Forestry and Land Scotland Coilltearachd agus Fearann Alba

Reelig Glen



Land Management Plan 2024 - 2034 030-517-446

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

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



Property details		
Property Name:	Reelig Glen	
Grid Reference (main forest entrance):	NH 5587 4314	
Nearest town or locality:	Inchmore/Kirkhill	
Local Authority:	Highland Council	

Applicant's details		
Title / Forename:	Eelco	
Surname:	de Jong	
Position:	Planning Forester	
Contact number:	07776172088	
Email:	Eelco.dejong@forestryandland.gov.scot	
Address: FLS Golspie Office, Golspie Business Park		
Postcode:	KW10 6UB	

Owner's Details (if different from Applicant)		
Name:	N/A	
Address:	N/A	

- 1. I apply for Land Management Plan (LMP) approval for the property described above and in the enclosed Land Management Plan.
- I apply for an opinion under the terms of the Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017 for afforestation / deforestation / roads / quarries as detailed in my application.
- 3. I confirm that the scoping, carried out and documented in the Consultation Record attached, incorporated those stakeholders which Scottish Forestry agreed must be included. Where it has not been possible to resolve specific issues associated with the plan to the satisfaction of the consultees, this is highlighted in the Consultation Record.
- 4. I confirm that the proposals contained in this plan comply with the UK Forestry Standard.
- 5. I undertake to obtain any permissions necessary for the implementation of the approved Plan.

Signed, Regional Manager		Signed, Conservator	
FLS Region	North	SF Conservancy	Highlands and Islands
Date	27 th July 2024	Date of Approval	
		Date Approval Ends	

Contents

1.0 Objectives and Summary	5
1.1 Plan overview and objectives	5
1.2 Summary of planned operations	6
2.0 Analysis and Concept	6
3.0 Management Proposals - regulatory requirements	9
3.1 Designations	9
3.2 Clear felling	10
3.3 Scale of proposed felling	10
3.4 Thinning	11
3.5 Other tree felling in exceptional circumstances	11
3.6 Restocking / New Planting	12
3.7 Species diversity and age structure	13
3.8 Road Operations and Quarries	15
3.9 Environmental Impact Assessment (EIA)	15
3.10 Tolerance table	15
3.11 Volumes coming phases	15
4.0 Management Proposals – guidance and context	16
4.1 Silviculture	16
4.1.1 Clear felling	16
4.1.2 Thinning	16
4.1.3 Low Impact Silviculture Systems (LISS) / Continuous Cover Forestry (CCF)	17
4.1.4 Long term retention (LTR) / Minimum intervention (MI) / Natural reserve (NR)	17
4.1.5 Tree species choice / Restocking	18
4.1.6 Natural regeneration	18
4.1.7 Wildlife Management	18
4.1.8 Fire	19
4.1.9 Tree health	19
4.1.10 Road operations, Timber haulage and other infrastructure	19
4.2 Biodiversity	20
4.2.1 Designated sites	20
4.2.2 Native woodland	20
4.2.3 Ancient woodland / Plantation on Ancient Woodland sites (PAWS)	20
4.2.4 Protected and priority habitats and species	20

4.2.5 Open ground	21
4.2.6 Dead wood	21
4.2.7 Invasive species	21
4.3 Historic Environment	
4.4 Landscape	
4.5 People	
4.5.1 Neighbours and local community	
4.5.2 Public access	
4.6 Soils	25
4.6.1 Protection and Fertility	
4.6.2 Cultivation	
4.7 Water	
References	

Appendix 1	Description of Woodland
Appendix 2	Consultation Rcord
Appendix 3	Tolerance Table
Appendix 4	Environmental Features
Appendix 5	Restock Prescriptions
Appendix 6	Landscape
Appendix 7	Water and Catchments Management
Appendix 8	Habitats Regulations Appraisal
Appendix 9	Designated Site Plan
Appendix 10	Deer Management Plan
Appendix 11	Fire
Appendix 12	Visualisations
Map 1	Location & Viewpoints
Map 2	Key Features
Map 3	Analysis & Concept
Map 4	Management Coupes

- Map 5 Future Habitats and Species
- Map 6 Thinning Coupes

1.0 Objectives and Summary

1.1 Plan overview and objectives

Plan name	Reelig Glen
Forest blocks included	Reelig Glen
Size of plan area (ha)	53.7ha
Location	See Map 1 – Location & Viewpoints

Long Term Vision

Reelig Glen will remain an exceptional forest for recreation and conservation. Working with the local community FLS will maintain and look to improve both the recreational and environmental value.

