



Forestry and
Land Scotland
Coilltearachd agus
Fearann Alba

Screeel

Land Management Plan

2021 - 2031

V1.1

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.



The mark of
responsible forestry




Property details	
Property Name:	Screeel
Grid Reference (main forest entrance):	NX 800 547
Nearest town or locality:	Castle Douglas
Local Authority:	Dumfries and Galloway

Applicant's details	
Title / Forename:	Mr Robin
Surname:	Fuller
Position:	Forest Planner
Contact number:	07919 044 382
Email:	robin.fuller@forestryandland.gov.scot
Address:	Forestry and Land Scotland, Ae Office, Ae Village, Parkgate, Dumfries
Postcode:	DG1 1QB

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

1. I apply for Land Management Plan approval for the property described above and in the enclosed Land Management Plan.
2. I apply for an opinion under the terms of the 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 the FC 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, Pp Regional Manager		Signed, Conservator	
FLS Region	South	SF Conservancy	South
Date	24/01/22	Date of Approval	
		Date Approval Ends	

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1.0 Objectives and Summary

1.1 Plan overview and objectives

Plan name	Screele
Forest blocks included	Screele, Potterland, The Doach
Size of plan area (ha)	569 ha
Location	See Location map (Map 1)

Long Term Vision
The forests and open land in Screele, Potterland and the Doach are valued by local communities and visitors to the Solway Coast for their rich mix of big conifer trees, healthy natural habitats and stunning viewpoints. High quality timber products are produced sympathetically balancing the needs of the area's diverse biodiversity. Welcoming access facilities allow a range of visitors to enjoy these qualities up close, whilst in the wider landscape the land contributes to one of Scotland's most scenic areas.
Management Objectives
<ol style="list-style-type: none"> 1. Landscape / visitor experience – sympathetic forest design that contributes to the areas special landscape qualities 2. Timber - production of quality timber products from a variety of species incorporating low impact silviculture 3. Native woodland – restoration and enhancement of ancient woodland sites, and connectivity with the wider woodland habitat network 4. Natural regeneration – include or control natural regeneration in line with other objectives
Critical Success Factors
<ul style="list-style-type: none"> • Control of western hemlock natural regeneration • Effective establishment of soft conifers • Timely PAWS restoration interventions • Rapid re-establishment of woodland cover (particularly on the slopes of Screele Hill) • Timely thinning and CCF interventions for establishing and maintaining 'big trees' • Establishment and 'natural' distribution of appropriate species in the Screele Hill transition zone and woodland fringe

1.2 Summary of planned operations

Table 1

Summary of Operations over the Plan Period	
Clear felling (gross)	71 ha
Thinning (potential area)	434 ha
Restocking (gross)	71 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 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 I** and on the Key Features map (**Map 2**). 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 III**.

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 Land Management Plan.

- 1. Objective:** Landscape / visitor experience –sympathetic forest design that contributes to the areas special landscape qualities
 - Opportunities:**
 - Protect key viewpoints in the LMP area ensuring sightlines are kept open.
 - Remove the hard upper edge of trees on Scree Hill.
 - Design the eastern flank of Scree Hill to fit sympathetically in the surrounding landscape.
 - Constraints:**

- Recent larch felling has reduced age diversity. It will take time for this to re-establish.
 - More exposed higher elevation sites will not be suitable for continuous cover forestry.
 - **Concept:**
 - Establish permanent woodland cover wherever practical using continuous cover forestry.
 - Design clearfell coupes to ensure size and shape are appropriate for location, especially where these will be visible from within the National Scenic Area.
- 2. Objective:** Timber - production of quality timber products from a variety of species incorporating low impact silviculture
- **Opportunities:**
 - Good growing conditions (brown earth soils and mild climate) offer potential for growing a range of tree species for timber products.
 - Mostly a very suitable and appropriate location for continuous cover forestry (CCF).
 - Link the timing of deer control effort to the timing of browsing-sensitive restocks within the wider LMP area.
 - **Constraints:**
 - Western Hemlock natural regeneration is a threat to existing and future restock sites.
 - Heavy public access will make deer control more challenging.
 - Deer fencing is not desirable in the LMP area
 - **Concept:**
 - Remove the Western Hemlock seed source and control natural regeneration.
 - Group restock species sensitive to deer browsing into areas where deer control can be easily undertaken.
 - Where appropriate, commit to CCF interventions to produce high quality, large diameter timber, that can be harvested without resorting to clearfelling.
- 3. Objective:** Native woodland – restoration and enhancement of ancient woodland sites, and connectivity with the wider woodland habitat network
- **Opportunities:**
 - Restoration of the PAWS (planted ancient woodland site) back to native woodland will improve connectivity in the wider landscape and benefit biodiversity.
 - Natural regeneration of native tree species is occurring in some areas, and can be incorporated into woodland habitat corridors.
 - Linkage with Taliesin community woodland.
 - **Constraints:**

