



Cononish Land Management Plan

2026-2036

Version Control

Version Number	Date	Comments
1.1	02/07/2026	Final Version (Approved)

Contents

A. Description of Woodlands	4
A.1 Property Details	4
A.2 Location and Background	6
A.3 Existing Schemes & Permissions	6
A.4 Stakeholder Engagement.....	6
A.5 Long Term Vision and Management Objectives.....	7
A.6 General Site Description	7
A.6.1 Topography & Landscape	7
A.6.2 Geology and Soils.....	9
A.6.3 Climate	9
A.6.4 Hydrology.....	10
A.6.5 Windthrow	10
A.6.6 Adjacent Land Use	10
A.6.7 Access.....	10
A.6.8 Historic environment	11
A.6.9 Biodiversity	11
A.6.10 Invasive Species	11
A.7 Woodland Description	11
A.8 Plant Health	12
B. Analysis of Information.....	16
B.1 Constraints and Opportunities.....	16
C. Management Proposals	19
C.1 Silvicultural Practice	19
C.2 Prescriptions	19
C.2.1 Felling.....	19
C.2.2 Thinning	19
C.2.3 LISS (Low impact Silvicultural Systems)	19
C.2.4 Long Term Retentions (LTR) / Natural Reserves	20
C.2.5 Restocking Proposals / Natural Regeneration	20



C.2.6 Protection	24
C.2.7 Fence erection / removal	24
C.2.8 Road Operations	24
C.2.9 Public Access	24
C.2.10 Historic Environment	25
C.2.11 Biodiversity.....	26
C.2.12 Tree Health.....	26
C.2.13 Invasive species.....	26
C.2.14 New Planting	26
C.2.15 Wildfire.....	26
C.2.16 Landscape:	27
C.3 Environmental Impact Assessment and Permitted Development Notifications	27
C.4 Tolerance Table	29
D. Production Forecast.....	30
Appendices	30
Maps.....	30



A. Description of Woodlands

A.1 Property Details

Property Name:	Cononish		
Business Reference Number:	NA	Main Location Code:	NA
Grid Reference: (e.g. NH 234 567)	NN 3247 2919	Nearest town or locality:	Tyndrum Village
Local Authority:	Stirling Council		
LMP Plan area (hectares):	651		
Owner's Details			
Title:		Forename:	
Surname:			
Organisation:	Forestry And Land Scotland	Position:	
Primary Contact Number:		Alternative Contact Number:	
Email:	planning.central@forestryandland.gov.scot		
Address:	Forestry & Land Scotland, Aberfoyle Office, Aberfoyle, Stirling		
Postcode:	FK8 3UX	Country:	Scotland
Approval (Scottish Forestry to Complete)			
LMP Reference Number:			
Approval Date:			
Approval Period:			
Signature:		Position:	



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 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? Delete as appropriate.			YES		
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:	CT Planning	Print:	Central Region Planning	Date:	02-07-26



A.2 Location and Background

The Cononish land management plan (LMP) area is located at the north-western corner of the Loch Lomond and Trossachs national park, to the west of the village of Tyndrum. The LMP area comprises of one large forest block to the west of the village that known as the 'Cononish' block (see map M1: Location). The A82 runs to east of the block through the village and is a gateway to Fort William/Oban and the west coast.

The area is 651ha in size and was acquired by the Forestry Commission in the 1960/70 period, and was afforested shortly after acquisition. This afforestation was exclusively with commercial conifer species.

Roy Maps (1747-1755) and OS maps from the 1800's show the area was largely devoid of trees up until this afforestation in the 1970's. Relatively little active management has taken place in the decades since: the only operational activity during the last plan period was the restocking of an area (11ha) that had been damaged by a fire in the early 2000's. This new LMP allows for the setting of a new strategic direction and plan for delivery.

A.3 Existing Schemes & Permissions

Type (e.g. Felling Permission)	Ref. No.	Details
Previous Plan	032/02/02	Previous Cononish Plan

A.4 Stakeholder Engagement

Main Points	LMP Reference (section/page):
Roading and Haulage	B.1 , C.2.8
Potential future <i>Phytophthora Ramorum</i> outbreaks	B.1 , C.2.1 , C.2.12
Control of Sitka Spruce regeneration	C.2.5
Presence of Scheduled Ancient Monument (SAM)	A.6.8 , B.1 , C.2.10
Proximity of River Tay SAC	A.6.4 , A.6.9 , B.1

A.5 Long Term Vision and Management Objectives

Vision

The long term vision for the LMP area is to move towards a more diverse forested landscape that is better integrated into the wider landscape. Productive forestry will remain within a core zone, while native habitat expansion will increase biodiversity and habitat connectivity.