Trails will be used extensively by both locals and tourists to admire the impressive and unique trees of Reelig Glen.

Thinning, carried out by the Woodland Group, will focus on safe recreation, retention of high value amenity trees and favouring native broadleaved species.

Invasive non-native species will be removed at regular intervals and opportunities will be sought to remove them at landscape scale.

Herbivore pressure will be managed to allow for regeneration of palatable tree species such as oak, holly and ash, to safeguard the designated features and improve biodiversity.

Management Objectives

- 1. Provide a high quality visitor experience
- 2. Work closely with the community to meet joint aspirations
- 3. Protect and improve environmental value
- 4. Diversify tree species and age to mitigate against climate change and disease
- 5. Manage herbivore pressure to safeguard and enhance environmental value

Critical Success Factors

- Retain current offering of visitor facilities at a minimum
- Retain or achieve favourable status for designated sites
- Plan for removal of Larch in light of *Phytophthora ramorum*

1.2 Summary of planned operations

Table 1: Summary of operations

Summary of Operations over the Plan Period			
Clear felling (gross)	2.7 ha		
Thinning (potential area)	38.2 ha		
Restocking (gross)	2.7 ha		
Afforestation	0 ha		
Deforestation	0 ha		
Forest roads	0 m		
Forestry quarries	0 ha		

The forest is managed to the UK Woodland Assurance Standard – the standard endorsed in the UK by the *Forest Stewardship Council and the Programme for the Endorsement of Forest Certification*. Forestry and Land Scotland (FLS) is independently audited to ensure that we are delivering sustainable forest management.

2.0 Analysis and Concept

The planning process was informed by collecting information about the woodland, which is presented in **Appendix 1 – Description of Woodlands** and **Map 2 – Key Features**. During the development of this plan we have consulted with the local community and other key stakeholders, and a Consultation Record is presented in **Appendix 2 – Consultation Record**.

Below lists the objectives for the site and how the key features present opportunity or constraint. The Analysis of these form the concept for this LMP. Different management options for achieving the plan's objectives were considered against the constraints and opportunities identified during scoping and consultation. The preferred approach is summarised on **Map 3 – Analysis & Concept**.

Table 2 : Analysis and concept

Ob	jective	Opportunities	Constraints	Concept
1.	Provide a high quality visitor experience	Current offering is of high quality, maintenance would suffice Joint working with community group increases local buy-in and engagement and can reduce cost Location and recreational value make the site extremely well visited and high priority	Limited budgets for creation and maintenance of recreational facilities might reduce available funds Car park surface is degraded Potential conflict between environmental and recreational values (e.g. big non-natives on PAWS sites)	Continue to maintain current offering working together with the local community group where possible Retain large non-natives for their recreational value out with designated sites Improve car park surface
2.	Work closely with the community to meet joint aspirations	Current working relationship is well- established Community working increases local engagement and sense of ownership Community group can achieve additional socio-economic and ecological benefits out with the scope of FLS	Potential conflict where FLS and community interests are not aligned Community group membership may not be reflective of all community views	Continue to work closely with the community to achieve a mutually satisfactory design Clearly identify aspirations and potential conflicts and resolve at land management planning stage Renew management agreement and ensure LMP facilitates community desires around thinning and species promotion Encourage community group to remain focussed on being a representative body and encourage new membership.
3.	Protect and improve environmental value	Environmental values have historically been prioritised by designating valuable sites as minimum intervention or long-term retention	Invasive non-natives present (e.g. <i>Rhododendron ponticum</i>)	Continue to remove invasive-non natives when necessary Continue to control herbivore population (detail in Objective 5)