- Non-native conifer natural regeneration (predominantly Western Hemlock) is becoming heavily established in some areas.
 - It is not desirable to use lots of plastic tree tubes or deer fencing in this important landscape area.
 - **Concept:**
 - Target restoration work on the PAWS to ensure there is good progress by the end of the plan period.
 - Deer control is essential to minimise browsing pressure in areas where native broadleaves are being encouraged.
 - Support the aims of South West Community Woodlands Trust by developing native woodland and open habitats adjacent to Taliesin.
- 4. Objective:** Natural regeneration – include or control natural regeneration in line with other objectives
- **Opportunities:**
 - A good mix of native broadleaf tree species are establishing naturally in some areas, offering local provenance and greater biodiversity value.
 - Natural regeneration of desirable timber species (predominantly Douglas Fir) can be managed to ultimately replace the current woodland overstorey – avoiding the need for clearfelling.
 - **Constraints:**
 - Western Hemlock is regenerating thickly in many places and if left unchecked will become dominant.
 - Significant encroachment of naturally establishing trees on Scree Hill top and at viewpoints in the LMP area would compromise Objective 1.
 - **Concept:**
 - Use desirable natural regeneration to help deliver the plan’s objectives, particularly in the use of continuous cover forestry for timber production, and for the expansion of native woodland.
 - Commit to controlling undesirable species – particularly Western Hemlock.

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 the Concept map (**Map 3**).

The first version of this plan (v1.0) was finalised in November 2021 ready for approval. Unfortunately, Storm Arwen caused considerable damage to the forest and this version of the plan (v1.1) includes the necessary changes required to respond to this.

3.0 Management Proposals - regulatory requirements

This land management plan was produced in accordance with a range of 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 Land Management Plans can be found using the link [HERE](#).

3.1 Designations

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

Table 2

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

The Key Features map (**Map 2**) shows the location of all designated areas and significant features. Any deep peats are indicated on the Soils map (**Map 9**).

3.2 Clear felling

Sites proposed for clear felling in the plan period are identified as Phase 1 and Phase 2 coupes on the Management map (**Map 4**).

Table 3

Clearfell Summary by Phase and Coupe Number			
Phase	Coupe Number	Fell Year	Gross Area (ha)
1	08008	2022/23	1.1
1	08005	2022/23	2.7
1	06043	2022/23	15.9
1	06015	2023/24	34.6
1	06041	2024/25	4.0
1	06024	2024/25	1.6
1	08010	2025/26	2.9
2	06017	2028/29	4.3
2	06050	2029/30	3.5
Total			70.6

Table 4

Clearfell by Species												
		Net Area (ha) by Main Species >20% (or MC, MB)										
Coupe Number	Fell Year	CP	DF	NF	Lar ch	LP	GF	NS	WH	SS	MB	Coupe Total
08008	22/23				0.4					0.7		1.1
08005	22/23				1.3				0.9	0.5		2.7
06043	22/23		4.1		0.7			0.5		6.8		12.1
06015	23/24	2.9	2.6	4.1	1.1	5.6	0.3	0.7	0.9	12.6		30.8
06041	24/25				4.0							4.0
06024	24/25				1.6							1.6
08010	25/26				0.1				0.1	2.3		2.5
06017	28/29		2.2		0.6				1.2			4.0
06050	29/30								0.5	0.5	1.8	2.8
Plan Area Total		2.9	8.9	4.1	9.8	5.6	0.3	1.2	3.6	23.4	1.8	51.4

NB Coupe totals: Table 3 shows gross coupe area / Table 4 shows net area of species

Table 5

Scale of Proposed Felling Areas											
Total Woodland Area		569 ha									
Felling Area	Phase 1	%	Phase 2	%	Phase 3	%	Phase 4	%	Long Term Retention	%	
Net Area (ha)	62.8	11	7.8	1	7.0	1	26.8	5	1.2	0.3	

3.3 Thinning

Potential sites for thinning in the plan period are identified on the Thinning map (**Map 5**).

