### **Central Region**

# **Strathyre Forests Strategic Larch Removal Plan**



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## A.Description of woodlands

#### A.1 Property details

<ul> <li>Property Name: Strathyre Forests (West Strathyre, Str.</li> </ul>	athyre East & Kirkton
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- **Business Reference Number:**
- Main Location Code:
- Grid Reference: (e.g. NH 234 567): NN 5542 1815
- Nearest town or locality: Strathyre
- Local Authority: Stirling
- LMP Plan area (hectares): 4224.65

#### Owner's Details

- Mrs Carol McGinnes
- Organisation: Forestry and Land Scotland
- Position: Regional Manager
- Primary Contact Number: 0300 067 6600
- Email: enquiries.central@forestryandland.gov.scot
- Address: Aberfoyle Office, Aberfoyle, Stirling FK8 3UX, Scotland

Approval - to be completed by Scottish Forestry staff:

LMP Reference Number:	
Plan Period: (ten years) (day/month/year) From:	to:
Operations Manager Signature:	Date:

#### Declaration

#### I hereby apply for a permission to fell the trees described in this application and I certify that:

- I am the landowner or an occupier of the land with written permission of the landowner;
- Where the landowner is a business, I am authorised to sign legal contracts on behalf of that business;
- If I am an acting on behalf of the landowner or occupier, I have been mandated to do so;
- Any necessary consents from any other person(s) if required, have been obtained;
- I have made the necessary checks with the local planning authorities regarding Tree Preservation Orders and Conservation Areas;
- I have notified all stakeholders that may be affected by the felling in this application and sought their views prior to submitting this application;
- I hereby acknowledge that Scottish Ministers may process any of my personal data contained in or relating to this application in accordance with the terms of Scottish Forestry's Privacy Notice, a copy of which is available at www.forestry.gov.scot;
- Where applicable and appropriate I have submitted an EIA screening opinion form for operations contained within this application under the Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017;
- I have read and understand this application fully and, to the best of my knowledge and belief, the information given in this application is complete, true, and accurate;
- I accept that any false or misleading information provided in this application constitutes an offence and may result in any felling permission based on this application being revoked at any time, and
- I have read and understand Scottish Forestry's Privacy Notice, a copy of which is available at https://forestry.gov.scot/privacy-complaints-freedom-of-information-and-requests-for-information.

Do you give consent for Scottish Forestry to access your land

YFS

You are not obliged to give us consent to enter your land, however if we are denied access to your land, and cannot carry out an assessment because of this, we may reject your application.

This consent is for access to assess this application as well as monitor compliance with any subsequent approval, where applicable

Signed:	Print:
Date:	

#### A.2 Location and Background

The Strathyre Forests Larch Removal Plan (LRP) covers a total of 4224.65 ha located around the villages of Strathyre and Balquhidder in Stirlingshire. The LRP area is divided in 3 forest blocks. These being Kirkton block (~471.52 ha) above Loch Voil, the West Strathyre block (~2630.68 ha) on the West side of Loch Lubnaig and Strathyre East (~1122.45 ha) on the East side. These blocks lie within The Loch Lomond and Trossachs National Park (LLTNP) and have a high recreational/landscape impact.

In 2016, a first infections of the disease *Phytophthora ramorum* was discovered within Strathyre and resulted in a number of Statutory Plant Health Notices (SPHNs) being issued by Scottish Forestry since.

Recent experience from elsewhere in Central Region indicates that the Strathyre Forests will suffer an exponential increase in *Phytophthora ramorum* infections over the next five years, which will require prompt action to limit the spread of the disease within the 'Priority Action Zone' outlined by Scottish Forestry. As such, this larch removal plan has been developed to gain prior approval for the removal of all larch and associated species within West Strathyre, East Strathyre and Kirkton over the next 5-6 years. The Land management Plans (LMP) for East Strathyre and Kirkton are currently expired or about to expire and the larch plan has been developed to ensure that we have approval before the revised LMP is developed. The larch Plan will also supersede the currently approved of West Strathyre. A revised 10-year Land Management Plan will subsequently be produced to succeed this interim larch removal plan, which will cover other aspects of forest management in greater details.

This approval should allow us to focus our strategic larch felling operation in programmed timeline that is sensible for the organisation, focusing resources where appropriate in order to try limiting the spread of the disease further north and east.

### **A.3 Existing Schemes & Permissions**

Table 1-

Type (e.g. Felling Permission)	Ref. No.	Details
Land Mamagement Plan	LMP-01-2017	West Strathyre LMP valid until 2027
Forest Design Plan	033/CT/S/11(2)	Strathyre East LMP- Extension until 10.08.25
UKWAS management Plan	N/A	Non-SF approved management plan for Kirkton Glen
Felling Permission	FPA 8374	Kirkton felling permission -Approved 26/10/2021 until 26/10/2023 for thinning
Felling Permission	FPA 10146	Kirkton felling permission- Approved 10/01/2023 until 10/01/2025 for clearfelling due to SPHN STH22_1261
Felling Permission	FPA-8093	Kirkton Thinning permission – Approved 10/05/21 until 10/01/2023

### A.4 Stakeholder Engagement

Table 2

Scoping/ Engagement – Main Points	LMP Reference (section/page):
Communication on <i>Phytophthora ramorum</i> related felling with LLTNP and affected communities	Section B1- Constraints, Opportunities and Concept section Appendix 4
Private Water Supplies – Neighbours	Section A.6.1 Hydrology and Section B1Constraints, Opportunities and Concept
Designations – NatureScot	Section C.1.12 Biodiversity – Appendix 4
Public drinking water catchments – Scottish	Section C.1.6 Hydrology

Water	Appendix 4
Public Engagement	Appendix 4
Scottish Raptor	Appendix 4

### **A.5 Vision and Management Objectives**

#### Vision

In the short term to remove larch and therefore minimise the risk of further spread of Phytophthora ramorum (PR).