Management Objectives

No.	Objectives (including environmental, economic and social considerations)	Indicator of objective being met
1	To address the threat of <i>Phytophthora ramorum</i> through the removal of Larch from the LMP area; prioritising areas that present the greatest operational constraints and risks.	Removal of Larch on the eastern face of the LMP area.
2	To increase the amount of native woodland habitat in the plan area	A higher proportion of native woodland in the LMP area by the end of the plan period
3	To improve and expand roading infrastructure	The indicators of this objective being met is the successful upgrade and expansion of the forest road network to allow for future management.

A.6 General Site Description

A.6.1 Topography & Landscape

The topography of the LMP area has been defined by glacial activity, with the area characterised by strath and glens and a rugged mountainous topography. The village of Tyndrum sits at the lower reaches of Strath Fillan with the Cononish block rising at the western edge of the village. The Cononish Glen runs from east to west, with the Cononish block rising northwards from the lower reaches of the Glen. As elevation increases the woodlands give way to open and rugged hill ground, reaching a highpoint at the exposed summit of Meall Odhar at 656 metres.

[Loch Lomond and the Trossachs National Park \(LLTTNP\) Special Landscape Qualities](#)

The [Special Landscape Qualities of the Loch Lomond and The Trossachs National Park Commissioned Report No. 376](#) highlights both the general landscape qualities of the national park, as well as special qualities that are defined within discrete geographical zones. The general qualities that are particularly relevant to this LMP are:

1. The rich variety of woodlands: this quality talks about how the “woods and the trees are important visually, bringing a tapestry of texture and colour that changes throughout the year”, it also outlines how “the woodlands define the lower and mid-glen slopes, distinguishing them from the open uplands” and how “they enclose settlements”.
2. Settlements nestled within a vast natural backdrop: this quality describes how “settlements that are present are often small-scale, nestled within the backdrop of vast landforms of mountain, hill, glen and loch”.
3. Famous through-routes: the west-highland way is specifically mentioned in this quality criteria and the report describes how these famous through routes “create a strong sense of movement through the area”.

The LMP area is within the ‘Breadalbane’ zone and the special qualities that are particularly relevant are:

1. Wide Strath Fillan: this quality describes the old mine workings and how they “stand out barren within the surrounding woodlands” and how the Cononish Glen “leads into the heart of high mountains”. The contrast between the farmed floodplains and “rough hummocky moorland or dense forestry plantation” is also described.
2. Crossroads within remote mountain ranges: this quality describes the “the experience of movement, constrained at the base of such large mountains” and how this “acutely emphasises the remoteness and silence of the high summits”.
3. Steep mountains and long glens: this describes how hills and mountains dominate the landscape, with bare upper hillsides and summits appearing “untouched, remote and wild”. The presence of forestry and farming in the Glens is noted, along with the intensive use of scarce flat land.

Landscape Character Types

NatureScot has produced a national map-based Landscape Character Assessment (LCT) for Scotland. LCT descriptions provide a list of key characteristics and typically include sections on physical, cultural and aesthetic elements of landscape. The LCT’s that cover the Cononish LMP area:

1. LCT 251 Highland Summits: key characteristics include highly visible peaks and ridges that form “a scenic rugged backdrop” to lower straths and glens. Broadleaf woodlands are generally “confined to steeper slopes with fragments of oak and birch tracking burns and gullies”. The presence of productive forestry is noted on both the lower slopes as well as



“extending up into the glens”. The dramatic views and rugged character “provide a sense of wildness” to the area. This LCT covers approximately 92% of the LMP area.

2. LCT 253 Straths and Glens: key characteristics include “broad u-shaped glens and straths” with hillsides that are forested “predominately with spruce” with “remnants of native woodland found along edges of burns” as well as riparian woods along rivers and tributaries. The views are often “open and extensive, focusing on the dramatic mountains”. This LCT covers approximately 4% of the LMP area at the eastern boundary.
3. LCT 252 Upland Glens: The Cononish block is partially covered by this LCT (around 4% of the LMP area), the characteristics here are narrow glen floors that “are strongly enclosed by steep hill slopes” that are sometimes “covered with extensive coniferous forestry”. Another key characteristic is the “relict wood pasture and Caledonian pine woodlands”. The steep glens provide channelled views that frame the “landscapes that lie beyond them”. As with the other LCT’s, it is noted that native woodland often traces along burn edges.

AI A.6.2 Geology and Soils

The underlying geology of the LMP area consists of metamorphic bedrock formed between 1000 million to 541 million years ago. This bedrock is classified by the British Geological Survey as belonging to the ‘Ben Lawers Shist Formation’, which is a calcareous schist with components of psammite, quartzite and pelite. The overlying geology consists of glacial deposits that were formed between 2.5 million and 11 thousand years ago (towards the end of the last ice age). The historic ‘Tyndrum main mine’ is a geological conservation review site (Site 2810,) on the basis of its mineralogy (the presence of metal deposits such as copper, lead and zinc). The geological conservation review site is also covered by a scheduled ancient monument designation (see section A.6.8).

