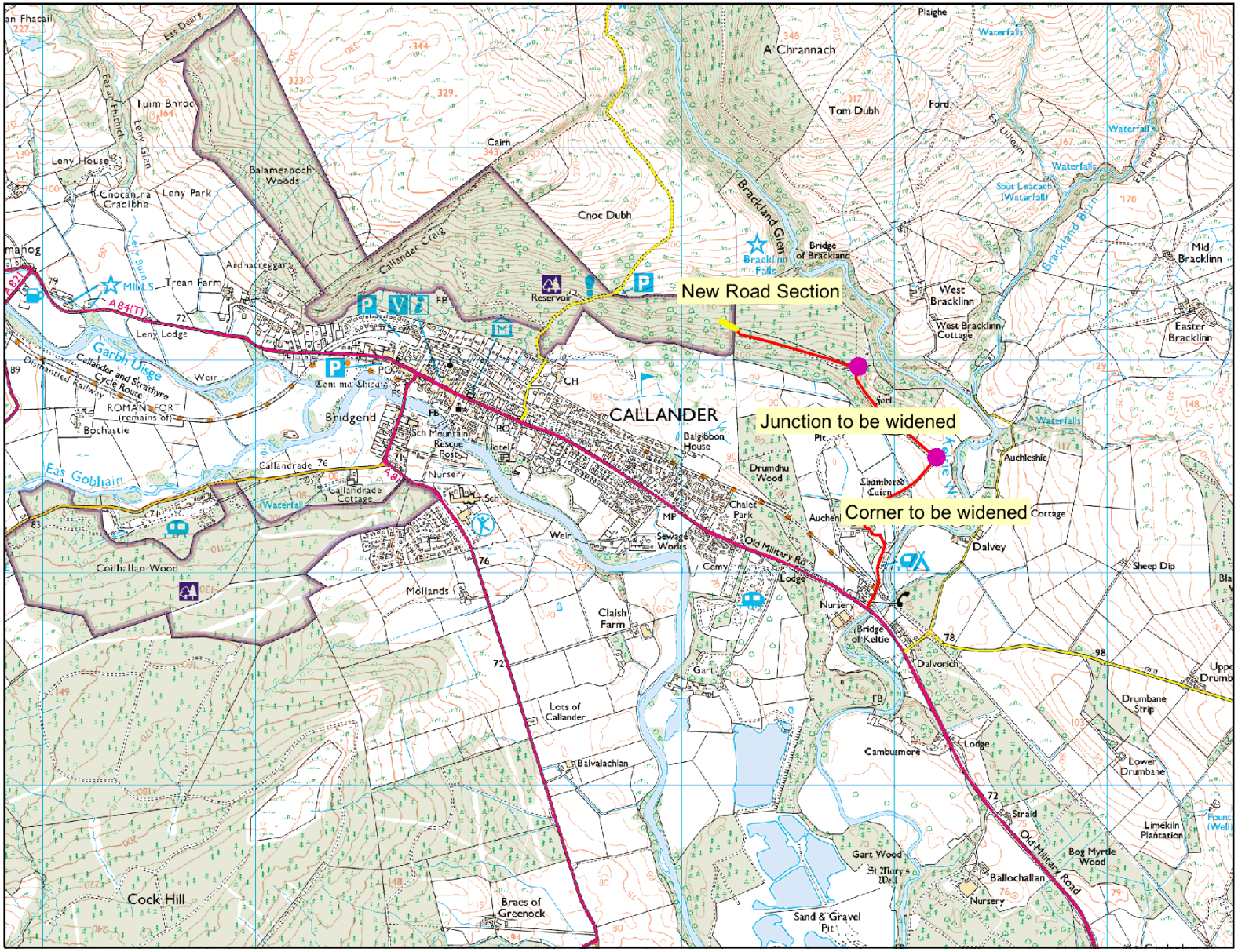
None.

Habitat:

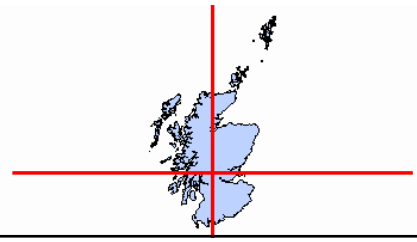
The construction of the new road section will have no impact on habitat.