The long term vision for the site will be set out in the developing Strathyre Forests Land Management Plan

#### **Management Objectives**

Table 3: Objectives

No.	Objectives (including environmental, economic and social considerations)	Indicator of objective being met
1	Prevent spread of PR by removing majority of larch present focusing on mature trees.	Annual reduction in larch area over agreed period
2	Minimise felling of associated species other than for access and safe removal of larch and to mitigate against catastrophic windblow	Adherence to considered felling plan

#### A.6 General site description

#### A.6.1 Hydrology

All watercourses found in West Strathyre and Strathyre East form the waterbody catchment of Loch Lunaig to the North and of Garbh Uisge to the South.

There are multiple public and private water supplies in both blocks feeding from these forest watercourses. The main Scottish Water distribution point for Strathyre village lies in East Strathyre forest where numerous burns feed the water catchment. Scottish Water main distribution point for Balquhidder, Auchtubh and Strathyre Glens also originate from Kirkton Glen Forest block. As well as being designated a water catchment Kirkton burn is also part of the River Forth water Catchment.

Most of the Land Management Area drains into the river Teith Special Area of Conservation, with part of it also linked to Loch Lubnaig Marshes Site of Special Scientific Interest (See Map 06-Hydrology and 04 Designations and Features).

#### A.6.2 Windthrow

Areas adjacent to the recently clearfelled neighbouring forestry estate (Stroneslaney) North of West Strathyre were affected by windblow and recently felled. Due to more recent felling, it is expected that boundary coupes will be more susceptible to windblow. In addition there are several areas which are already succumbing to windthrow, such as a significant area of larch and Norway spruce on the shoulder of Creag Bheag in West Strathyre. See Map 08- Issues and Concept

ForestGALES, combined with on-site assessments have been used to help calculate the risk of windblow in particular stands and where thinning and keyholing of larch is expected to cause an unacceptably high risk of windblow, especially on the upper slopes of these forests, clearfell has been selected as the preferred management option.

#### A.6.3 Access

Recreational access:

Kirkton, Strathyre East and West Strathyre offer a range of core paths on their forest road has two main core paths on its main forest road. Part of the road network has been designated as core paths, the Rob Roy Way and Sustrans National Cycle Route 7, and are well used recreational features.

There is also numerous core access to the neighbouring hills of Ben Ledi, Beinn an t-Sithein and upper Kirkton glen.

Numerous car parks and viewpoints are situated along the A84, which draw the attention of the visitors to some of the proposed felling (See Map 07- Recreation).

Local community is also active, particularly around Strathyre Village and communication on PR felling with LLTNP and affected communities will be undertaken.

#### Operational access:

All blocks are well roaded with access to almost of all the proposed felling coupes and CCF areas being served by the current road network.

A new road will be required in coupe 81001, Strathyre East, to allow us loading timber away from the main public road.

In West Strathyre a new road will also be required to access the upper slopes of Stronyre coire and link it to the existing forest road. Additional quarries will also be required to access these areas containing larch that are currently inaccessible, as well as for general maintenance of the road infrastructure. A screening opinion request will be submitted once we establish what is required.

Access tracks will be required for harvesting and restocking on sites across the plan area, as well as a number of ramps that will be required to access sites. These will be determined at operational planning stage. An EIA SOR and Prior Notification submission will be made in due course for these new road and tracks.

Slopes are a constraints in some places with winch work being preferred method of work to manage these areas effectively. The road network is sufficient to facilitate winch harvesting. However some area where scattered larch only will be felled to waste are practically inaccessible with even hand-cutters for Health and Safety concerns. Eco-plugs will be used as a mean to kill the larch in these areas.

#### A.6.4 Historic Environment

Numerous relic archaeological features can be seen in this area and are detailed below.

#### 1-Kirkton

Kirkton lower slopes possess two relics of 18-19th Century Plantation enclosures, as well as a two sheepfold relics in some of the larch coupes.

#### 2-West Strathyre

Relics of medieval/post-medieval agricultural settlements have their buffer on the edge of the clearfell coupe 82058 and thinning coupe 82705, 82708, 82710 and 82719.

Medieval/post medieval grazing shielings can also be found on the upper grazing slopes north of Ben Vane on the edge of coupe 81053.

A relic of a corn drying/lime kiln is also present on the Eastern edge of thinning coupe 82521

#### 3- Strathyre East

East Strathyre lower slopes has several relics of 18-19th Century plantations along its lower slope and within proposed clearfell coupes 81043, 81502 and 81504, along with thinning coupe 81710, 81707, 81508, 81706.

Medieval/post medieval grazing relic areas can be identified in the edge of coupe 81006, 81051, 81034 and 81047

Coupe 81001 to the North has an undesignated culvert on the line of the military road A remain of an uncategorised building is also present in coupe 81057.

See Map 04- Designations and Features for details of their location.

#### A.6.5 Biodiversity

The LMP area supports a wide range of woodland and edge habitat species and is recognised as an important habitat link for species travelling along the Strathyre corridor. Stands of mature conifer, including larch, are particularly valuable for a range of species including red squirrel and bird of prey. Loch Lubnaig and the major connecting waterbodies, and the Loch Lubnaig Marshes are designated as an SAC and SSSI respectively for a range of aquatic life, including fish assemblages and freshwater pearl mussels. All watercourses running through the woodlands feed ultimately to these ecosystems.

Further South, Garbh Uisge (end of Loch Lubnaig) is a tributary of the River Teith SAC and is also designated for its fish assemblage such as Salmon and Lamprey.

As well as numerous PAWS, the forests contain areas of native semi-natural woodland, ancient woodland and a southern portion of West Strathyre also lies within the Great Trossachs Forest National Natural Reserve. A significant area (~35 Ha) of native woodland is also designated as a SSSI at the Pass of Leny Flushes.

These designations are detailed in Map 04 Designations and Features.