		Recreationally valuable elements overlap with several environmentally valuable elements (e.g. <i>Buxbaumia viridis</i> and its associated habitat of large diameter conifers)	Potential conflict between environmental and recreational values (e.g. characteristic non- natives on PAWS sites)	Zone areas where recreational value trumps FLS's PAWS aspirations.
			Herbivore impact is negatively impacting designations	Retain or achieve favourable status of designated sites
			Cost of environment works cannot be offset against timber income from the block. External funding limited.	
4.	Diversify tree species and age to mitigate against climate change and disease	Removal of larch as a preventative measure against <i>Phytophthora ramorum</i> presents an opportunity to restructure Local community can carry out small scale felling to promote age and species diversity	Thinning opportunities are limited due to coupe size, landform, access and forest stability. Felling and/or thinning potentially conflicts with recreational values in the short term	Use opportunities where small scale forest operations are necessary and/or feasible to restructure by increasing age and species diversity
5.	Manage herbivore pressure to safeguard and enhance environmental value	Good relationships with neighbouring estates Feral goats are less timid making population reduction easier	Difficult terrain for shooting due to limit access to allow for night shooting and easy extraction and high recreational pressure High herbivore densities in surrounding areas	Work together with adjacent landowners to reduce feral goat and deer population Communicate clearly with stakeholders the need for herbivore control and working methods

3.0 Management Proposals - regulatory requirements

This LMP was produced in accordance with government and industry standards and guidance, as well as recent research outputs, recognised at the time of its production. A full list of the current standards and guidance which guide the preparation and delivery of FLS LMP's can be found using the link <u>HERE</u> where specific industry guidance applies this will be referenced throughout the plan.

3.1 Designations

Map 2 – Key Features shows the location of all designated areas and significant features.

The plan area forms part of, includes, or is covered by the following designations and significant features.

Designations and significant features				
Feature type	Present	Note		
Site of Special Scientific Interest	Yes	See Map 2 – Key Features		
(SSSI)				
National Nature Reserve (NNR)	No			
Special Protection Area (SPA)	No			
Special Area of Conservation	Yes	See Map 2 – Key Features		
(SAC)				
World Heritage Site (WHS)	No			
Scheduled Monument (SM)	No			
National Scenic Area (NSA)	No			
National Park (NP)	No			
Deep peat soil (>50 cm	No			
thickness)				
Tree Preservation Order (TPO)	No			
Biosphere reserve	No			
Local Landscape Area	No			
Ancient woodland	Yes	See Map 2 – Key Features		
Acid sensitive catchment	No			
Drinking Water Protected Area	No			
(Surface)				

Table 3 : Designations and significant features in the Reelig Glen LMP area

3.2 Clear felling

Sites proposed for clear felling in the plan period are identified as Phase 1 and Phase 2 coupes on **Map 4 – Management Coupes** and coupe detail is provided in the table below.

Clearfelling (Phase 2)								
Coupe No.	Fell Year	Total Area (Ha)	Spp by Ha (Larch)	Restock Year	Comments			
23015	30/31	2.7	2.7	30/31	Fell if threat of <i>Phytophthora ramorum</i> increases			
Totals		2.7	2.7					

Table 4: Clearfelling Phase 2

3.3 Scale of proposed felling

Table 5: Scale of Proposed Felling Areas

Scale of Proposed Felling Areas										
Total Woodland Area 53.7 ha										
Felling	Phase 1	%	Phase	%	Phase	%	Phase 4	%	LTR, MI &	%
			2		3				NR	
Net Area (ha)	0ha	0	2.7ha	5	0ha	0	0ha	0	30.1ha	56

3.4 Thinning

Potential sites for thinning in the plan period are identified on **Map 6 – Thinning Coupes** and detail is provided in the table below.

Table 6: Thinning Coupes

Thinning (Phase 1 & 2)									
Coupe No.	Total Area (Ha)	Thin Year	Species	Prescription for Thinning	Comments				
23902	19.3	Continuous	Mixed	Single tree selection by Woodland Group. Thinning will be done for amenity and environmental value and as such will focus and species, form and tree health. Where native broadleaves exist these will be favoured over non-native species. Where particularly impressive trees exist these will be retained					
23903	4.3	Continuous	SP/LA	Single tree selection for amenity and environmental value. Tree felling to safeguard informal trails and promote native broadleaved species.					
23904	1.8	29/30	Mixed	Respacing to favour native broadleaved species					
23905	12.8	Continuous	Mixed	Visitor zoning. As detailed in paragraph 4.5.2					
Total	38.2								

Thinning will normally be carried out at, or below, the level of marginal thinning intensity (i.e. removing no more than 70% of the maximum MAI, or YC, per year). Higher intensities (no more than 140 % of maximum MAI, or YC, per year) may be applied where thinning has been delayed, larger tree sizes are being sought or as part of a LISS prescription.