This covers an area of 434 ha.

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. Where trees need to be removed to accommodate facilities to support approved thinning and CCF, including stacking areas, ramps and access racks within adjacent management coupes, this should ideally be identified in thinning maps and thinning plans as part of the LMP submission. Where this is not the case, additional felling necessary for reasonable infrastructure can be agreed by exchange of email. In all cases work plans will define the detailed thinning prescription before work is carried out and operations will be monitored by checking pre and post thinning basal areas for the key crop components.

3.4 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 are a 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 Land Management Plan 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].

3.5 Restocking

Proposed restocking is shown on the Future Habitats and Species map (**Map 6**).

Table 6

Restocking							
Phase †	Coupe Number	Gross Area (ha)	Proposed Restock Year	Species	Method *	Minimum stocking Density (s/ha)	Note
1	08008	1.1	2024	DF	R	2500	Restocking may be delayed in line with Phytophthora ramorum policy but it is desirable to plant early to avoid unwanted regen
1	08005	2.7	2024	DF MB	R (DF) NR (MB)	2500 (DF) 1600 (MB)	As 08008
1	06043	15.9	2024	DF / RSQ; SOK / MB	R (DF/RSQ) R (SOK/MB)	2500 (con) 1600 (blvs)	This area will be designated and managed as CCF. 50:50 mix for

Restocking							
							DF/RSQ. 50:50 mix for SOK/MB.
1	06015	34.6	2025	DF SP/MB SOK/MB MB	R (DF) R (SP) R (SOK) NR/R (MB)	2500 (DF) 500-1600 (SP/MB) 1600 (SOK/MB)	The lower slopes will be DF managed as CCF. SOK/MB mix will create softer transition with Taliesin. SP/MB transition zone and woodland fringe - see section 4.1.5
1	06041	4.0	2026	SS MB	R (SS) NR (MB)	2500 (SS) 1600 (MB)	See coupe details in section 4 for rationale to plant SS in the interim
1	06024	1.6	2026	DF	R	2500	As 08008
1	08010	2.9	2027	DF NS/SS	R (DF) R (NS/SS)		As 08008. 50:50 NS/SS mix
2	06017	4.3	2030	MB MC DF	NR (MB/MC) R (DF)	1600 (MB) 2500 (DF)	The north end of the coupe will form part of the Potterland natural reserve with MB and MC allowed to regen naturally. As 08008 for the south end.
2	06050	3.5	2031	DF	R	2500	

Total	70.6
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† recently felled awaiting restock (F) / Phase 1 (1) / Phase 2 (2)

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

If the Restock or natural regeneration should fail to reach 1600 per hectare (Native Broadleaves) or 2500 sph (productive Conifers) 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.

3.6 Species diversity and age structure

The following tables 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. The current woodland composition is shown on **Map 8**.

Stands adjoining felled areas will be retained until the restocking of the first coupe has reached a minimum height of 2m. Where this is not possible (e.g. due to windblow risk), the planned approach to achieving height separation between adjacent coupes is outlined in section 4.1 – Clearfelling.

Table 7

Plan area by species						
Species	Current		Year 10		Year 20	
	Area (ha)	%	Area (ha)	%	Area (ha)	%
Sitka spruce	184	32	158	28	150	26
Other conifers	121	21	117	21	130	23
Native broadleaves	86	15	108	19	115	20
Other broadleaves	3	1	2	0	1	0
Fallow	3	1	6	1	1	0
Open ground	172	30	178	31	172	30
Total		100		100		100