#### A.6.6 Community and Recreation

The Strathyre corridor provides a key route for tourists travelling to the northwest Highlands and for many will be their first experience of a Highland Landscape. However, Strathyre also provides a minor destination in itself, being only a few minute's drive North from Callendar and featuring the summit of Ben Ledi and attractions such as holiday cabins.

The main communities in the vicinity are the villages of Strathyre and Balquidder with the public roads passing through ranging through consultation, severely restricted and excluded for timber transport purposes.

Levels of recreation are high in many areas, with the long distance trail 'Rob Roy Way' and National Cycle Route 7 pass through West and Strathyre East. There are 4 promoted trails (3 in West Strathyre and 1 in Strathyre East) with the route to Ben Ledi amongst those. Other than the forest road network a limited number of other non promoted trails across the Strathyre Forests and Kirkton.

#### A.7 Woodland description

Map 02-Current species shows the main species present in each sub-compartment of the forest. The following tables 4, 5 & 6 shows the current species composition in each forest areas as well as the future species composition in terms of change and species diversification. Currently most of the larch is planted with Sitka spruces in most areas.

Map 04- Designations and Features shows the extend of Plantation on Ancient Woodland Sites (PAWS) in today's forest. Proposed clearfell coupes on such sites offers the opportunity to restore these sites with native species where appropriate.

Many of the older stands were planted in the 1940's and can still be found throughout the forest areas. Large areas are already seeing their second rotation.. The distribution of Age Classes in the current and future forests is shown on Tables 7-9.

**Table 4- West Strathyre Area by species** 

This shows the current and future species composition within the West Strathyre Area of the larch plan

Species	Current*		Year 10*		Year 20*	
	Area (ha)	%	Area (ha)	%	Area (ha)	%
Sitka spruce	779.4	50	720.6	46	667.8	42.7
Norway spruce	87.2	5.6	78.4	5	72.9	4.7
Mixed conifers	27	1.7	194.2	12.4	216.9	13.9
Scots pine	43.7	2.8	51.2	3.3	59.1	3.7
Hybrid larch	40.2	2.5	0	0	0	0
Japanese larch	58.9	3.8	0	0	0	0
European larch	24.4	1.6	0	0	0	0
Douglas firs	15.8	1	14.2	1	7.7	0.5
Birch (downy/silver)	51.1	3.3	40.6	2.6	36.1	2.3
Other broadleaves**	95.1	6.1	178.8	11.4	222	14.2
Oak spp.	58.7	3.8	55.2	3.5	51.6	3.3
Internal open ground ***	283.53	17.8	231.83	14.8	230.93	14.7
Total	1565.03	100	1565.03	100	1565.03	100

<sup>\*</sup> Of planted areas excluding open areas such as deer glades & unplanted bare ground, open hills and other land use. Any mixtures such as Mixed Conifer (MC) should be broken down and included as an individual species component where a species occupies more than 10%.

<sup>\*\*</sup> Predominantly comprising mixed native broadleaves.

<sup>\*\*\*</sup> Internal OG exclude areas of open ground such as deer glades, unplanted and bare ground, open hills and other land used for agriculture, quarries and facilities.

#### **Table 5- East Strathyre Area by species**

This shows the current and future species composition within the East Strathyre Area of the larch plan

Species	Current*		Year 10*		Year 20*	
	Area (ha)	%	Area (ha)	%	Area (ha)	%
Sitka spruce	518.7	64	409	50.4	307.8	38
Norway spruce	64.6	8	57.6	7.1	96.2	11.9
Scots pine	50.1	6.2	34.9	4.3	37.2	4.6
Douglas fir	23.4	2.9	15.6	1.9	10.6	1.3
Mixed conifers	15.7	2	131.4	16.2	174.7	21.5
European larch	9.7	1.2	0	0	0	0
Hybrid larch	25	3	0	0	0	0
Japanese larch	24.3	3	0	0	0	0
Birch (downy/silver)	27	3.3	15.3	1.9	16.6	2
Mixed broadleaves**	26.9	3.3	54.5	6.8	61.8	7.6
Internal OG	25.5	3.1	92.6	11.4	106	13.1
Total	810.9	100	810.9	100	810.9	100

<sup>\*</sup> Of planted areas excluding open areas such as deer glades & unplanted bare ground, open hills and other land use. Any mixtures such as Mixed Conifer (MC) should be broken down and included as an individual species component where a species occupies more than 10%.

<sup>\*\*</sup> Predominantly comprising mixed native broadleaves.

<sup>\*\*\*</sup> Internal OG exclude areas of open ground such as deer glades, unplanted and bare ground, open hills and other land used for agriculture, quarries and facilities.

#### **Table 6- Kirkton Area by species**

This shows the current and future species composition within the Kirkton Area of the larch plan

Species	Current*		Year 10*		Year 20*	
(Add relevant species groups, or OG/OL)	Area (ha)	%	Area (ha)	%	Area (ha)	%
Sitka spruce	249.9	62	233.6	58	164.3	40.7
Scots pine	14.1	3.5	14.1	3.5	14.1	3.5
Japanese larch	14.1	3.5	0	0	0	0
Hybrid larch	12.1	3	0	0	0	0
Norway spruce	14.1	3.5	51.9	12.8	51.6	12.8
European larch	5.2	1.2	0	0	0	0
Mixed conifers	10.6	2.6	20.7	5.1	70.4	17.4
Mixed broadleaves**	37.7	9.3	37.7	9.3	79.8	19.8
Internal OG (open round)	46	11.4	45.8	11.3	23.6	5.8
Total	403.8	100	403.8	100	403.8	100

<sup>\*</sup> Of planted areas excluding open areas such as deer glades & unplanted bare ground, open hills and other land use. Any mixtures such as Mixed Conifer (MC) should be broken down and included as an individual species component where a species occupies more than 10%.

<sup>\*\*</sup> Predominantly comprising mixed native broadleaves.