The Woodland Group, with support from FLS, will be responsible for ensuring operations are in line with certification, industry guidance and best practise. The Woodland Group will define a detailed thinning prescription before work is carried out which will be agreed with FLS to ensure work is in line with the approvals. The final volume removed will be reported back to FLS by the Woodland Group. In case the Woodland Group is unable to carry out the work or seizes to exist FLS will take on the operations.

3.5 Other tree felling in exceptional circumstances

FLS will normally seek to map and identify all planned tree felling in advance through the LMP 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 LMP 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 over the plan area covered by this approval is 75 cubic metres per calendar year. A record of the volume felled in this way will be maintained and will be considered during the five year LMP review.

[N.B. Trees may be felled without permission if they: are of less than 10 cm diameter at breast height (1.3 m); pose immediate danger to persons or property; are completely dead; or are part of Authorised Planning Permission works or wayleave agreements].

3.6 Restocking / New Planting

Proposed restocking is shown on **Map 5 - Future Habitats and Species** and detailed in the table below.

Phase 2 Restock (2029-2033)								
Coupe No.	Total Area (Ha)	Native B/Leaf	Open (Ha)	Year	Method	Comments		
23015	2.7	2.7		30/31	R/NR	Mix between planting and regeneration. Planting of oak, likely tubed, with expected regeneration of other native broadleaves		
Total	2.7	2.7						

Table 7: Restock Phase 2

* replant (R) / plant (P) / natural regeneration (NR) / plant alternative area (ALT) / no restocking (None)

If the restock/regeneration should fail to reach the stocking density as per **Appendix 5** – **Restock Prescriptions** the site will be beaten-up to the required planting density. This will be assessed at year 3 and year 5 after planting with beat up by at least year 5. If the site is regenerating with sufficient appropriate regeneration no intervention will be needed. If the

site is regenerating with insufficient or undesirable regeneration removal of unwanted species and/or planting with desired species will take place. Where the natural regeneration is not the desired species it will be considered against the plan objectives and tolerance table and either accepted (with a plan amendment if necessary) or removed.

3.7 Species diversity and age structure

The following tables and graphs show how the proposed management of the forest will help to maintain or establish a diverse species composition and age-class structure, as recommended in the UK Forestry Standard.

Plan area by Species						
Species	Current		Year 10		Year 20	
	Area (ha)	%	Area (ha)	%	Area (ha)	%
Beech	7.7	14%	7.6	14%	7.7	14%
Birch (downy/silver)	8	15%	7.6	14%	7.2	13%
Douglas fir	5.4	10%	4.9	9%	4.5	8%
Larches	6.2	12%	3.8	7%	3.6	7%
Mixed broadleaves	4	7%	4.4	8%	6.3	12%
Mixed conifers	14.9	28%	15	28%	15.3	28%
Norway spruce	1.4	3%	1.2	2%	1.1	2%
Pedunculate/common oak	0	0%	0	0%	1.6	3%
Scots pine	5.5	10%	5.2	10%	5	9%
Not Applicable	0.6	1%	4	7%	1.4	3%
Total	53.7		53.7		53.7	

Table 8: Species diversity



Figure 1: Bar chart demonstrating species diversity and land use

Table 9: Age diversity

	Plan area by	Age				
	Current		Year 10		Year 20	
(years)	Area (ha)	%	Area (ha)	%	Area (ha)	%
0 - 20	1.8	3%	3.1	6%	6.2	12%
21-40	0	0%	0	0%	1.8	3%
41-60	0	0%	0	0%	0	0%
61-80	17.6	33%	0	0%	0	0%
81 - 100	5.9	11%	16.2	30%	14.8	28%
100+	27.7	52%	30.3	56%	29.5	55%
Not applicable	0.7	1%	4.1	8%	1.4	3%
Total	53.7		53.7		53.7	



Figure 2: Bar chart demonstrating age diversity

3.8 Road Operations and Quarries

There are no planned civil engineering operations apart from maintenance of the current infrastructure.

3.9 Environmental Impact Assessment (EIA)

No EIA scoping opinion request has been applied for as none of the operations are above the threshold values for EIA scoping.

3.10 Tolerance table

Working tolerances agreed with Scottish Forestry are shown in **Appendix 3 – Tolerance Table**.