The Cononish block is broadly defined by typical podzols at the highest elevations around Meall Odhar with peaty surface water gleys and iron pan soils defining the majority of the remainder of the block.

See map M3: Soils

A.6.3 Climate

The majority of the LMP area is classified as ‘cool & wet’ although at the highest elevations it is defined as ‘sub-alpine & wet’. Average rainfall for the area is 3312 mm per year.

The lower reaches of the LMP area are classified as sheltered, but the majority of the LMP area is classified as either moderately or highly exposed. Around Meall Odhar exposure increases to a level that is not suitable for forestry.

See Map M6: Climate

A.6.4 Hydrology

The LMP area is part of the Cononish and Dochart catchment areas, which form part of the wider Tay river catchment. The area has two main watercourses, the Crom Allt which passes through the village of Tyndrum, and the Cononish which runs along the southern boundary of the LMP area. These watercourses join just south of the LMP area where they become the River Fillan. The rivers are all part of the River Tay SAC (designated for Atlantic salmon, lamprey and otter). There are a network of burns, which travel through the forest and feed the main watercourses. A number of minor burns run through the old lead mine (scheduled monument) and into the Crom-Allt. The LMP area is covered by a drinking water protected area (DWPA), additionally there is a private water supply that has a catchment within the LMP area.

A.6.5 Windthrow

Windthrow is a risk in the LMP area, especially at the higher elevations where it is more exposed. The majority of the forest was planted in the 1970's, so there is now a mature crop (tall trees with small crowns) that is at increased risk of windthrow events if left in-situ. The eastern face of the Cononish block (facing Tyndrum village) has been affected by patchy windthrow.

Windthrow risk can be assessed using a DAMS scores (Detailed Aspect Method of Scoring). This is a scoring method developed by Forest Research that models wind-risk across the UK using data on a suite of relevant variables. The provided DAMS score maps helps visualise the increased windthrow risk as higher elevations as well the more sheltered pockets.

See Map M5: DAMS

A.6.6 Adjacent Land Use

The LMP area is surrounded by various categories of open ground (including an SSSI across the river Cononish), but is also neighboured by a commercial goldmine in the west and a community managed woodland that connects to the east. An active railway line runs along the eastern boundary of the LMP area.

A.6.7 Access

The Cononish block has two main access options that are suitable for timber haulage. The first is to come off the A82 in Tyndrum village and travel up 'Lower Station Road' and cross the railway line via a level crossing. The second access option is to come off the A82 south of Tyndrum at Dalrigh and travel up Cononish Glen via forest roads.

The public have non-vehicular access to all the forest roads. There is a short circular walking trail called the "the cattle creep" that is accessible from the village. The 'cattle creep' trail and the existing forest roads are part of the core path network. A section of the cattle creep trail is shared with the

west Highland way, which during the summer months is well used; the remaining roads and forest areas receive low levels of use.

See Map M7: Key Features

A.6.8 Historic environment

There is one scheduled ancient monument (SAM) in the area, this is the Tyndrum Lead Mine that sits at the north-eastern tip of Cononish (SAM Reference: SM5714) . Non-scheduled features include:

- Old mine track: an old stoned track leading towards the mine which is used as part of the cattle creep trail.
- Old township: footprint of several old buildings and associated enclosures (WoSAS Pin: 63465)
- Cairns: a record exists for two cairns on the open hill (WoSAS Pin: 63475)

See Map M4: Heritage

A.6.9 Biodiversity

There are red-squirrel and pine marten in the LMP area. There are Golden Eagle and White Tailed eagle territories in the wider area. The River Tay is designated as a special area of conservation (SAC) due to its importance for Salmon and Lamprey species; the designation includes the Crom Allt, Cononish and River Fillan. The Ben Lui and Coille Coire Chuilc SSSI's sit adjacent to the Cononish block (outside the LMP area). Coille Coire Chuilc is designated for its native Caledonian pinewood habitat. Ben Lui is designated for its geology and upland habitat assemblages (Ben Lui is also designated as an SAC based on its habitat assemblages).

See map M7: Key Features

A.6.10 Invasive Species

There are no known issues with invasive species within the LMP area.

A.7 Woodland Description

The Cononish was nearly all planted in 1975/76 (apart from 9.4 ha of woodland that was present pre-acquisition), and there has been little management since, with the exception of a small area of Scots pine that was planted after a forest fire in 2008. The face overlooking Tyndrum Village (to the south of the scheduled monument) has a large proportion of Larch across it, with some pockets of windthrow present. There are a few other pockets of Larch present in the block, but this slope holds the majority of the Larch and is the most challenging for future operations. The rest of the forested area of the block comprises of Sitka spruce with a minor component of Lodgepole pine also present in

select areas. The productivity of the Cononish block has been variable, with a higher proportion of stunted growth at the upper boundaries of the forested area and in a patchwork of areas across the block; the exposure and soil conditions at these locations has proved unsuitable for productive conifers. There is a central zone along the existing forest road (lower elevation) that has shown good productivity, these areas are favourable for a continued productive crop in future rotations.

