



## FLS LMP Amendment Form

		Area in hectares
Felling/Thinning	All areas	444.59ha felling 396.55ha thinning
Restocking/Nat Regen	All areas	444.59ha
Roads		0
Forwarder track/Winch Bay		0
Recreation path/cycle Trail		0

Land Management Plan Name	Carron Valley
LMP Ref Number	032/16/02
Coupe Number (ensure relates to approved plan)	Please see accompanying <i>Coupe summary table</i>  (NB coupe numbers must differ from approved plan due to the creation of new coupes and new coupe boundaries. Where existing coupes have been retained the original number has been kept. Coupe numbers were not detailed in original approved plan.)
Nearest Town	Denny
Grid Reference	NS6882 (Carron Main Block) NS6985 (Cairnoch)
Date of Submission	08/04/2022

**Summary:**

The purpose of this amendment is to gain prior approval for the removal of all larch species within Carron Valley forest (comprising two forest blocks: Carron Main Block (66) and Cairnoch (67)). In 2021, a large number of Statutory Plant Health Notices (SPHNs) were issued by Scottish Forestry (SF) within Carron Valley due to the disease *Phytophthora ramorum*, with most of these requiring amendments to facilitate both felling and restocking operations. Recent experience from FLS land on Cowal indicates that Carron Valley will now suffer an exponential increase in *Phytophthora ramorum* infections over the next 5 years, which will require prompt action from both SF and FLS in order to limit the spread of the disease within the Priority Action Zone outlined by Scottish Forestry. This amendment will therefore gain pre-approval for the felling of all larch and other closely associated species\* within the remaining 5 years of the existing plan period, with several key benefits:

- It will allow FLS to plan felling operations in advance of SPHNs being issued and expedite the delivery of SPHN felling.
- It may allow pre-emptive felling to help further control the spread of *P. ramorum*, depending on the rate of spread and the number of SPHNs served in a given year.
- It allows the removal of larch, and subsequent restocking, across the entire forest to be planned in a holistic manner.
- It will help reduce the administrative burden on FLS and SF of submitting and approving multiple amendments for different SPHNs issued each year.
- It increases the transparency of FLS plans and operations compared to submitting multiple smaller amendments, which would not necessarily be placed on the Scottish Forestry Public Register.

\*other species growing in close association with larch (either as pure stands or in mixtures) will typically be removed where necessary for operational access or where there is an unacceptable risk of windblow

All other upcoming operations requiring an amendment have been included in this submission, except for civil engineering work which requires an EIA determination and will be included in a single subsequent amendment to reduce delays in gaining approval for the removal of larch.

A coupe summary table has been provided which provides more detailed information on the operations proposed for each coupe over the next 5 years.

**Outline of operations:****Felling:**

Clearfelling has been identified where thinning is impractical or silviculturally inappropriate (e.g. due to the risk of windblow). Several areas will be felled before their maximum mean annual increment (MMAI) has been reached (i.e. prematurely). In most areas clearfelling will be of larch and other closely associated species, however a few areas are of pure larch. Three felling coupes from the original plan approval, which are programmed for 2022 felling, but do not contain larch, have been retained; otherwise the felling proposals in this

amendment replace all other felling proposed for the remainder of the plan period. The accompanying *Amendment felling and thinning map* also includes areas of felling already approved through amendments in 2021, where some operations may be ongoing. These and the existing 2022 felling coupes (not containing larch) have not been listed in the accompanying *Coupe summary table* as approval for these operations has already been granted.

More detail on felling proposals is given in the coupe summary table.

Total area: 444.59ha Total volume: 140 488.08m<sup>3</sup>

#### Thinning:

Where appropriate, stands will be thinned to reduce impacts on production, landscape and forest habitats. This includes areas which would not otherwise be thinned due to age or stability constraints – e.g. removing a very low percentage of mature larch or thinning in areas of marginal soil or exposure. Stands will either be thinned at a normal commercial thinning intensity or above or below this depending on the percentage of larch requiring removal. Stands are more likely to be thinned below the normal commercial thinning intensity and in the majority of cases thinning has not been proposed where over 1/3 of the stand is assessed to be larch. Consideration has also been given to the potential impacts of higher thinning intensities on subsequent stand growth and timber quality and where this is considered likely to have an adverse impact the stand has been assigned to clearfelling. Instances where crop growth may be affected by higher thinning intensities have been highlighted in the accompanying *Coupe summary table*. In most cases the primary objective of thinning is to remove larch, although other species may be removed where necessary to facilitate this. The thinning data also includes small areas of felling 0.2ha or less in size, as these are too small to be shown as individual felling areas.

Continuing approval is also sought for standard silvicultural thinning not associated with larch, to ensure that thinning windows are met wherever possible and provide greater forest resilience and management flexibility in the future.

More detail on thinning proposals is given in the coupe summary table.

Total area: 396.55ha

#### Restocking:

Restocking proposals have been kept as per the original (approved) plan and subsequent amendments, except where the proposed restock species is larch, or where other factors (such as new coupe shapes) make the existing proposals inappropriate. Increased allowance has also been made for riparian buffer zones in discussion the FLS environment team. Where larch was previously identified in restocking proposals this has been replaced with alternative conifers or broadleaved species wherever possible. In some areas, approval is sought to delay the restocking of felled areas until the neighboring/surrounding stand is felled due to constraints such as size and access (as detailed in the coupe summary table). In

all cases, these areas are less than 5% of the surrounding coupe size (cf. Scottish Forestry larch tolerance table allowances).

More detail on restocking proposals is given in the coupe summary table.

Total area: 444.59ha

Other operations:

Due to legislation changes in 2019, felling approval is now required for operations to remove tree regeneration from open habitats and riparian zones for environmental purposes. These have been included in this amendment and are indicated on the Environmental Felling and Thinning Map.

**Main issues and mitigation:**

The distribution, age and structure of the stands which require harvesting present some landscape challenges and is likely to result in adjacency issues, particularly in the eastern half of Carron Main Block (66). Where adjacency issues are likely, FLS will seek to program felling in a way that maximizes the time period between the felling of adjacent coupes.

There will be some loss of Long-Term Retention (LTR) areas and felling will be required in some areas of Minimum Intervention (MI). Replacement areas will be identified at the next LMP revision as appropriate.

The removal of larch is likely to have a negative impact on the population of red squirrel within the forest, due to the relatively high habitat and feeding values this species provides. Consideration has therefore been given to the predicted red squirrel carrying capacity of different tree species when revising restocking proposals.

The loss of larch will also negatively impact forest diversity, resilience and landscape value. Therefore, wherever possible, alternative conifer or broadleaved species have been proposed for restocking, to retain and increase diversity and resilience and to improve landscape values. In most areas where Sitka or Norway spruce are proposed as a replacement, these form a mixture with other species.

A number of clearfell sites lie in close proximity to the Carron Valley Reservoir or connected watercourses, therefore there is an increased risk of diffuse pollution from these sites. FLS maintain a good working relationship with Scottish Water and efforts will be made, dependent on the timing and location of SPHNs, to spread the felling of these coupes over the full 5 year period in order to lessen this risk.

Map(s) Attached	Amendment felling and thinning map 2 Environmental felling map Amendment restocking map 2
Document(s) Attached	Coupe summary table
Forester - Name/date	Sandy Davidson 08/04/22
Planning Manager - Name/date	Stewart Towers 08/04/22

# Scottish Forestry

Approved By	
Date	
Comments	