Chart 1

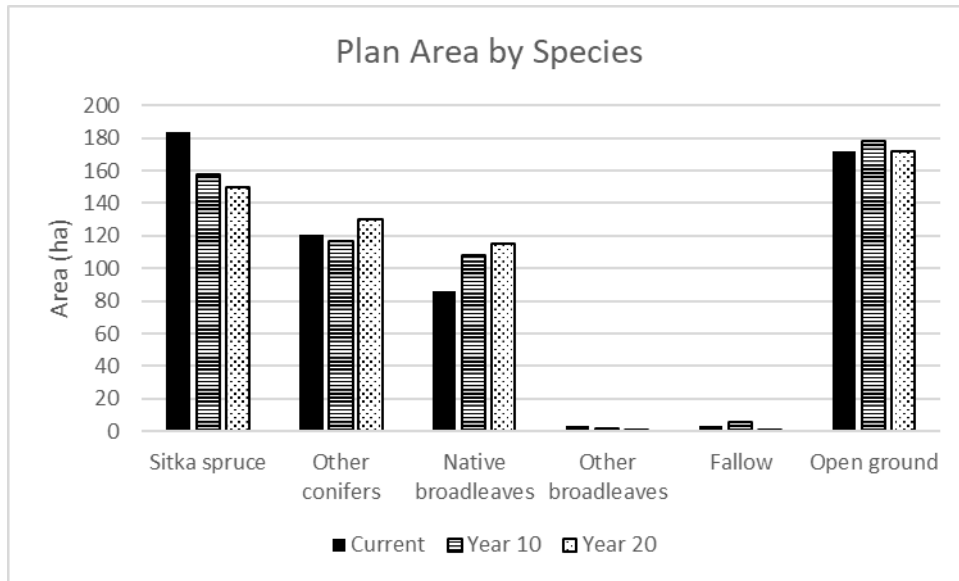
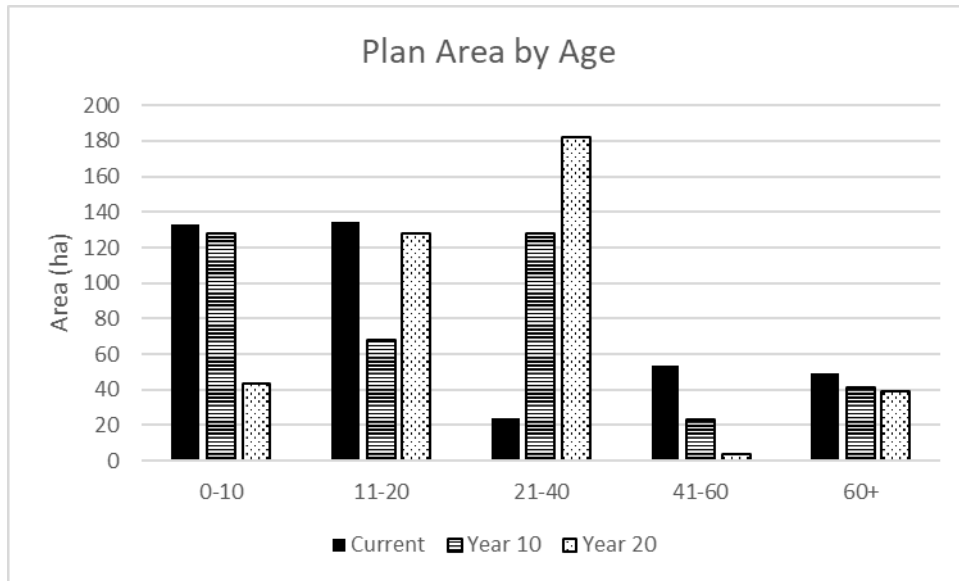


Table 8

Plan area by Age						
Age Class (years)	Current		Year 10		Year 20	
	Area (ha)	%	Area (ha)	%	Area (ha)	%
0 – 10	133	34	128	33	43	11
11 – 20	135	34	68	17	128	32
21 – 40	24	6	128	33	182	46
41 – 60	53	14	23	6	4	1
60+	50	13	41	11	39	10
Total		100		100		100

Chart 2



3.7 Road Operations and Quarries

Planned new roads, road realignments, road upgrades, new quarrying, and timber haulage routes are shown on the Road Operations and Timber Haulage map (**Map 7**).

Table 9

Forest Road Upgrades, Realignments, New Roads and New Quarrying				
Phase	Name / Number	Length (m)	Year	Operation
1	DB252 Potterland (south)	420	22/23	Upgrade
1	Doach	440	22/23	Upgrade
1	DB252 Potterland	340	22/23	Realignment
1	DB252 Potterland (north)	4310	27/28	Upgrade

3.8 Environmental Impact Assessment (EIA)

Any operations requiring an EIA determination are shown in the table below. If required, the screening opinion request form is presented in **Appendix II**.