A.8 Plant Health

The major plant health issue for consideration in this LMP is Phytophthora Ramorum, a fungal pathogen that causes mortality in Larch. If P.Ramorum is found the regulator (Scottish Forestry) issues a statutory plant health notice (SPHN) that requires the removal of the infected area. The mortality caused by the disease as well as the sanitary felling approach can have significant impacts on the landscape & environment. While the disease has not yet been detected within the LMP boundaries, there is a significant probability of it being an issue within the plan area in the future. The climate in the LMP area (warm & moist) is favourable to the disease, and there is Larch present within LMP and wider area.



Table 1 - Area by species

This shows the current and future species composition within the entire Land Management Plan area.

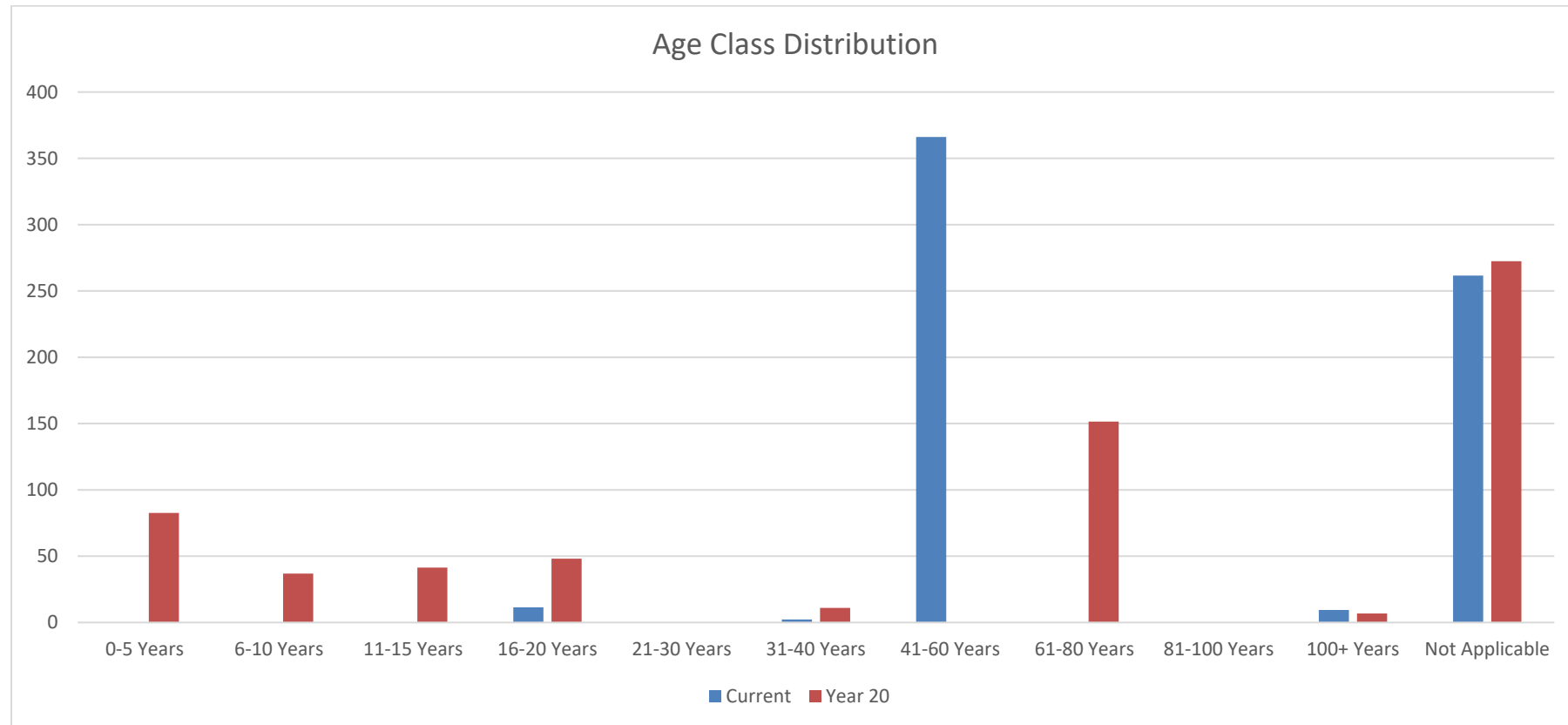
Area by species						
Species	Current*		Year 10*		Year 20*	
(Add relevant species groups, or OG/OL)	Area (ha)	%	Area (ha)	%	Area (ha)	%
Native Broadleaves	2.3	0.35	46.9	7.21	86.9	13.35
Larch	30.7	4.72	10.6	1.63	5.9	0.91
Lodgepole pine	64.9	9.97	52.8	8.11	30.1	4.63
Norway spruce	1	0.15	0.8	0.12	0.7	0.11
Scots pine	13.6	2.09	24.8	3.81	34.2	5.26
Sitka spruce	276.7	42.52	261.4	40.17	220.4	33.87
Open (56006)	155.7	23.92	155.7	23.92	155.7	23.92
Open/Other	106	16.28	96.59	14.99	116.69	17.92
Total	651	100	651	100	651	100



Table 2 – Area by age

This shows the woodland area broken down by age class and will show how well the woodland is distributed across the age classes.