<sup>\*\*\*</sup> Internal OG exclude areas of open ground such as deer glades, unplanted and bare ground, open hills and other land used for agriculture, quarries and facilities.



#### **Area by Age Tables and Figures**

These shows the 3 forests broken down by age class and how that distribution will change over 20 years.

#### **West Strathyre**

Figure 1 showing age class distribution of West Strathyre Forest

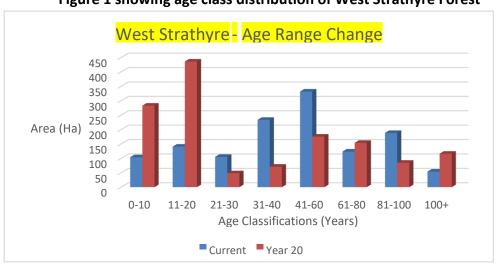


Table 7 – Area by age West Strathyre

Age class (years)		Current	Year 20	
(years)		Area (ha)	Area (ha)	
0-10		104	283	
11-20		140.7	435.9	
21-30		105.3	48.4	
31-40		233.7	71.1	
41-60		331.9	175.4	
61-80		123.7	153.9	
81-100		188.2	84.8	
100+		54.1	116.1	
Total		1281.6	1368.6	

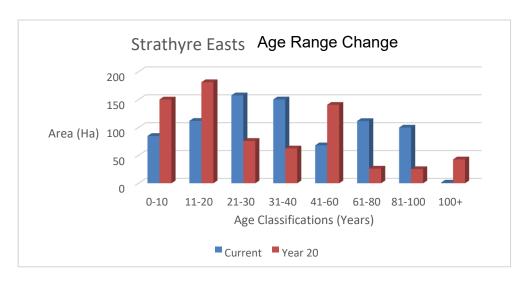


Figure 2 showing age distribution of Strathyre East Forest

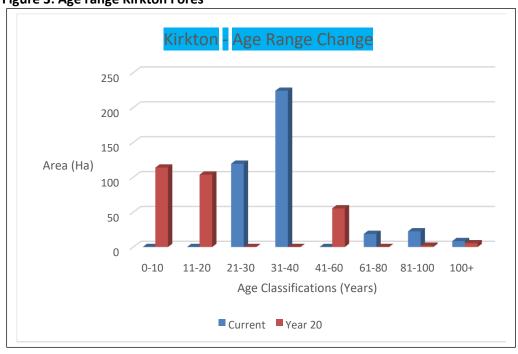
**Table 8- Area by Age Strathyre East** 

Age Class Year	Area (ha)	Area (ha) -Year 20
0-10	84.8	150.2
11-20	111.9	181.2
21-30	157.6	76
31-40	150.3	62.5
41-60	68	140.6
61-80	111.6	26.3
81-100	99.9	25.4
100+	1.2	42.8
Total	785.3	705

**Table 9 : Age Class Kirkton Forest** 

Age Class Year	Area (ha)	Area (ha) -Year 20
0-10	0	113.9
11-20	0	103.7
21-30	119.4	0
31-40	224/	0
41-60	0	55.4
61-80	18.8	0
81-100	22.5	1.9
100+	8.5	5.4
Total	393.2	280.3

Figure 3: Age range Kirkton Fores



## **B.** Analysis of Information

### **B.1 Constraints, Opportunities & Concept**

Table 10: Concept table

Factor	Considerations	Concept
Private Water Supplies (PWS)	Private water supplies in all blocks	Management proposals consider identified PWS and detailed protection measures will be outlied as part of the work planning process. All PWS are in the process of being fully assessed and recorded, including consultation with the relevant supply owner(s). Maintain high operational standards in relation to protection of water supplies.
PAWS	Significant area of PAWS within West Strathyre and Strathyre East.	Felling in larch plan includes consideration of PAWS and potential future restoration options. The management of PAWS will be reviewed at the LMP stage to ensure protection of remnant features and assess potential for restoration.
Continuous Cover Forestry	Significant area previously designed as CCF containing larch	Management type considers previous thinning regime/cycle and larch percentage to ensure future stand stability. Where stand stability is compromised, the suitability for further thinning has been revised and management type change to clearfell.
Landscape	The LMP areas falls are in the National Park and falls within the Highland Summit Landscape Type and the Straths and Glens with Loch type and some areas of	Thinning and keyholing of larch will be used to reduce landscape impact where appropriate. Clearfell coupes have been designed to minimise visual impact.

	larch felling will be highly visible. The most significant impact on the landscape will be in Kirkton where most of the larch felling will be happening in the front face of the block, visible from Balqhidder	The coupe shape in Kirkton has been designed to give flexibility that reflect the line of force and create a better design.
Access	Considerable amount of road upgrade required to access some areas of larch.  New road required off the A84 to access coupe 81001.	FLS will be exploring options and requirements for any civil engineering works as part of the full LMP renewal. For any relevant civil engineering project required for larch felling a subsequent EIA SOR (and relevant planning applications) will follow as required. Particularly isolated coupes will be left to a later stage of felling to allow the review and approvals process to be fully completed and relevant civil engineering works to be carried out.
Public road	Some felling to be done within safety distance of public road requiring appropriate planning and consultation with Transport Scotland.  Public roads leading to forests are consultation routes with haulage restriction limiting felling and extraction of timber. Neighbouring estate known to have sought permission for large coupe in same Glen resulting in potential for hauling large amount of timber within larch plan proposal window	Coupes to be programmed to minimise impacts on traffic, in consultation with Transport Scotland and early engagement with Transport Scotland will be undertaken.  Results from consultation with Timber Transport Forum and SF suggests that consultation with neighboring estate is essential to discuss potential haulage quota and this discussion is ongoing.
Visitor experience	High level of recreations in areas to be felled complicated by the existing path infrastructure and recreational expectations	Maintain recreational infrastructure. Liaise with communities, LLTNP and Council regarding diversion/ path closure. Seek to implement lower-impact felling methods where possible.
Communities	Felling of larch complicated by the proximity of stands to houses and businesses and use of the forests by communities and visitors alike	Regular quarterly of bi-annual communication via the Community Trust and Councils should ensure that communities are kept up to date with operational progress. Any specific issues such as protection

	of PWS will be considered pre-operations and liaison with
	appropriate landowner will ensure adequate level of protection
	where required.