Table 10

EIA projects in the plan area		
Type of project	Yes / No	Note
Afforestation	No	
Deforestation	No	
Forest roads	Yes	1) Potterland - realignment of east perimeter road to access 06017. Has already received Screening Opinion on 06/08/2019. 2) Potterland - upgrade of east perimeter road to access 06017 3) Doach – upgrade of north spur – access for thinning and larch removal
Forestry quarries	No	There are no current proposals to extend the existing quarry in Potterland

3.9 Tolerance table

Working tolerances agreed with Scottish Forestry are shown in **Appendix IV**.

4.0 Management Proposals – guidance and context

4.1 Silviculture

4.1.1 Clear felling

To achieve the UK Forestry Standard of separation between adjacent crops, adjoining coupes should not be felled before the restocking of the first area has reached an average height of at least two metres. We expect this to be achieved in 5 years following planting.

Any unforeseen reduction in separation during the period of the plan will be formally agreed with Scottish Forestry as an amendment. Felling will be undertaken once trees in adjacent restocked coupes have reached 2 m height.

Coupes for clearfelling during the plan period (refer to **Map 4**):

08008

Fell year 2022/23 (1.1 ha)

EL (P88). Two small areas of larch infected with *Phytophthora ramorum*, plus windblow. Access via north spur road which is planned for upgrade. Potential opportunity to tie in with thinning operations in the vicinity, which will also target larch within mixed stands. Popular informal paths through site.

08005

Fell year 2022/23 (2.7 ha)

SS and EL (P26), WH and EL (P62). Good access off short road spur. Protect and retain broadleaves around north west corner. Ensure watercourse at bottom of coupe is protected from diffuse pollution during operations (road maintenance and harvesting). Popular informal paths through site.

06043

Fell year 2022/23 (15.9 ha)

SS/DF/HL (P58). New road to site. Water pipeline to west of coupe. Ensure close liaison with neighbours at Chapelyard and Scree Farm during work plan stage. This coupe will now include clearance of significant windblow caused by Storm Arwen around and to the west of the FLS car park. The latter is a PAWS area, and the initial desire to slowly thin the conifers towards restoration is no longer an option due to the extent of damage. Any existing

broadleaves will be protected where possible, although much of the establishing understorey of native species have been obscured by fallen trees.

06015

Fell year 2023/24 (34.6 ha)

Extensive damage caused by Storm Arwen throughout this area has severely compromised any opportunities to split this into several coupes, which was the preferred option.

A complex coupe with extensive steep and craggy areas. The Scree Hill core path passes through the coupe and is very popular with walkers (although this is currently impassable). There is also a well-used informal path that climbs the slopes from Taliesin (this is also currently impassable). Main access will be from the dead-end road off the hairpin bend, with additional options from the northern boundary road adjoining Taliesin, and also to the south end of the coupe - although the latter is limited due to a steep roadside banking. The future land use for this coupe will be DF at lower levels with patches of oak to soften the edge with Taliesin community woodland, moving up to low-density broadleaves and Scots pine, before finally merging into woodland fringe. All existing broadleaves should be retained where possible. The establishment of SP and native broadleaves in the transition zone will not be uniform planting but will respond to the micro-topography revealed after felling, creating a more natural feel (1000 sph but made up of denser patch planting in a mosaic amongst open rocky terrain).

06041

Fell year 2024/25 (4.0 ha)

HL (P2012). Young crop with *P. ramorum* infection. Good access. NB - although the eventual desired future restock species includes DF, it would be difficult to establish DF in the current narrow strip adjoining Barhill Wood due to the high risk of deer damage. The current adjacent crop in 06040 is 10 year old SS. It is therefore proposed that the 'strip' of 06041 will be restocked with SS for the interim and then harvested with 06040. However, DF will then be established in the next rotation across coupes 06041 and 06040 in line with the 'Future Habitats and Species' map.

06024

Fell year 2024/25 (1.6 ha)

HL (P2002). Infected crop. Good access.

08010

Fell year 2025/26 (2.9 ha)

SS/WH (P62), EL (P25). Good access. Road is part of formal walking trail. Protect existing broadleaves around south and west edges.

06017

Fell year 2028/29 (4.3 ha)

South end - DF (P64). North end – DF and WH (P26). Good access but road upgrade and realignment planned to facilitate these works. The DF and WH are big trees on a relatively steep slope. These stands were considered carefully during the plan development as they are admired by many for their impressive size and age, however the WH is creating a seed-source which is increasing WH natural regeneration in the adjacent natural reserve. Previous advice from Forest Research highlighted the stand's origin as a WH trial site but also suggested that felling is now the best course of action to support current management objectives.