Age class (years)	Current	Year 20
	Area (ha)	Area (ha)
0-5 Years	0	82.6
6-10 Years	0	36.9
11-15 Years	0	41.4
16-20 Years	11.4	48.1
21-30 Years	0	0
31-40 Years	2.3	11
41-60 Years	366.1	0
61-80 Years	0	151.5
81-100 Years	0	0
100+ Years	9.4	6.8
Open/other	261.6	272.4
Total	651	651





B. Analysis of Information

B.1 Constraints and Opportunities

Factor	Constraint	Opportunity
Access	The LMP area has limited coverage in terms of forest roads, which limits the potential for active management across much of the block	Additional forest roads & maintenance of existing infrastructure could make management of this area more viable, giving more scope for management interventions.
Timber Haulage	There is an access point to Cononish in the village of Tyndrum; the road is well used especially during the summer months when the tourist season is at its peak.	Plan new roading infrastructure so that the majority of haulage can be directed through the Dalrigh access, minimising disruption to the village.
Tree Health	There is a high proportion of Larch in the area; much of this is on steep ground overlooking Tyndrum village. There is a danger of P.Ramorum infection.	Pro-actively remove Larch and transition to more suitable habitats that meet the objectives for the plan. Pro-active removal will ensure there is a lower proportion of host species for P.Ramorum in the wider landscape. This approach also ensures there is operational capacity and infrastructure in place to deal with scope of the issue.
Landscape	The limited species & age class across the LMP area mean there is not much textural diversity within the landscape, and hard visual lines are present in some areas.	Improve the visual landscape whilst also meeting other plan objectives. A wider use of species, as well as the targeted use of variable density planting will allow for a more naturalistic fit of the woodland into the wider landscape
Water	The Crom-Allt and River Fillan have elevated levels of heavy metals. There is a source-point on FLS land (the old lead mine).	Use low-impact silvicultural (LISS) methods to ensure that there is a diverse and continuous forest cover on sensitive areas. This will ensure that soil disturbance is minimised and watercourses are protected from excess leaching of heavy metals.



B.1 Constraints and Opportunities		
Factor	Constraint	Opportunity
	There is a private water supply (PWS) that draws from FLS land Proximity to River Tay SAC	PWS catchments can be restocked with native broadleaves, allowing for minimal future intervention and protection of water quality. Operational guidance as detailed in the 'UK Forestry Standard Practice Guide Managing forest operations to protect the water environment' and 'Scottish Forestry: Managing forestry operations to protect private water supplies' will be followed. Minimum buffer widths for forestry activities will be followed, and cultivation choices will be in compliance with best practice (with direct planting favoured). FLS will follow UKFS forest and water guidelines and best practice (UKFS, 5th Edition). Operational guidance as detailed in the 'UK Forestry Standard Practice Guide Managing forest operations to protect the water environment' will be followed to ensure protection of all watercourses.
Heritage	There is a scheduled ancient monument (the lead mine) in the LMP area	Sensitively remove Larch and enhance the woodland habitats so that future disturbance on the SAM can be minimised and features protected. Protection of the SAM will ensure continued protection of the GCR.
Additional roading and maintenance of existing infrastructure will allow for the pre-emptive removal of Larch in early phases of the plan, which will ensure that the risks presented by P. Ramorum can be proactively mitigated. The construction of additional forest roading also allows previously unmanaged areas to be restructured and diversified, greatly increasing the proportion of native woodland within the plan area. Lower impact silvicultural approaches will be taken around the SAM so as to protect heritage features and water quality. Restocking plans will ensure that riparian areas are shifted to native broadleaf habitat, this will protect water sources whilst also increasing habitat		

B.1 Constraints and Opportunities

Factor	Constraint	Opportunity
	connectivity in the landscape. A zone of productive conifer will remain in the centre of the LMP area where growing conditions are favourable. Map M8 (Concept) shows how these constraints and opportunities will be incorporated to meet plan objectives. Section C provides further detail on management proposals.	



C. Management Proposals

C.1 Silvicultural Practice

As noted in section A7 the planting in the 60's and 70's was of productive conifer, with no silvicultural intervention in the decades since. This uniformity of stand structure limits silvicultural options. As such clear-felling will be the primary method of harvesting, with alternative methods employed in areas with unique sensitivities and constraints.