## C. Management Proposal

#### **C.1** Prescriptions

#### C.1.1 Felling and Thinning

This plan proposes the felling of all larch and within the plan area and any associated species necessary to access the larch, to mitigate against windblow or to minimise visual impact.

Thinning will be preferred in stable stands whilst stands with higher proportions of larch and/or unsuitable for thinning will be clearfelled. Coupe shapes have been designed to ensure that the impact on landscape remains as minimal as possible and retain suitable areas of Long Term Retention and Continuous Cover Forestry (CCF).

**Map 09** - Management illustrates the proposed clearfell and thinning coupes. The plan here is focused on the removal of larch spp. Due to the wide distribution of larch throughout the three blocks, the proposal has been thoughtfully designed to minimise landscaping impact of larch removal. Where larch component is high throughout a coupe, and coupe has been previously unthinned and susceptible to windthrow, clearfelling is proposed using a sensible windfirm boundary and ensuring that felling is operationally feasible.

The larger clearfell coupes designs in Kirkton have been sought to avoid creating a coupe structure that creates a long line from high to low across the front face as viewed from Balquhidder and the surrounding glen; including consideration of the potential for this to become a permanent feature through subsequent restocking. A visualisation of Kirkton clearfelling coupes is illustrated on **Appendix VP01** and **VP02** and **Map 13** shows the view points of the visualisation. The illustration shows a large felling coupe which could be impactful in terms of scale in the short-term, but given the necessity for the Larch felling, this size gives flexibility to design future coupes that reflects the line of force coming down from Meall Reamhar down to the valley floor above Balquhidder creating a better design in the long-term.

Where the larch component remains minimal (usually less than 8%) in previously un-thinned or in coupes where the thinning window has been missed, larch will be either felled to recycle or chemically killed with a minimal felling of other conifers to allow access to pockets of larch, where required. The level of thinning in these coupes will remain well below the level of

marginal thinning intensity, and predominantly restricted to access racks, minimising stand instability risks.

Higher intensities may be applied in areas previously well thinned and with existing thicket understorey as part of a LISS prescription. Selective felling in these areas with large percentage of larch is done in previously well thinned and managed LISS coupes.

Tables 11 below as well as Appendix 1 Table of Operations 2025-2030 illustrate in more detail the clear felling and thinning programme in all three forest areas.

Appendix 2 Context of felling map puts into context the felling in the three forest blocks by referring to past felling operations

Table 11- Felling and thinning areas in West Strathyre during the five years period of the proposed plan

Year	Planned Clearfell (Ha)	Planned Thinning (Ha)	Planned Total (Ha)	Planned Larch Area (Ha)	Planned % plan area larch removed	Actual Clearfell (Ha)	Actual Thinning (Ha)	Actual Total (Ha)	Actual Larch Area (Ha)	Actual % plan area larch removed	Comments
25/26		46.3	46.3	9.2	8						
26/27	25.27	98.81	124.08	30.48	24						
27/28	30.7	42.9	73.6	11.53	7.7						
28/29	42	31.3	73.3	22.2	19.3						
29/30	80.66	171	251.3	50.09	41						
Total	178.6	390.3	568.58	123.5	100						

Table 12- Felling and thinning areas in Strathyre East during the five years of the plan

Year	Planned Clearfell (Ha)	Planned Thinning (Ha)	Planned Total (Ha)	Planned Larch Area (Ha)	Planned % plan area larch removed	Actual Clearfell (Ha)	Actual Thinning (Ha)	Actual Total (Ha)	Actual Larch Area (Ha)	Actual % plan area larch removed	Comments
25/26	0	18.9	18.9	0	0						
26/27	18.4	0	18.4	7.99	12						
27/28	21.2	77.5	98.7	23.38	36						
28/29	50.9	80	131	16.76	26						
29/30	43.7	45.96	89.7	16.53	26						
Total	134.2	222.36	356.6	64.66	100						

Table 13-Felling and thinning areas in Kirton during the five years of the proposed plan

Year	Planned Clearfell (Ha)	Planned Thinning (Ha)	Planned Planned Total (Ha)	Planned Larch Area (Ha)	Planned % plan area larch removed	Actual Clearfell (Ha)	Actual Thinning (Ha)	Actual Total (Ha)	Actual Larch Area (Ha)	Actual % plan area larch removed	Comments
25/26	0	0	0	0	0						
26/27	32.4	15.0	47.5	13.3	42.4						
27/28	25.62	35.33	60.9	7.8	24.6						
28/29	28.1	0	28.1	2.5	9						
29/30	48.4	0	48.4	7.9	24						
Total	134.52	50.33	184.9	31.4	100						

Map 14 puts into context the change of management type from previously designed CCF coupes to clearfell/thinning and selective thinning and map 15 demonstrates further the extend of clearfell coupes containing mature conifers. This is also illustrated in table 14 below:

Table 14- shows the extend of felling of mature conifers

	Total areas in the 3 forest areas	Planned clearfell in the 3 forest areas (ha)	Planned clearfell in the 3 forest areas (%)
Woodland areas > 50 years old	730.5	148.8	20.3
Woodland areas 40-50 years old	337.4	37.5	11.1

#### **C.1.2 Long Term Retention, Minimum Intervention and Natural Reserve**

The existing Natural Reserve in West Strathyre will continue to be managed through minimum intervention and any larch within this will be felled to recycle.

#### C.1.3 Other tree felling in exceptional circumstances

FLS will normally seek to map and identify all planned tree felling in advance through the plan process. However, there are some circumstances requiring small scale tree felling where this may not be possible and where it may be impractical to apply for a separate felling permission due to the risks or impacts of delaying the felling.