3.11 Volumes coming phases

Volume per phase								
	Phase 1	Phase 2	Phase 3	Phase 4				
Volume (m³)	500	1596	500	500				

4.0 Management Proposals – guidance and context

4.1 Silviculture

4.1.1 Clear felling

Coupe detail can be found in section 3.2 and Map 4 – Management Coupes.

Clearfelling in this plan area is solely driven by resilience and health. The felling of the larch in phase 2 of the plan is driven by the threat of *Phytophthora ramorum*. In line with the larch strategy (FLS, 2022), FLS looks to programme and fell 20% of all larch by 2027 and any difficult and complex larch coupes by 2023 within the 'Priority Action Zone – More Vulnerable' of which Reelig Glen is part.

The need for felling the larch in Reelig Glen will be dependent on the spread of *P. ramorum*. If the main front of *P. ramorum* remains far from Reelig glen no action will be taken. If the front moves swiftly from the south-west towards Reelig glen FLS might decide to fell the larch as a preventative measure when it is operationally suitable. This decision will be at the discretion of FLS and the felling approvals in this plan account for this. In case of infection by *P. ramorum*, and the subsequent receipt of a statutory plant health notice, felling will take place as soon as possible in line with Scottish Forestry requirements.

The Reelig Glen coupe is serviceable by Harvester/Forwarder combinations. It is expected that an element of hand-felling, traction winch usage and/or skylining might be needed for some of large diameter trees and/or trees on steep slopes.

4.1.2 Thinning

The thinning coupes can be viewed in **Table 6 - Thinning** and on **Map 6 – Thinning Coupes.** Thinning will be done to increase recreational value or to promote a specific species composition and therefore selection is done predominantly on species, form and tree health. Areas with a focus on recreation are highlighted as 'visitor zones'. In these areas health & safety and aesthetics are the main drivers for the tree selection. An outline thinning prescription for the upcoming coupes has been determined and is shown in the **Table 6 - Thinning** in **section 3.5**.

4.1.3 Low Impact Silviculture Systems (LISS) / Continuous Cover Forestry (CCF)

Continuous Cover Forestry has a multitude of advantages over a clearfell and restock management system. It positively contributes to soil health, carbon capture, ecology and forest aesthetics (Forestry Commission, 2008). For these reasons FLS has looked to maximize areas of CCF. The areas intended for CCF can be seen on **Map 4 – Management Coupes**.

Depending on species, exposure and soil, different silvicultural systems can be used. As a rule the preferred silvicultural system for CCF is the least intrusive one. Choice of silvicultural system is mainly dictated by species, soil and crop stability. The least intrusive systems involve selecting individual trees for felling and are reliant on shade-tolerant species such as spruces, firs and beech. As these species are well established in Reelig Glen it is feasible to use a single tree selection system. This system regenerates and maintains stands of uneven age by regularly felling small quantities of timber. Felling is done either on positive (select future trees and fell surrounding trees) or negative (fell trees with poor form/health or of undesired species) selection. In Reelig glen a mixture of these two will be used with a particular focus on maintaining and promoting existing native broadleaved species.

4.1.4 Long term retention (LTR) / Minimum intervention (MI)/ Natural reserve (NR)

The Reelig Glen LMP area contains 30.1ha of LTR, MI and NR sites, these are illustrated spatially in **Map 4 – Management Coupes**. These sites will be managed in accordance with FLS guidance for the respective management types which can be supplied on demand.

The majority of this area, 27.6ha is under the Long Term Retention designation. In these areas it is currently not expected that clearfelling will take place at any point in time but small scale management such as thinning will take place for environmental and amenity value. The management might be changed in the future depending on changes in circumstances (large scale windblow, disease or a fundamental change in objectives).

The Natural Reserves will be perpetuated indefinitely and only very specific set-up operations or non-native removal operations are allowed. The areas have been selected mainly on their location and ecological potential.

4.1.5 Tree species choice / Restocking

Restocking will be done according to **Map 5 - Future Habitats and Species** and **Appendix 5 -Restock Prescriptions**. Stocking densities, species and main objectives of the future habitats are given in these restock prescriptions. The only restock area will be the phase 2 larch felling coupe. Small scale planting of native broadleaves might however take place by the community group for environmental and amenity value.

The brief guidelines below will be followed to ensure adequate restocking:

• To obtain maximum benefits from restructuring, contiguous restocking areas will not be less than 1 ha per individual shape (except in CCF areas) or exceed 40 ha unless forest health issues, open habitat restoration feasibility or windblow dictate otherwise.