Forestry Commission Scotland
Coimisean na Coilltearachd Alba

Bracklin Location



Conservancy Boundary



Scotland

N

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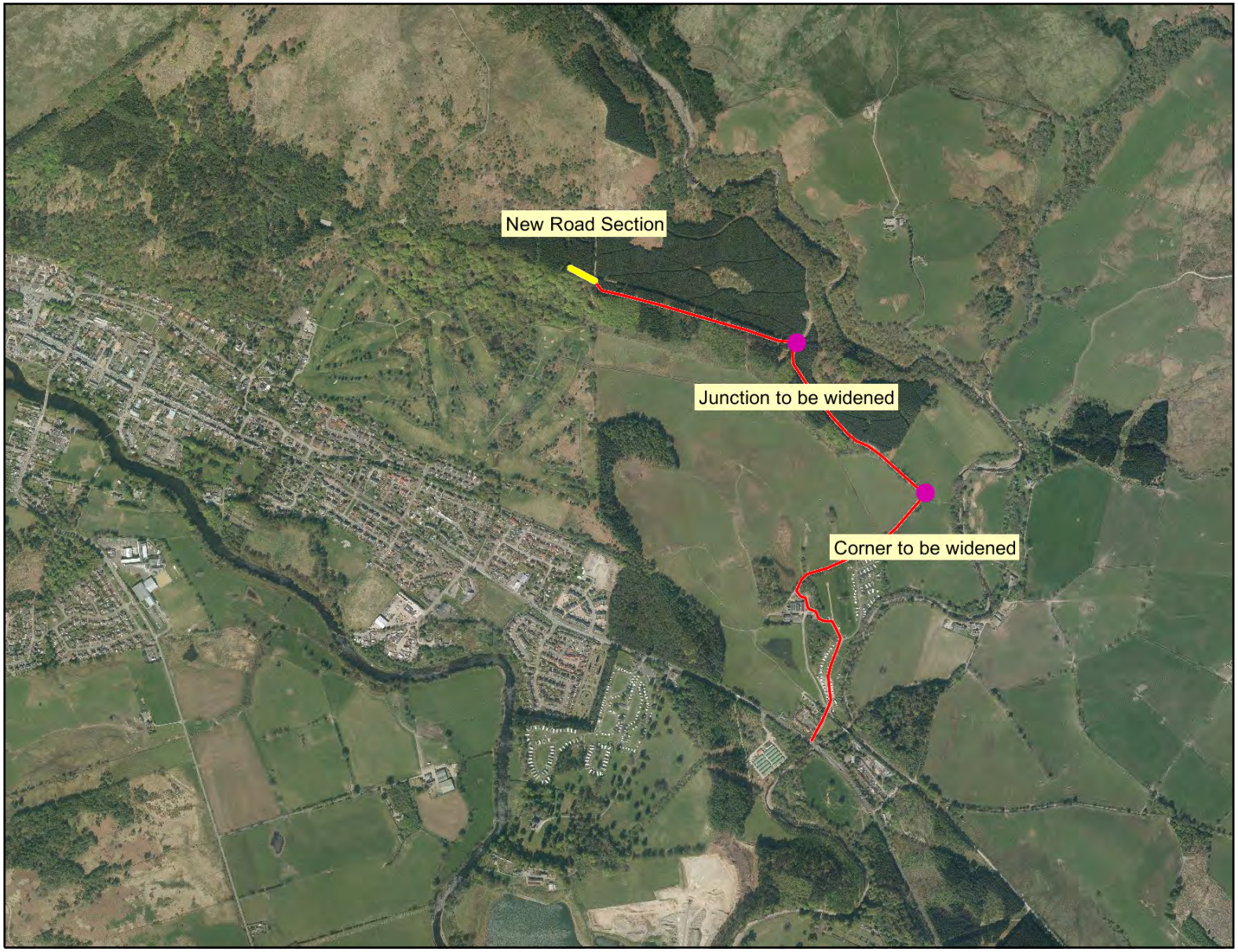
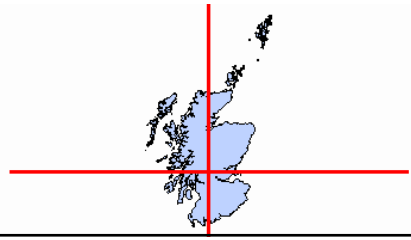
Forestry Commission Scotland
Coimisean na Coilltearachd Alba