C.2 Prescriptions

C.2.1 Felling

Map M9 (Management) shows the felling that will take place during the plan period. The major face of Larch (Coupe 56003) will be felled in phase 1, this allows for proactive mitigation of the P.Ramorum risk and the swift restocking with native species. Coupe 56009 will be felled in phase 1, and 56012 will be felled in phase 2.

C.2.2 Thinning

Map M10 (Thinning) shows the areas for which thinning approval is sought. Two coupes have been defined to reflect the sensitive approach that will be taken in this area. The primary objective for both these coupes is to maintain forest cover and protect soils whilst gradually reducing the proportion of Larch present.

(Note: these thinning coupes are contained within the LISS management coupe which is described in section C.2.3, thinning coupes have been assigned to ensure the detail is captured in our internal mapping and planning systems)

Coupe 56703 is the most sensitive coupe as it is within the SAM boundary and north of a burn that runs from the mine into the Crom Allt. Within this coupe all thinning will be motor-manual and felled material will be secured and left on site. Coupe 56704 sits south of the sensitive burn and the SAM boundary. Within this coupe there is an area of windblow on the southern boundary that will be cleared. Machines will be used for windblow clearance, but the burn will be appropriately buffered. Thinning intensity will be low across both coupes, reflecting the aims of the LISS approach.

C.2.3 LISS (Low impact Silvicultural Systems)

Cononish has one LISS management coupe (56015) which contains two thinning coupes (56703 & 56704) where a LISS approach will be taken (see Map M9). This area is under LISS management due to the sensitivities around the old lead mine (SAM & GCR) and the need to minimise soil disturbance

that could affect the Crom-Allt and associated watercourses. The guiding principle for this coupe is maintaining continuous canopy cover and protecting water quality. Low intensity thinning will gradually reduce the proportion of Larch, whilst creating conditions that are favourable to natural regeneration (some broadleaf regeneration is already present within windblown areas). Natural regeneration will be assessed post intervention and further decisions made accordingly. Supplementary planting will be used if necessary, and non-larch conifer regeneration will be accepted as a minor proportion of the future species mixture.

No machines will operate in the most sensitive areas, with limited use of machines permitted for windblow clearance/thinning out-with these areas. As per section C.2.10 (see page 23), no work will take place within the SAM area without consent from HES.

C.2.4 Long Term Retentions (LTR) / Natural Reserves

The LMP area has one long term retention coupe (56008), designated due to a high proportion of Scots pine that sits within the Caledonian Pinewood buffer zone that surrounds 'Coille Coire Chuilc' SSSI. Retaining this coupe will allow for increased connectivity of native habitat throughout the plan area.

C.2.5 Restocking Proposals / Natural Regeneration

The future species for the LMP area is detailed on map M11 (Future Species). Map M12 (Restock: Plan Period) shows the restocking that will take place during the approved plan period.

Productive Conifer Areas: The central zone of the Cononish block will be restocked with Sitka spruce at standard densities (2700 stems/ha to achieve 2500 stems/ha at year 5).

Riparian Areas: Riparian areas will restocked with native mixed broadleaves, group planting along burn edges will ensure that there is a matrix of open space and native woodland (1600 stems/ha, variable density). Conifer regeneration will not be accepted within these areas.

Native Broadleaf areas: These areas are identified on the map legends as 'Birch with other native broadleaves'. These areas are suited to an upland birch woodland type. The soils vary across the site (see map M3: Soils) and so the woodland types would naturally fall across a number of NVC categories (W4/W17). As such the woodland will be primarily downy Birch with other species such as rowan, oak and alder also utilised as minor components. Final decisions on the precise composition of minor components will take place during the internal FLS work-planning stage. Scots pine is of importance in the wider landscape and it strongly associated with upland birch woodlands, so a minor component of Scots pine will be planted into the matrix where conditions are favourable. No Scots pine will be planted within the CPI buffer zone; however, provision is made for its inclusion should a compliant, locally sourced seed supply become available (e.g. from seed collected at Coille Coire Chuilc and grown on at a local nursery), subject to NatureScot approval. The target density at

year 5 will be 1600 stems/ha, with higher densities at lower elevations allowing for a lower density at the higher elevations (500 stems/ha minimum). The use of variable density planting will allow for more naturalistic transitional zones between open hill and woodland at higher elevations.

Scots pine with Birch: This has been differentiated from the above category as these zones will contain a higher proportion of SP (up to 40%) with Birch and other native mixed broadleaves as secondary components. This will provide increased habitat connectivity through Cononish Glen and the wider landscape, connecting and enhancing the existing areas of pinewoods whilst providing added landscape diversity. The target density will be 1600 stems per ha, with variable density utilised along current hard edges to soften the visual impact between open ground and woodland.