06050

Fell year 2029/30 (3.5 ha)

MB/MC (P2015). The current natural regeneration of mixed species here is not desirable as it creates a 'banding' appearance from out with the forest and prevents opportunities to grow quality Douglas fir. In many other places this type of naturally developing woodland would be adopted, but here it is not the best use of this ground and will be replanted with DF. (NB - some of the naturally regenerating native woodland will be retained to the south as minimum intervention in coupe 06048 where the hill path ascends). Good access but note public access hazard. (NB – delay this coupe if not cost effective or commercially viable)

4.1.2 Thinning

Refer to **Map 5**.

There is excellent potential for thinning in the LMP area. There are two main objectives for thinning here: 1) to facilitate continuous cover forestry as an alternative to clearfelling, creating a diverse forest structure including 'big trees' which contributes to the visitor experience and is more appropriate in this designated landscape; 2) to produce high quality large diameter timber in the long term with a regular supply of material from thinnings.

Where continuous cover forestry (CCF) is planned, timely and appropriate interventions are critical to establishing access racks and developing the crop matrix. Likewise, monitoring of CCF stands must be carried out and recorded to ensure successful continuity of the management approach.

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

Refer to **Map 4**.

71 ha of existing woodland have been identified for management under CCF with an additional 16 ha planned after future restocking. This makes up about 15% of the plan area.

06019

(15.8 ha)

This includes the lower slopes of Potterland next to the public road and the forest entrance. Currently the coupe has a variety of mature conifer species including NS, WH, LC, NF and DF, and a significant component of broadleaves, both in the canopy and establishing in the understorey. The management objective should be to favour broadleaves below the forest road to complement the PAWS site to the south which is recovering, whilst accepting an element of conifers (not WH). BE is present but removal is unrealistic and so this will feature in the future composition. Above the forest road the aim is a gradual change to a conifer dominated mix – potentially a ESF/BE mix. The suggested CCF approach is ‘group shelterwood’ which will maintain canopy cover whilst developing a more uneven-aged structure over time. Access is good but dedicated racks should be established for successful CCF.

06018

(2.7 ha)

The P2002 DF here will be managed under ‘uniform shelterwood’ to encourage natural regeneration in the lower storey, and to maintain canopy cover which is desirable in this sensitive landscape. NB - coupe 06024 and part of 06017 will also be incorporated into CCF once they have been restocked. Access is good. In the absence of sufficient natural regeneration of DF, under planting will be the preferred option.

06046

(5.5 ha)

This coupe is next to the public road, adjoins Taliesin community woodland, and contains PAWS. Some felling has already taken place here, mostly larch, but the remaining conifers need to be removed using ‘group selection’ to allow the site to become native broadleaf woodland. The challenge will be extracting the big trees without damaging establishing broadleaf regeneration. There is a scattering of conifers through the minimum intervention

coupe 06027 to the south-east and these should be taken at the same time. It is envisaged that the work will be completed within the timeframe of this plan (10 years). Natural regeneration of WH (and other conifers) will need managing before it reaches seeding age and compromises the objective of the site.

06013

(4.5 ha)

This area of hazel coppice and native woodland has been worked by volunteers from the South West Community Woodlands Trust since 2001. Their rotation glade management has benefitted biodiversity and supplied materials for construction and training using traditional green-woodworking techniques. The management plan for this site should be updated to review issues – for example, the long-term balance between coppice and high forest, and whether sycamore should now be retained as a replacement for ash. FLS will continue to support the group in managing this site (see section 4.5.1).

06014

(2.1 ha)

This coupe between the coppice site, natural reserve and quarry offers potential for firewood products. The establishing birch regeneration needs to be managed accordingly, by clearing 0.5 ha gaps (12.6m radius circles or 22.4m sided squares) and respacing the new growth, aiming for a 50% crown height to increase vigour. Access is good.

06031

(5.2 ha)

PAWS coupe set back from the Screel car park that has already had the conifers removed resulting in an establishing birch stand with some mature oaks. The aim here is to respace the birch to let more light in and encourage additional native species to establish. This will also enhance the visitor experience for those passing by on the Screel Hill path. The oaks will benefit from halo thinning, to encourage natural regeneration. Any remaining non-native trees will be felled and left on site. It is preferable that all operations are carried out by hand-felling to avoid damaging the broadleaves. This intervention should be planned within the next few years to avoid the need for machinery. Excellent access.