Felling permission is therefore sought for the approval period to cover the following circumstances:

Individual trees, rows of trees or small groups of trees that are impacting on important
infrastructure\* (as defined below), either because they are now encroaching on or have
been destabilised or made unsafe by wind, physical damage, or impeded drainage.

\*Infrastructure includes forest roads, footpaths, access (vehicle, cycle, horse walking) routes, buildings, utilities and services, and drains.

The maximum volume of felling in exceptional circumstances covered by this approval is 75 cubic meters per plan per calendar year. A record of the volume felled in this way will be maintained and will be considered for the submission of the new Land Management Plan.

#### **C.1.4 Woodland Management Visitor Zones**

Visitor Zones have been identified in areas where FLS encourage and manage access or where the woodland managed by FLS interacts with popular visitor sites or access routes. Visitor Zones are mapped on **Map 07- Recreation** and this map specifies management interventions identified to be carried out in the next ten years .

In these areas, single trees or small groups of trees will be removed when necessary to protect facilities, infrastructure and trails, or to enhance the setting of features, or to maintain existing views.

Woodland in these zones will also be thinned, or trees re-spaced, for safety reasons (including to increase visibility to ensure that sites are welcoming and feel safe) and where it is necessary to enhance the experience of the forest setting, through the development of large trees, or preferential removal of trees to favour a particular species.

#### C.1.5 Restocking proposals/ Natural Regeneration

Where felling is being pursued through this LRP, restocking will be on a like-for-like basis (i.e. replacement of existing species with the same species), or as per the future habitats and species proposals identified in the previous respective plans for West Strathyre, Strathyre East and Kirkton – as shown on **Map 10-Future Habitat and Species**. This will ensure that overall species composition within the forest is not declining from the current baseline (SF pre application advice). As shown in tables 4 to 6, the current and projected species proportions within each forest (and consequently across the plan area) are well within the requirements set out in UKFS 5. Where larch was previously proposed as part of the restocking mixture, this will be replaced with suitable alternative conifers such as (but not limited to) Douglas fir, Scot's pine, western red cedar, or Norway spruce; or may be restocked with broadleaved species if appropriate in the context of the wider forest design. Where larch is being 'keyholed', typically in small areas (either <0.25ha, or <10% of the respective management coupe area) these will typically be left fallow until the surrounding areas are felled and restocked.

A coupe by coupe description of the currently proposed restocking can be found in Appendix 1: **Table of operations 2025-2030**, and the effect of the restocking proposals will have on the future forest can be seen through tables 7-9.

Restocking design across the LRP area will be fully revised as part of the LMP renewal, including consideration of PAWS restoration potential and natural regeneration/underplanting of appropriate species within CCF areas. The LMP restocking proposal will then be subject to consultation with the National Park and relevant stakeholders. Appendix 4 Larch Plan Consultation Record details the pre-larch plan consultation with Loch Lomond National Park and other stakeholders regarding our intentions to plan restocking appropriately at LMP renewal stage and ensure future restock design fits the National Park Special Landscape Qualities. Until this time any minor changes required will continue to be identified on a yearly basis in conjunction with delivery teams and carried out within LMP tolerances or approved through formal amendments where required.

#### C.1.6 Hydrology

Potential impacts on hydrology have been considered as part of the LRP proposals and all operations will be compliant with the latest version of the UKFS (Forest and Water Guidelines) and Scottish Water 'Guidance on Forestry Activities near Scottish Water Assets'. The scale of felling is unlikely to have a significant effect on flooding within the catchment of the River Teith or the River Balvaig as per thresholds set out in the UKFS. Adherence to the UKFS Forest and Water Guidelines will help mitigate localised impacts of surface water run-off. This includes appropriate management of forest operations such as drainage, road construction and harvesting as detailed in the guidance.

Individuals can also report issues through the Central Enquiries email address enquiries.central@forestryandland.gov.scot or phone on 0300 067 6600 (ref appendix 4).

FLS adopts a precautionary approach to protecting water supplies; as detailed in the Scottish Forestry "Managing Forestry Operations to Protect Private Water Supplies" guidance, which includes appropriate steps at planning and pre-operational stage to identify and protect all private water supplies (PWS) as well as identifying source water catchments prior to operations. Locations of these water supply were identified during the planning stage of this plan by contacting potential owners of water and ground truthing their location ( Appendix 4). The same applies to Site assessment prior to forest operations will identify actions to meet these requirements and be discussed with Scottish Water on a coupe-by -coupe basis prior to any operations within the relevant water catchments including Drinking Water Protected Area catchment and particular care will be exercised within these water catchments and the vicinity of PWS. The locations of any PWS will be shown in constraints maps at the operational planning stage ( Appendix 4).

Timber extraction will normally avoid crossing burns or main drains, but where necessary, crossing points will be designed and managed as appropriate (e.g. use of log bridges etc.). All felling and restocking will comply with the Controlled Activities Regulations (CAR) 2011 General Binding Rules and relevant licenses and permissions obtained if and as required.

#### C.1.7 Protection

Restocking to be protected in accordance with the local deer management plan. The overall preference is to limit browsing damage through population control wherever possible, with strategic fencing being used where populations are especially high. A strategic deer fence is present on the boundary of Strathyre East and a strategic stock fence on the boundary of Kirkton.

#### C.1.8 Fence erection/removal

Any requirements to replace these or implement new fencing will be assessed and detailed in the subsequent LMP renewal, and where required fencing will be designed in compliance with the 'Joint Agency Statement and Guidance on Deer Fencing' (Ref appendix 4- public consultation record).