Sitka spruce regeneration on areas that are being restocked as native woodland types was identified as a potential issue during initial scoping. This has been an issue on other FLS sites, and there is a reasonable probability that there will be natural regen within restock coupes here. Due to the high costs of managing regen a pragmatic approach must be taken, and as such up to 20% percent regeneration will be accepted at year ten. This will be monitored during stocking density assessments post establishment, and control measures will be taken to ensure this threshold is not exceeded. The focus will be on early intervention so that restock species have a competitive advantage and high survivability rate.



Table 3 – Felling

This shows the scale of felling within the felling phases in the context of the whole Forest Plan. This includes any areas of ‘LISS – Fell’ (i.e. removal of final overstorey).

SCALE OF PROPOSED FELLING AREAS (including LISS final fell areas)												
Total Forest Plan Area:		651	hectares									
Felling	Phase 1	%	Phase 2	%	Phase 3	%	Phase 4	%	Long Term Retention	%	Area out-with 20yr plan period	%
Area (Ha)	92.5	14.2	46.0	7.1	0.0	0.0	87.9	13.5	0.0	0.0	229.1	35.2

Table 4 – Thinning

This shows the area of thinning over the first 10 years of the Forest Plan.

Species	Thinning (ha)
Larch	13.86
Total	13.86

Table 5 – Restocking

This table provides information on the restocking proposals for the first 10 years of your Forest Plan. Restocking should be listed on a coupe by coupe basis.

Felling Phase	Map Identifier(s)	Species to be planted	Area (ha) to be planted
1	56003A	SS	18.29
1	56003B	BI/NMB/SP	9.79
1	56003C	BI/NMB/SP	6.35
1	56003D	NMB	3.53
1	56009A	SS	27.78
1	56009B	BI/NMB/SP	16.79
1	56009C	NMB	1.63
1	56009D	SP/BI/NMB	1.8
2	56012A	SS	21.27
2	56012B	BI/NMB/SP	8.91
2	56012D	BI/NMB/SP	4.67
2	56012E	NMB	2.04
Total Area			122.85



C.2.6 Protection

Deer management is a core activity underpinning the delivery of benefits from Scotland's National Forest Estate. The objective is to sustain healthy populations of wild deer, while controlling their impacts across the Estate in line with land-carrying capacity and the successful achievement of land-management goals. The FLS Deer Management Strategy, together with the Central Region Deer Management Plan, set out the strategic priorities and regional approach to deer management.

Responsibility for deer management in this area has recently returned to the Central Region, and the deer management team is continuing to develop its understanding of the area. The effectiveness of protection measures will be monitored throughout the life of the plan (including the performance and condition of the strategic deer fence), and approaches will be adapted as necessary to ensure that herbivore impacts are minimised.

Further information on deer management on the FLS estate can be view here : [Deer management | Forestry and Land Scotland](#).

C.2.7 Fence erection / removal

There is an existing strategic deer fence that contains the LMP area; this fence extends into west region and contains other forest blocks.

C.2.8 Road Operations

Map M13 (Timber Haulage) shows the current and planned roads, access points, and an estimate of tonnage to be hauled during the plan period. The main access to the LMP area will be via Dalrigh, with the village access used only in limited circumstances such as bringing machinery onto site, site visits, and emergency access.

C.2.9 Public Access

There are no proposals to change public access arrangements within the LMP area. All core paths will continue to be managed in accordance with the principles of the Scottish Outdoor Access Code (SOAC). Any unavoidable operational diversions or temporary closures will be kept to a minimum and reinstated as soon as it is safe to do so.

Strathfillan Community Development Trust and the Loch Lomond & The Trossachs National Park Authority Access Team will be consulted in advance of any proposed diversions or temporary closures to ensure that any temporary access plans are appropriate.

C.2.10 Historic Environment

Scheduled Ancient Monument (SAM): The proposed operations for the SAM area (see sections C.2.3) have been chosen to keep potential disturbance to a minimum. No work will take place on the Lead mine without a 'Scheduled Monument Consent' from Historic Environment Scotland. Due to the unique sensitivities around the mine further SEPA input will be sought at this stage.

Non Scheduled features: Appropriate buffers will be applied and enforced around significant historic features. All operations will adhere to UKFS standards and best practice.

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 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.

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).	We will ensure that historic assets (both designated and un-designated) are included within our land management and operational plans and are managed in line with <i>UK Forestry Standard</i> .

C.2.11 Biodiversity

Map M11 shows the Caledonian pinewood buffer zone that extends out from Coille Coire Chuilc SSSI. No planting of Scots pine will take place within this zone. Within the wider LMP area retention of conifer zones, as well as expansion of native woodland habitat types will increase habitat connectivity in the LMP area and wider landscape.

Before undertaking any forest operations outlined Land Management Plans, a detailed work plan is developed to ensure all environmental constraints are identified and addressed. These work plans are prepared in advance of operations to allow for surveys to be conducted at appropriate times.