• Commercial restocking will not be undertaken on soil types 9e, 11c, 11d due to the intensive drainage regimes and high fertiliser inputs that would be required to achieve successful establishment.

The Restocking Strategy for Scotland's National Forest Estate aims to minimise chemical usage in restocking (i.e. application of insecticides and/or herbicides) by considering adequate ground preparation at site level, and using tactics such as delayed planting (i.e. applying five year fallowing) to achieve this.

4.1.6 Natural regeneration

In both CCF and felling areas natural regeneration will be used to recruit (part of) the next rotation of trees. In those areas where recruitment is insufficient, supplemental planting will take place.

It is expected that some of the riparian zones, designed open ground and broadleaf areas will fill in with natural regeneration of both conifers and broadleaves. This will be managed in such a way as to ensure that, where practicable, it does not significantly impose a negative impact upon the objectives of the plan or create a negative impact upon the watercourse in terms of shading and acidification.

4.1.7 Wildlife Management

The Deer Management Plan can be found in Appendix 10.

4.1.8 Fire

FLS continues to work closely with the Scottish Fire and Rescue Service (SFRS) to prevent and tackle wildfires that threaten Scotland's National Forests and Land. FLS support SFRS in their lead role for fire prevention and suppression through creating annual fire plans, maintaining a duty rota, and providing additional logistical support. FLS's primary objective is always to protect people's health, safety and wellbeing. A detailed fire assessment of the Reelig Glen plan can be found in **Appendix 11 – Fire.**

4.1.9 Tree health

The main threat to tree health in this forest block is *Phytophthora ramorum* which has been discussed in detail in section **4.1.1**. There are other diseases impacting the forest but considering the objectives no active management to counter their presence or impact will be undertaken. Buttrot, particularly *Phaeolus schwienitzii*, is effecting mature Douglas firs and has lead and will lead to snap. *Heterobasidion annosum* is also present and will impact pines, spruces and larches.

4.1.10 Road operations, Timber haulage and other infrastructure

Map 2 – Key features shows the existing forest road network and Timber Transport Routes. As mentioned in paragraph **3.8** no civil engineering operations beyond maintenance are proposed.

In case of felling of the larch haulage will need to take place along a consultation route. Forestry and Land Scotland will consult with the Highland Council regarding restrictions on haulage for this operation.

4.2 Biodiversity

4.2.1 Designated sites

Designated sites in the area are listed in **Table 3** in **3.1** and shown in **Map 2 – Key Features**. The draft HRA and DSP can be found in **Appendix 8 – Habitats Regulations Appraisal** and **Appendix 9 – Designated Site Plan**. There are two designated sites in the area; Moniack Gorge SSSI and Moniack Gorge SAC.

4.2.2 Native woodland

The Native Woodland Survey of Scotland (Scottish Forestry, 2024) demonstrates the condition and extent of natural and semi natural woodland in Scotland. Only a fraction of Reelig Glen has been surveyed as the majority of the block is a mix between native and non-native species. The surveyed area is found around the upper carpark and is identified as an upland birchwood. The herbivore impact here is low which can likely be attributed to the high recreation pressure in the locality.

4.2.3 Ancient woodland / Plantation on Ancient Woodland sites (PAWS)

Ancient woodland sites can be viewed on Map 2 – Key Features and in Appendix 4 – Environmental Features. As can be seen on the map almost the entire LMP area is either Ancient (of semi-natural origin)(PAWS) or Long-Established (of plantation origin)(LEPO) with the majority being LEPO and a small area in the South-East of the plan being PAWS. The PAWS area sits entirely within the SAC/SSSI designation. The appendix furthermore demonstrates the state of the PAWS and, as can be seen, a large proportion of PAWS areas is threatened. Mostly this is due to the presence of the non-native conifers which characterize the block.

Future management operations will favour native species and thereby moving from nonnative species to native species over time. Norway spruce will be tolerated in PAWS areas in agreement with the FLS Environment Team for the benefit of red squirrel and other species.

4.2.4 Protected and priority habitats and species

A detailed list of protected and priority habitats and species can be found in **Appendix 4** – **Environmental Features.**

All forest management operations involve a planning process before work commences which includes checks for wildlife and important habitats (a Preliminary Ecological

Assessment). Work plans will be adjusted if necessary based on NatureScot buffer zones and timing restriction to avoid disturbance (NatureScot, 2022), and opportunities to further protect species or enhance habitats will be identified.