#### C.1.9 Roads & Haulage

Significant areas of the forests, including the whole of Kirkton and much of West Strathyre, are accessed via minor public roads with various restrictions governing timber haulage, as detailed in the local Timber Transport Management Plan (TTMP). As such, FLS will continue to liaise with the local Timber Transport Group, adjacent landowners, and the Local Authority as appropriate to ensure haulage impacts on these routes are minimised, and managed in accordance with the lates agreed TTMP. Appendix 4 Larch Plan Consultation Record shows record of the engagement with Timber Transport Forum group.

Expected timber movements as a result of felling proposed in this LRP are detailed below and on Map 11-Road Access and Haulage:

- North of West Strathyre haulage entrance/ exit at NN 5560 1640 onto TTMP route 2 Stroneslaney & Keip to A84 (via Strathyre) estimated timber volume per year: -2025/26: 0 tonne
  - -2026/27 4,615 tonnes
  - -2027/28: 9,900 tonnes
  - -2028/29: 1,000 tonnes
  - -2029/30: 0 tonne
- North of West Strathyre haulage entrance/exit NN 5589 1774 onto TTMP route 2 Stroneslaney to A84 (via Strathyre) estimated timber volume per year:
  - -2025/26: 4,400 tonnes
  - -2026/27: 8,600 tonnes -2027/28: 0

tonne

-2028/29: 6,000 tonnes

-2029/30: 0 tonne

 Kirkton Haulage entrance/exit NN 5255 2077 onto TTMP route 1a Stronvar Bridge to Auchtubhmore estimated timber volume per year:

-2025/26: 0 tonne

-2026/27: 11, 200 tonnes -2027/28:

9,460 tonnes

-2028/29: 15, 500 tonnes -2029/30: 15,000 tonnes

Kinghouse entrance/exit NN 5628 1994 leading onto the A84. There are no restrictions on this public road. Hauled volume is estimated at 33,100 tonnes during the 5 years period of this plan.

East Strathyre entrance/exit NN 5601 1620 leading onto A84. Hauled volume is estimated at 20, 207 tonnes during the 5 years period of the plan.

Bochastle entrance/exit NN 6077 0906 leading onto A84. Hauled volume estimated at 5, 351 tonnes.

#### C.1.10 Public Access

Map 07-Recreation shows the extend of core path and cycle network within the LRP area. The proposals within this LRP, required to address serious plant health issues, will result in some temporary disruption to public access, mainly associated with felling operations. As a result, some important routes such as core paths and rights of way will have to be closed/diverted to maintain public safety during high-risk operations. This being the case, this LRP will enable a planned approach to be taken with regards to managing felling in relation to public access; and will also address potential safety risks which could result from high levels of tree mortality adjacent to key access routes.

Any restrictions to public access necessitated by the proposed operations will be resolved by a Public Access Management Plan (PAMP) as through the detailed work planning process, and including further consultation with relevant stakeholders; in particular the Loch Lomond and the Trossachs National Park Authority. Appendix 4 shows record of the consultation with LLNP during the planning of this plan.

#### **C.1.11 Historic Environment**

Our key priorities for archaeology and the historic environment are to undertake conservation management, condition monitoring and archaeological recording at our significant historic assets; and to seek opportunities to work in partnership to help to deliver Our Place in Time: the Historic Environment Strategy for Scotland and Scotland's Archaeology Strategy. Significant historic environment features will be protected and managed following the UK Forestry Standard. Harvesting coupes, access roads and fence lines will be surveyed prior to any work being undertaken to ensure that upstanding historic environment features can be marked and avoided. At establishment and restocking, work prescriptions remove relevant historic environment features from ground disturbing operations and replanting. Where appropriate, significant historic assets are recorded by archaeological measured survey (see active conservation management) and may be presented to the public with interpretation panels and access paths. Opportunities to enhance the setting of important sites and landscapes will be considered on a case-by-case basis (such as the views to and from a significant designated site).

The Regional Historic Asset Management Plan includes conservation management intentions for those designated historic assets in Scotland's national forests. Details of all known historic environment features are held within the Forester Web Heritage Data (built using national and regional historic environment records) and included within specific operational Work Plans to ensure damage is avoided. Significant historic environment features will be depicted on all relevant operational maps.

**Table 14: Historic Environment concept table** 

Objective	Opportunities	Constraints	Concept
Caring for the Historic Environment	We will ensure positive conservation management at significant historic assets, undertaking scrub control, condition monitoring and archaeological recording where necessary.	We will undertake suitable work practices on operational sites with known historic assets (and those discovered during operations).	included within our

#### **C.1.12** Biodiversity

Potential impacts on biodiversity have been considered in the development of this LRP with input from local Environment staff, and especially in the context of the particular biodiversity interests outlined in A.6.5.

The main mitigation measure to reduce impacts of biodiversity has been to limit, as far as reasonably practicable, the felling of other/non-larch species, especially in stands which are already over c.50 years of age and which are therefore considered to have increased biodiversity value. Wherever possible, in areas which have been well-thinned and/or previously managed as CCF, these principles are generally being maintained with the retention of mature, stable trees; especially of species such as Norway spruce or Scots pine which are of enhanced value to wildlife. For all other areas, there will be a general preference to retain Scots pine and broadleaved species within felling coupes where these are stable and it is otherwise considered suitable to do so. While in some situations it has not been practical to retain mature stands (>50 years), in general the proposals will retain significant areas of mature forest which can be considered for future suitability as long-term retentions in the upcoming Land Management Plan revision (see map 15 LTR Analysis)

FLS 'Environment team maintains good records of protected species, in the forest and surrounding landholding. These records are used for the protection of habitats and species at an individual through the detailed work planning process, which stipulate the pre-operational requirements such as coupe surveys to identify potential protected species and appropriate timing of operations and other mitigation measures. These requirements follow the most up-todate best practice guidelines, including relevant Scottish Forestry wildlife and forest operations guidance notes, and will conform with statutory regulations relating to the protection of species and habitats.

Where required, appropriate species licenses will be sought and applied and all subsequent operations will strictly adhere to the prescriptions and any associated mitigation measures detailed within the license. General mitigation measures such as the installation of bird and bat boxes, and the retention of deadwood and mature trees (excluding larch) may also be deployed where appropriate.