Bracklin Access and Job Details



Conservancy Boundary



Scotland

N

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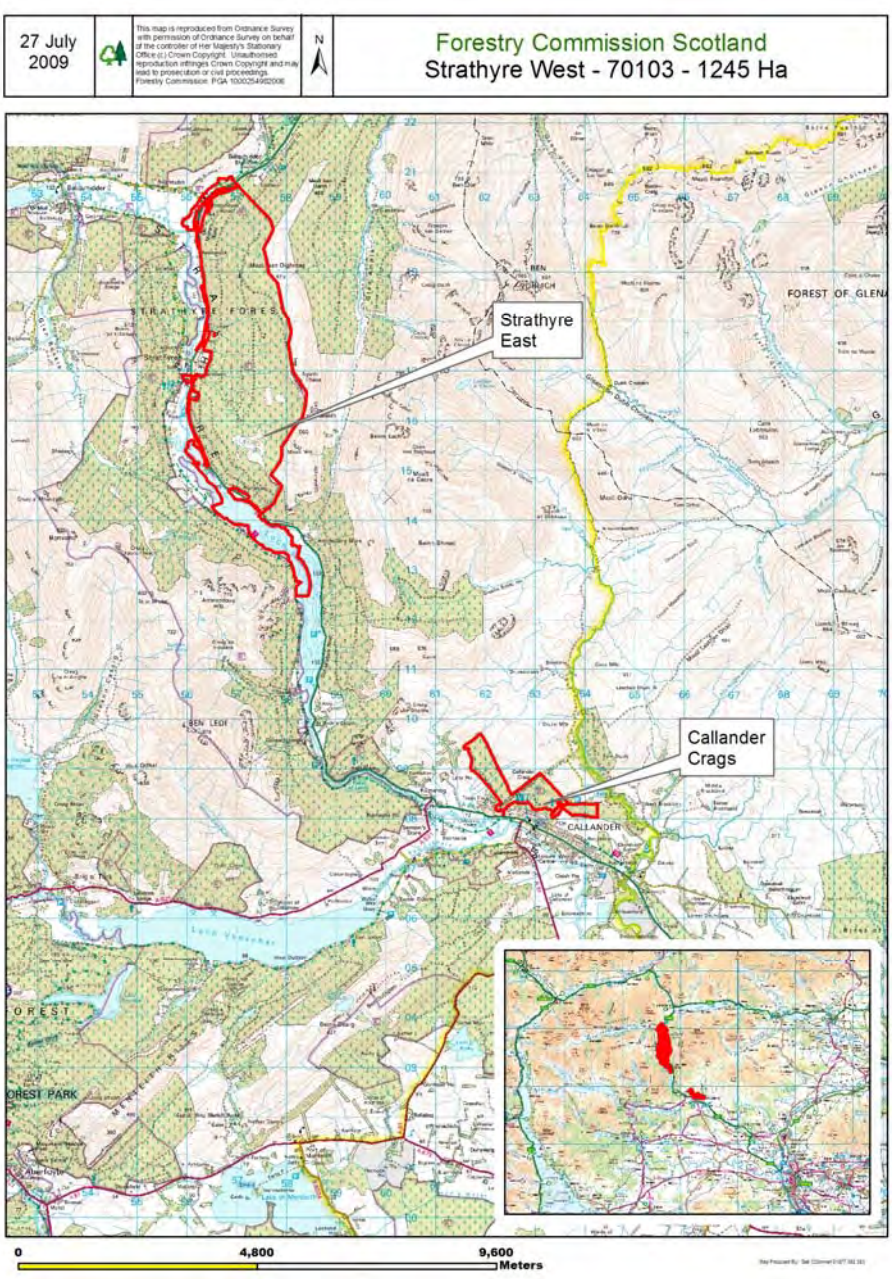
Appendix VI. EIA Determination summary - forest tracks

Coupe	Length (m)	Area (ha.)	Purpose	Landscape	Water quality	Archaeology	Biodiversity	Access	Recreation	Material
85003	604	0.12	crop establishment	Visible from Coilhallan	standard protection measures	no known issues	no significant issues	from forest road	potential trail	to be found on site
85003	227	0.16	harvesting and crop establishment	Visible from Coilhallan	standard protection measures	no known issues	no significant issues	from forest road	potential trail	local quarry
85004	309	0.06	crop establishment	no issues	standard protection measures	no known issues	no significant issues	from forwarder track	potential trail	to be found on site
85004	227	0.16	harvesting and crop establishment	no issues	standard protection measures	no known issues	no significant issues	from forest road	no issues	renew existing; local quarry
85018	61	0.02	harvesting	no issues	standard protection measures	no known issues	no significant issues	from existing trail	reinstate trail	local quarry
85020	45	0.03	harvesting	no issues	standard protection measures	no known issues	avoid broadleaved trees	from forest road	no issues	local quarry

Appendix VII. Deer Management Plan

Deer Management Plan Name Strathyre East

This plan covers the following deer management units:-70103



Callander Land Management Plan 2015-2024

1. Description:

The plan area is on the east side of the Strathyre valley and lies entirely within the Loch Lomond and Trossachs National Park. The forest is a mixture of first and second rotation, mainly commercial woodland, and is diverse in structure and age class. CCF concentrated on lower slopes. Some recreation use, confined to forest roads and paths. Callander Crags heavily used recreationally, by visitors and local people.