All works within the Plan area which are likely to disturb protected species will be done under licence from NatureScot and will follow the assessment and mitigation actions set out as conditions of this licence.

4.2.5 Open ground

There are no priority open habitats present in the plan.

4.2.6 Dead wood

Opportunities for retaining or creating deadwood will be identified during the planning of all felling and thinning works, favouring areas with the highest deadwood ecological potential. Valuable deadwood and deadwood areas will be marked on contract maps. Areas of natural reserve will offer some of the best opportunities for the development of standing and fallen deadwood. Where it is safe to do so, standing mature dead trees will be retained as these offer excellent potential for a range of species. Deadwood will be managed in accordance with the Scottish Forestry Practise Guide '*Managing deadwood in forests and woodlands*' (Humprey & Bailey, 2012) and the FLS document '*Deadwood Management – Guidance for staff'* (*FLS,2021*).

Of particular relevance in relation to deadwood is the designation for *Buxbaumia viridis* which is associated with large diameter degraded conifer wood. Management principles are referred to in **Appendices 8 & 9**.

4.2.7 Invasive species

As can be seen in **Appendix 9 – Designated site plan** invasive non-native species (INNS) are having a negative impact on the designations within Reelig Glen. A list of species is provided in **Appendix 4 – Environmental Features.** Extensive INNS removal has been carried out in the past and removal will continue as and when necessary to protect the condition of the designated sites.

4.3 Historic Environment

Heritage features can be found on **Map 2 – Key Features.** No scheduled ancient monuments exist within the Reelig Glen LMP area. The most notable features in the glen are the 19th century stone bridge and grotto which were built as a famine relief scheme by the Fraser family. The inspiration for the bridge comes from the Ravenna gorge in Italy. Interpretation is currently in place and will be maintained.

The protection and enhancement of significant archaeological sites is a key objective on all forests and land managed by FLS and the method is stated below.

Our key priorities for archaeology and the historic environment are to undertake conservation management, condition monitoring and archaeological recording at 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 (2014) and Scotland's Archaeology Strategy (2015). Significant archaeological sites will be protected and managed following the UK Forestry Standard (2017) and the FCS policy document Scotland's Woodlands and the Historic Environment (2008). Harvesting coupes, access roads and fence lines will be surveyed prior to any work being undertaken in order 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 designated historic assets on the National Forest Estate. Details of all known historic environment features are held within the Forester Web Heritage Data and included within work plans for specific operations to ensure damage is avoided. Significant historic environment features will be depicted on all relevant operational maps.

Areas of historic environment interest should be checked both on FLS's internal historic environment records and also with the Council's HER prior to the commencement of forestry activities. Any upstanding features should be clearly marked, both on the ground and on operational maps. Care should be taken to avoid any damage to surviving structural elements.

4.4 Landscape

See Map 1 – Location and Viewpoints, Appendix 6 – Landscape and Appendix 12 - Visualisations

4.5 People

4.5.1 Neighbours and local community

FLS has actively engaged with the neighbours and local community for this land management plan through an extensive consultation process. Signs were put out to notify visitors of the LMP revision and known neighbours and all community councils were contacted at scoping and consultation. A public consultation event was held in Kirkhill which was advertised through several different media.

Several neighbours have taken an active interest in the development of the plan and their aspirations have been incorporated where they do not conflict with the objectives of the plan and are consistent with FLS' s approach to land management. Details can be found in **Appendix 2 – Consultation Record**.

The Woodland Group of Aird Community Trust has actively taken part in the development of the plan as they, together with FLS, manage a section of the plan area as detailed in **Map 2 – Key Features**. The plan takes into account the aspirations of the Woodland Group and ensures approval for the works and activities carried out by the Woodland Group. The Woodland Group will be responsible for ensuring operations carried out by the Group are in line with approvals, certification and industry best practise and guidance. Details of the working relationship will be set out in the new management agreement which will be produced in the autumn of 2024 and which can be supplied to Scottish Forestry upon request. If the Woodland Group is unable to carry out the operations specified or seizes to exist FLS will take on full management.