As part of this process, FLS environment staff carry out both desk-based assessments and site-based walkover surveys to identify protected species, including red squirrels, and any additional environmental considerations. The findings of these surveys then inform the timing of operations, the potential exclusion of sensitive areas, or modifications to the planned operations to avoid impacts on protected species.

This operational work planning process ensures compliance with the most up-to-date legislation and follows best practice guidance, such as 'FCS Guidance Note 31: Forest Operations and Wildlife Protection' and 'FCS Guidance Note 33: Forest Operations and Red Squirrels'. The work planning process also allows us to potentially identify further measures that we can take to improve habitat for species during operations.

C.2.12 Tree Health

Tree Health is a major consideration for this LMP due to the high proportion of Larch and threat of P.Ramorum. This has been accounted for by removing the majority of Larch within the first phase of felling. Remaining areas of Larch are smaller and more concentrated and have been couped in future phases. If SPHN's issued in these areas Larch will either be selectively removed or removed via a change of phasing.

C.2.13 Invasive species

The area will continue to be monitored for invasive species. If issues are identified a removal and control program will be implemented.

C.2.14 New Planting

Not applicable: There is no woodland creation proposed as part of this LMP.

C.2.15 Wildfire

The LMP area is relatively low risk due to climate and soil conditions. The improved forest road network will provide significantly better access in the event of a wildfire. FLS's approach to wildfire

management can be viewed here: <https://forestryandland.gov.scot/what-we-do/health-safety-wellbeing/wildfire-prevention>

C.2.16 Landscape:

There are no major land-use changes proposed so general landscape characteristics (see section A.6.1) will remain broadly constant, with a number of landscape enhancements resulting from restocking of felled coupes with a more diverse mixture of native species. The face overlooking Tyndrum village will transition from conifer to native broadleaf over the plan period, increasing the visual texture of the landscape and providing more seasonal variation (see Map M11). Variable density planting will be used to ensure that existing hard edges are softened. Density will generally decrease at higher elevations, allowing for a more naturalistic transitory zone between woodland and open hill.

There will be a transitory period as the phase 1 coupe (56003) is removed. The coupe has a reasonable level of screening internally from the village, and will be swiftly restocked to mitigate visual impact. The area around the SAM (Coupe 56015) will gradually transition to include more broadleaves, blending into adjoining forests and providing a textured foreground to the monument site.

Native woodland expansion within Cononish Glen will compliment Coille Coire Chuilc and the community woodlands, with increased visual diversity and habitat connectivity. A small area around the fields in Cononish Glen (see map M8) will be felled and allowed to develop as a transitory open area, breaking the hard field margin while allowing for native natural regeneration. Field edges within the Glen will be planted with mixed species at a variable density, breaking the hard lines that are currently present and creating more visual and textural diversity within the Glen. These measures have been agreed at part of the Greater Cononish Glen Management Plan (GCGMP) which was developed as a condition of the approved Scotgold planning application.

A series of visualisations have been carried out to illustrate the changes that will occur within the landscape, these are available in the appendices (Appendix 3). The locations that the visualisations were generated from can be seen in Map 14: Viewpoint Locations. Supplementary contextual viewpoints and a comprehensive assessment of special landscape qualities has also been provided (Appendix 1, Appendix 2).

C.3 Environmental Impact Assessment and Permitted Development Notifications

Type of Project	Sensitive Area		Non-sensitive Area		Total
Afforestation	-	-	-	-	-



Type of Project	Sensitive Area			Non-sensitive Area		Total
Deforestation	-	-	-	-	-	-
Forest Roads	0.64 ha			-		0.64 ha
Quarries	-			-		-
Provide further details on your project if required.						
An EIA screening opinion request (SOR) is being submitted concurrently to the LMP.						



C.4 Tolerance Table

	Map Required (Y/N)	Adjustment to felling period*	Adjustment to felling coupe boundaries**	Timing of Restocking	Changes to Restocking species	Changes to road lines	Designed open ground ***	Windblow Clearance****
FC Approval normally not required	N	Fell date can be moved within 5 year period where separation or other constraints are met	Up to 10% of coupe area	Up to 2 planting seasons after felling	Change within species group e.g. evergreen conifers or broadleaves		Increase by up to 5% of coupe area	
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 nd 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

Note

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

** 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.

*** Tolerance subject to an overriding maximum of 20% designed open ground.

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



D. Production Forecast

Not applicable: FLS provide this nationally to Forest Research as per agreement with Scottish Forestry.

Appendices

Provide a list of appendices:

Item number	Title
1	Special Landscape Quality Assessment
2	Additional Contextual Viewpoints
3	Visualisations
4	Consultation Log

Maps

Map Number	Title
M1	Location
M2	Current Species
M3	Soils
M4	Heritage
M5	DAMS
M6	Climate
M7	Key Features
M8	Concept
M9	Management
M10	Thinning
M11	Future Species
M12	Restock (Plan Period)
M13	Timber Haulage
M14	Viewpoint Locations