Total Area 1124ha

Designations: None

Altitude: 121 metres to 600 metres.

Perimeter fencing

a mixture of stock and deer fencing. Details can be found in the FD fence plan.

There is a strategic deer fence which covers the west and south from Glenample to Callander Crags. This fence is in good condition with annual repairs carried out. There are a number of stock and deer fences which are well beyond repair and this causes sheep ingress in the areas of Monachyle and Kirkton Glens.

There are many species of wildlife in this DMU, the undermentioned are perhaps the more popular:-

Golden Eagles, Monachyle Glen which is just outside FC land.

Black Grouse, sporadic and few in numbers.

Otters and Mink, Balvaig and Loch Luibnaig. Salmon and Sea Trout, Leny river and through any water system to the Balvaig. There are also reports of wildcats although this has not been confirmed.

Forest design plan areas: Strathyre East - 1124ha, Callander - 121ha

2. Neighbours:

The estates and farmers are many and varied in the area and compromise mainly of sheep and cattle farming, although a few, (Monachyle, Ballimore, Glenample and Woodland Trust) do contribute to the Balquidder Deer Management Group and set annual culls.Cowal and Trossachs FD is also a member of this group.

3. Main Objectives and Key Issues

Ongoing re-stocking is vulnerable to deer impacts and the target of 15% of browsing of SS and 30% on soft conifers.

Native woodland remnants are extremely vulnerable and steps will be taken to reduce adverse impacts.

4. Deer Management Methods and Resources

Deer control is currently carried out by directly employed FCS Wildlife Ranger staff.

Some permit stalking will be offered where this does not detract from other objectives being achieved.

Currently there are no plans to lease deer stalking so as to maintain a high level of control.

Out of season shooting will conform with FCS policy.

Night shooting will be utilised where serious damage may occur despite having used all other methods including out of season control.

Deer fencing will be used where immigration from neighbouring deer populations cannot be reasonably controlled by shooting.

FCS attendance will be maintained at the relevant Deer Management Groups.

5. Monitoring

All year 1 restocking will be monitored by Nearest Neighbour assessment, this is currently undertaken via a central contract with Strath Caulaidh Ltd. .

Population monitoring using the national SCL contract will be used as required. The last assessment was in 2009.

SDA assessments are conducted at years 1 & 5 by the Operations team.

All biological data will be collected via the SWMS.