08001

(4.4 ha)

The far south-east edge of Doach woods has experienced episodes of windblow in part due to the poor rooting of mature conifers on thin soils (rankers). Much of this open area is now filling up with birch and WH regeneration. In the far bottom corner, under the mature DF,

there is significant broadleaf regeneration. It is therefore proposed that this coupe shall develop into a broadleaf woodland rather than trying to re-establish conifers here which are likely to suffer the same fate. WH regeneration will be managed so as not to compromise this site or neighbouring coupes. Remaining stands of conifers shall be felled during the plan period as part of wider thinning operations in the wood.

08002

(16.2 ha)

The area above and below the top road in Doach wood, incorporating a mix of mature conifers and well-established native woodland. The objective for most of the section below the road is to maintain a predominantly conifer dominated stand utilising natural regeneration of DF, NS and SS which will complement the DF below in coupe 08003. Above the road the current composition and structure is more complex with a mix of conifers and broadleaves, and the aim here is to have more broadleaf dominated stands with an element of conifer (not WH). The immediate need is to remove the larch element from this entire coupe and also WH which will dominate the natural regeneration if left unchecked. A CCF thinning of both 08002 and 08003 will be undertaken in the early stages of the plan period to deliver this. Using an 'irregular shelterwood' approach for coupe 08002 takes account of the variation in ground conditions and requirements of desired species, and should help retain a complex structure with a wide range of ages that will have amenity benefits in this popular wood.

08003

(8.4 ha)

The 'big trees' of Doach wood. This area has benefitted from regular 'uniform shelterwood' interventions in the past and a young understorey of DF is establishing well. The aim here is to continue with CCF thinnings, gradually removing the overstorey and protecting the DF regeneration which will become the 'big trees' of the future. It is critical that WH regeneration is managed effectively to prevent it becoming the dominant understorey species. Ensure that access racks are retained for future use.

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

Refer to **Map 4**.

Long term retention

There are only two small LTRs identified in the plan area which have been designated for amenity value, but this is compensated for by the large areas of CCF woodland (see section 4.1.3):

- 1) 08004 – the strip of DF (P28) running down the watercourse to the west of Doach wood. Currently marked for felling and restocking with broadleaves in 2050 but this will be reviewed at the next plan revision in 10 years.
- 2) 06009 – a currently young stand of SP that will be left as LTR to develop into an area of over-mature trees that will be enhanced with future SP planting to the west.

Minimum intervention

97 ha of the plan area (17%) has been classified as ‘minimum intervention’ where activities will be limited to: wildlife management; removal of invasive exotics/non-native tree regeneration that could reduce value for biodiversity or colonise surrounding stands; actions to benefit specific species of conservation priority; firefighting; and ensuring tree safety along access routes. The objective in these areas is to encourage the development of semi-natural habitats.

Natural reserve

Potterland Hill has been identified for this highest level of minimum intervention where management activities are strictly limited in favour of natural processes. The aim is for the area to support a rich biodiversity through a long period of ecological continuity. The woodland is designated as LEPO (long established of plantation origin) and already has a complex mix of: semi-natural and plantation origin woodland; steep craggy ground; landslides creating transient open space; exposed rock; gullies; and hilltop. At 30 ha this is a significant part of the plan area (5%) and helps to deliver many of the plan objectives. As plantation origin, the area will likely continue to develop as a mixed woodland. Despite its vulnerability to *P. ramorum* the existing larch here will not be removed as this would risk significant ground disturbance. Dead larch will contribute to future standing dead wood in the natural reserve. The Scottish Forestry ‘*P. ramorum* on larch Action Plan’ (2021) directs land owners to remove all larch within the Management Zone over the period of management plans, but there is also reference to ‘*Balancing outbreak control objectives with other principles of sustainable forest management (SFM) in areas where infection eradication is no longer deemed a viable option*’.

The retention of larch within the natural reserve is considered reasonable for the maintenance and development of biodiversity and ecological functions. Western Hemlock natural regeneration will be monitored and if levels are compromising the natural reserve then felling/removal will be undertaken.