Any operations that are planned near to Schedule A1 or 1A birds will be treated as sensitive sites and will be undertaken in such a way that potential disturbance is avoided or minimised. Any operations on sensitive sites will have a qualified Ecological Supervisor, and where required guidance will be sought from the Scottish Raptor Study Group and/or NatureScot. FLS will comply with all relevant guidance and legislation, including FCS Guidance Note 32 and/or any that supersede this note.

In particular, any forestry operations undertaken in the vicinity of important wildlife sites(such as raptor nests or badger setts) and designated sites such as the River Teith SAC, the Loch Lubnaig Marshes & Stronvar Marshes SSSI, Pass of Leny SSSI and the Great

Trossachs Forest National Nature Reserve will adhere to the required specified buffer zones and/or other mitigation on the basis of advice from qualified/experienced members of staff and statutory consultees (NatureScot).

All operations will be compliant with the latest version of the UKFS (Forest and Water Guidelines), this includes prevention measures such as silt trap before operations starting, using appropriate log bridges to cross watercourses and no machine access within 10 m of watercourses. **Appendix 3** – Felling surrounding designated sites details the operational methods that can be expected as part of our normal operational procedures.

As well as the prevention measures detailed above, FLS will be submitting Screening Opinion Request to Scottish Forestry for any pre-operational civil requirements and discuss mitigations at this stage.

For reasons described in section C.1.1, Strathyre forests will see a reduction in mature conifers in these forests (Map 14). However areas still deemed suitable for CCF management and suitable for retention and minimum intervention will be re-assessed at Land Management Plan renewal stage to ensure that areas of mature conifer are retained.

Where plantations on ancient woodland sites (PAWS) have been identified, remnant features and areas of high conservation value will be maintained and enhanced as required under UKWAS, and the subsequent LMP process will further consider opportunities for PAWS restoration where appropriate. The opportunity to remove non-native conifers on identified PAWS has been considered in the LRP felling proposals, with a presumption to maximise the opportunities for future restoration.

#### C.1.13 Other tree health issues

The Strathyre corridor is has become significantly impacted by ash dieback with infections progressing year on year as recorded by regular surveys. Many ash trees are located in close proximity to key recreational routes (such as the National Cycle Network Route 7 and the Rob Roy Way), public and forest roads, properties, utility infrastructure, and other assets. In general, FLS aim to manage ash dieback in alignment with Scottish Forestry's guidance, however given the extent of infection close to major infrastructure, as part of this LRP we also seek formal approval to remove:

 Any ash with a condition score between 2 and 4 (i.e. less than 75% canopy cover) within falling distance of usage zones 1 and 2 (including all forest roads and recognised recreation routes), as per map 12 Strathyre ash condition and Scottish Forestry's 'Guidance on the management of individual ash trees affected by ash dieback in Scotland'. and;

• All ash within the 'red zone' of nearby utility infrastructure (based on the risks, costs and disruption associated with felling, and experience of disease progression through the Strathyre corridor).

In most, but not necessarily all instances such removal will fall within the visitor zones shown on map 7 Recreation.

#### **C.3 Environmental Impact Assessment and Permitted Development Notifications**

No projects are proposed at this stage which require an EIA SOR. Any projects identified in the future a separate EIA SOR will be submitted



#### **C.4** Tolerance table

#### **Table 15:**

FC Approval normally not required	Map Required (Y/N)	Adjustment to felling period*  Fell date can be moved within 5 year period where separation or	Adjustment to felling coupe boundaries**  Up to 10% of coupe area	Timing of Restocking  Up to 2 planting seasons after felling	Changes to Restocking species  Change within species group e.g. evergreen conifers or broadleaves	Changes to road lines	Designed open ground ***  Increase by up to 5% of coupe area	Windblow Clearance****
		other constraints are met						
Approval by exchange of email and map	Y		Up to 15% of coupe area	Between 2 and 5 planting seasons after felling subject to the wider forest and habitat structure not being significantly compromised		Additional felling of trees not agreed in plan  Departures of more than 60m in either direction from centre line of road	Increase by up to 10%  Any reduction in open ground within coupe area	Up to 5 ha
Approval by formal plan amendment may be required	Y	Felling delayed into second or later 5 year period  Advance felling into current or 2 <sup>nd</sup> 5 year period	More than 15% of coupe area	More than 5 planting seasons after felling subject to the wider forest and habitat structure not being significantly compromised	Change from specified native species  Change between species group	As above, depending on sensitivity	More than 10% of coupe area  Colonisation of open areas agreed as critical	More than 5 ha

<sup>\*</sup>Felling sequence must not compromise UKFS in particular felling coupe adjacency. Felling progress and impact will be reviewed against UKFS at 5 year review.

<sup>\*\*</sup> No more than 1 ha, without consultation with Scottish Forestry, where the location is defined as 'sensitive' within the Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017.

<sup>\*\*\*</sup> Tolerance subject to an overriding maximum of 20% designed open ground.

<sup>\*\*\*\*</sup>Where windblow occurs, Scottish Forestry must be informed of extent prior to clearance and consulted on clearance of any standing trees.

## **Appendices:**

Item number	Title
Appendix 1	Table of Operations
Appendix 2	Context of felling
Appendix 3	Felling surrounding designated sites
Appendix 4	Larch Plan Consultation records
VP01	2025_28 Kirkton Felling
VP02	2025_28 Kinghouse

## Maps:

Item number	Title
01	Location & Background
02	Current Species
03	SPHNs and Larch
04	Designations and Features
05	Utilities
06	Hydrology
07	Recreation
08	Issues and Concept
09	Management
10	Future Habitats and Species
11	Roads Access and Haulage
12	Strathyre Ash Condition
13	Kirkton visualisation viewpoints
14	Change in management Type
15	Strathyre LTR potential