6. Cull Targets

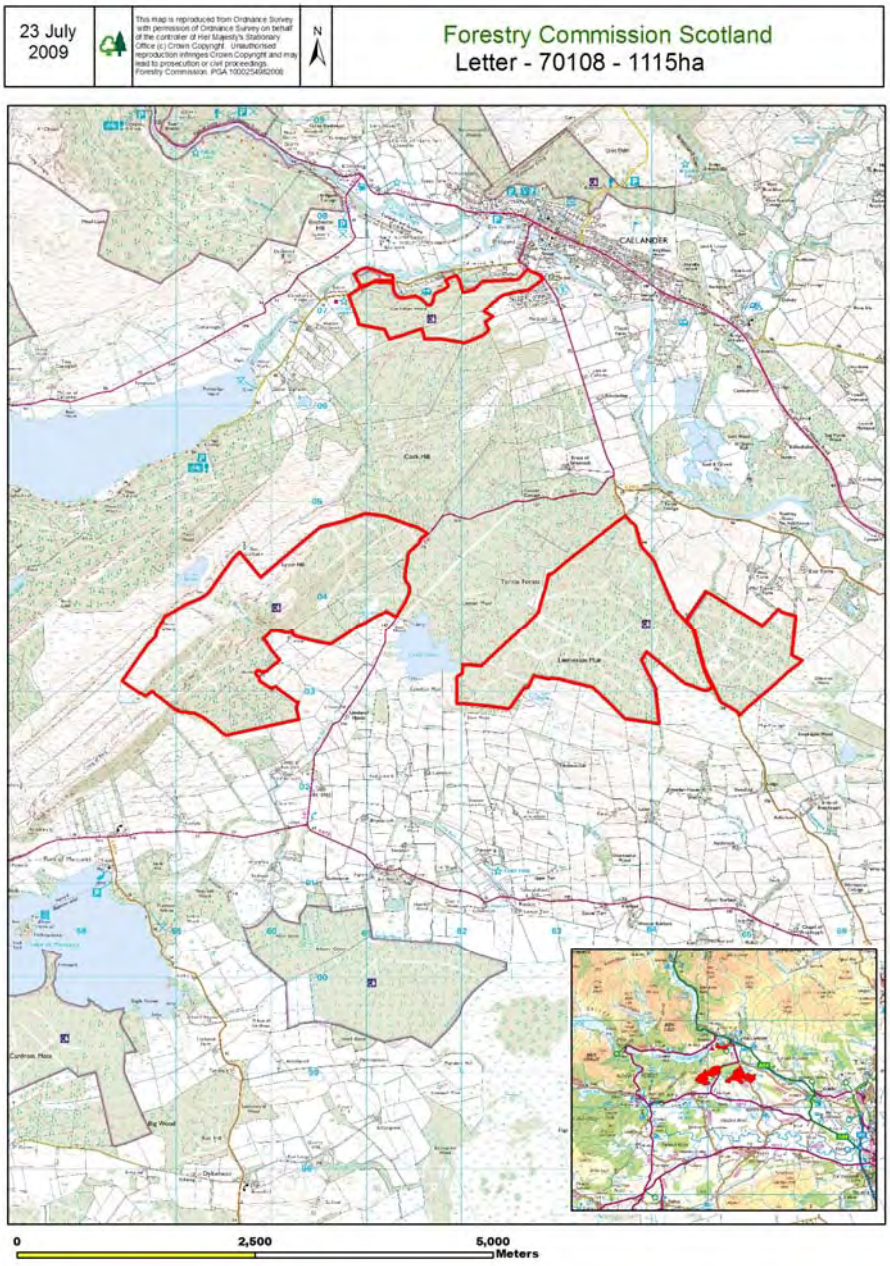
Cull targets will be set using any previous populations data, cull data from the WMS, impact assessments and the Wildlife Rangers local knowledge.
Cull progress will be monitored via the WMS and regular reports will be produced by the deer administration hub.

7. Historic Culls

Cull records are kept at the Forest District Office.

Deer Management Plan Name Letter

This plan covers the following deer management units:-70108



Callander Land Management Plan 2015-2024

1. Description

Restructuring of all blocks currently taking place, with a significant proportion of soft conifer and native woodland restocking. Coilhallan is a woodland with heavy recreational use and a housing estate on the eastern boundary. Torrie is used less by the public and Letter used least (but still has some public access).

Deer stalking is currently leased in Letter and Torrie.

Total Area 1115ha

Designations: None

Altitude: 80m to 370m

Perimeter Fencing:

Mixture of stock and deer fencing (details to be found in the FD fence plan).

Forest design plan areas: Torrie – 365ha, Letter – 344ha, Coilhallan – 125ha

2. Neighbours:

Rednock Estate, Invertrossachs Estate, Wester Lenniston Farm, East West and Mid Torrie Farms. Within 1km is the busy town of Callander.

3. Main Objectives and Key Issues

Ongoing re-stocking is vulnerable to deer impacts and the target of 15% of browsing of SS and 30% on soft conifers.
Native woodland remnants are extremely vulnerable and steps will be taken to reduce adverse impacts.

4. Deer Management Methods and Resources

Deer control is currently carried out by directly employed FCS Wildlife Ranger staff.
Some permit stalking will be offered where this does not detract from other objectives being achieved.
Currently there are no plans to lease deer stalking so as to maintain a high level of control.
Out of season shooting will conform with FCS policy.
Night shooting will be utilised where serious damage may occur despite having used all other methods including out of season control.
Deer fencing will be used where immigration from neighbouring deer populations cannot be reasonably controlled by shooting.
FCS attendance will be maintained at the relevant Deer Management Groups.

5. Monitoring

All year 1 re-stocking will be monitored by Nearest Neighbour assessment or subsequent newly developed methodology.
Population monitoring using the national SCL contract will be used as required. The last assessment was in 2009.
SDA assessments are conducted at years 1 and 5 by the Operations team.
All biological data will be collected via the SWMS.

6. Cull Targets

Cull targets will be set using any previous populations data, cull data from the WMS, impact assessments and the Wildlife Rangers local knowledge.
Cull progress will be monitored via the WMS and regular reports will be produced by the deer administration hub.

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