4.5.2 Public access

FLS is the largest provider of outdoor recreation in Scotland, and we welcome over ten million visitors per year to the forests we manage. The forests and land we look after play a key part in Scotland's 'natural health service', providing spaces where people of all ages can spend time enhancing their physical and mental health through play, exploration and relaxation. We want to do what we can to make sure that as many people as possible, from all backgrounds can enjoy their visit. To help facilitate visits we provide a network of facilities including car parks and waymarked trails above and beyond the network of Core Paths (See **Map 2 – Key Features**). These facilities are promoted via the FLS website and through a series of free leaflets. Where there are waymarked trails, on site information is also provided. The specific facilities within this Land Management Plan area are discussed below.

Reelig Glen contains two waymarked trails as well as several core paths and one promoted car park. The 'Tall Trees Trail' takes visitors through the glen and past some of the biggest

trees in the country. Additional interpretation regarding the glen and several of its unique specimens and species is provided. This trail is marked as 'Moderate' with some short steep or rocky sections and steps.

The Upper Reelig Trail takes visitors into the "cathedral" stand of beech and through the area managed in conjunction with the Woodland Group. This trail is classed as 'Strenuous' due to the rougher and steeper terrain.

In other parts of the forest, visitors are welcome to explore under a right of responsible access as described by the Scottish Outdoor Access Code (SOAC) and laid out in the Land Reform (Scotland) Act 2003. This ensures everyone has statutory access rights to most of Scotland's outdoors, if these rights are exercised responsibly, with respect for people's privacy, safety and livelihoods, and for Scotland's environment. Equally, land managers have to manage their land and water responsibly in relation to access rights and FLS will only restrict public access where it is absolutely necessary, usually for safety reasons, and will keep disruption to a minimum.

We are working to maintain our current recreation infrastructure, though the ability to do so in future depends on available funding. We are actively working with the community to facilitate suitable projects on FLS land. The number of visitors in the area has grown over the recent years and we continuously assess whether the current infrastructure is sufficient. The car park in particular is heavily used and often full, FLS is exploring options to upgrade and expand the car park. In case of expansion the appropriate approvals with the Highland Council and/or Scottish Forestry will be applied for.

Woodland Management in 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 separately on the **Map 6 – Thinning Coupes**.

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 increasing 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.

4.6 Soils

4.6.1 Protection and Fertility

Brash mats (or alternative measures) will be used to protect sensitive soils on areas where harvesters and forwarders are being used. Felling residue will usually be left on site to allow nutrient recycling, with consideration for the practicalities of restocking.

In this plan the choice of species has taken into account the fertility of the site to the extent that it anticipates no fertiliser will be used during restock. Broadleaf species will be incorporated within silvicultural mixtures to improve soil function and encourage a sympathetic and characteristic field layer to develop.

4.6.2 Cultivation

Where required, the choice of ground cultivation technique will consider the short-term benefits for establishment against any long-term side effects on tree stability, access for future forest operations and the environment. There will be a preference for the least intensive technique.

A mix of scarifying, mounding and flat/screef planting will be used depending on soil type, weed growth, geomorphology and the desired species.

4.7 Water

For more detail regarding management of water and catchment see **Appendix 7 – Water** and **Catchment Management** and **Map 2 – Key Features**.

For enquiries about this plan please contact:

James Reid Planning Forester Forestry and Land Scotland North Region Smithton Office Tower Road, Smithton Inverness, IV2 7NL

james.reid@forestryandland.gov.scot

References

FLS. (2022). Larch Strategy.

Forestry Commission. (2008). Managing Continuous Cover Forests OGB No.7.

Forestry Commission Scotland. (2012). Managing forests as red squirrel strongholds. FCS.

Humprey, & Bailey. (2012). *Managing deadwood in forests and woodlands*.

NatureScot. (2022). *Disturbance Distances in selected Scottish Bird Species*. Retrieved from https://www.nature.scot/doc/disturbance-distances-selected-scottish-bird-speciesnaturescot-guidance

Scottish Forestry. (2021). Phytophthora Ramorum Action Plan.

Scottish Forestry. (2024, May). *Native Woodland Survey of Scotland*. Retrieved from https://experience.arcgis.com/experience/aa6b4ff901294dea84dcff3205d48fab?data_id=da taSource_11-17c32120a8f-layer-9%3A94065

Taylor, C. (1991). Forest Fertilisation in Britain. Forestry Commission.

UKFS. (2022). Designing and managing forests and woodlands to reduce flood risk.