Prior to this reassessment there were three natural reserves in the plan area: the two separate ones at Potterland Hill summit and the slopes near Glenyerrock have been joined into the new larger single unit; the small stand of mature conifers at the top of Troudale Gill will no longer be a natural reserve due to its small size and being incongruous in the landscape – once felled it will be restocked with Hawthorn and other scrubby native species that will be allowed to colonise the steep ground here.

4.1.5 Tree species choice / Restocking

Refer to **Map 6**.

Rich, deep soils across much of the plan area (especially on the lower slopes) offer excellent potential for growing a range of tree species, and producing quality timber products. To this end Douglas fir will increase (Current = 59 ha / Year 10 = 75 ha / Year 20 = 87 ha) replacing Sitka spruce in many places to offer increased diversity and resilience. Future climate projections suggest that DF will continue to be suitable for the site. Other alternative productive conifer species that have been chosen to contribute to the mix include Norway spruce, noble fir and coast redwood – the latter also adding visual diversity.

Western hemlock grows exceptionally well here. Although this could be adopted as a productive conifer, and would suit CCF management, it is currently posing a threat to the establishment of other species (notably DF) and is invading native woodland including the PAWS sites. Therefore this species will not feature in the future mix and will be actively removed to reduce these risks.

The PAWS sites will be monitored to ensure development of the desired native woodland types. Natural regeneration in these sites is the preferred method of establishment, but any planting will be of species native to the area (preferably from a local seed-source) and will complement and/or enrich existing naturally growing scrub and woodland to give the most ecological value.

The eastern middle slopes of Scree Hill are steep and craggy with thinner soils. Productive conifers were planted here in the first rotation but have been prone to windblow in recent years (the Scree Hill core path passes through this zone). Extraction of these trees will be challenging. The productive timber line has therefore been lowered slightly. This transition zone will be planted instead with a lower density SP/MB mix to establish a permanent habitat, which will merge above to woodland fringe. The establishment of SP and native broadleaves in the transition zone will not be uniform planting but will respond to the micro-topography revealed after felling, creating a more natural feel (500 – 1600 sph). It is hoped that the upper fringe (which will not be restocked) will develop similarly to the area at OS Grid Ref: NX 7876 5487 where a patchy but diverse mix of native broadleaf species and some pine is establishing well through natural regeneration. Other natural regeneration will be monitored and managed appropriately to maintain this soft upper edge.

Due to the rich soils, restocking in the plan area must be prompt to avoid weediness and undesirable natural regeneration. Ideally this should be within one year of felling, and no later than two years unless there are other factors to consider.

The Restocking Strategy for Scotland's National Forest Estate explains that we will minimise chemical usage in restocking (insecticides and herbicides) by considering options at the site scale, and using tactics such as delayed planting to achieve this.

All broadleaf planting will be native to the area and should complement and/or enrich existing naturally growing scrub and woodland to give the most ecological value.

4.1.6 Natural regeneration

Natural regeneration of the desired species in CCF areas will be recruited as the next rotation, and it will be important that thinning/CCF interventions avoid damage to young trees.

There should be a preference for natural regeneration of broadleaf areas (to maintain provenance and improve the chances of establishment) but where this is unlikely or has not been successful then these areas should be planted/beaten up to the required stocking density and site requirements.

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.

There are some productive sites where natural regeneration is occurring. These will be monitored and recorded in the FLS sub-compartment database. Where this is the desired species, we will endeavour to use it to establish the required stocking density. If stocking density is too low it will be beaten up by year 5. If the natural regeneration is too dense it may be necessary to clear and restock. 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.

4.1.7 New planting

No current proposals within the plan area for new woodland creation

4.1.8 Protection

Deer

The plan sits within the Solway Deer Management Unit (DMU). Roe deer are the only species present in the plan area.

The main objectives within the DMU are:

To enable re-stocking to take place without the need for deer fencing and to achieve the appropriate stocking density at year five.

To maintain impact levels in accordance with FLS local policy of less than 10% on all commercial tree species.

To maintain a sustainable deer population.

Currently the three year average browsing impacts across this DMU are within target objectives.

The population dynamics in this DMU have not changed considerably in recent years.

The annual Roe deer cull target up to 2024/25 for the DMU will be stable at 415. This figure has been chosen based on population modelling to ensure the objectives of the DMU are met. For the Scree LMP area the annual cull is set at 45 roe deer.

Recovering native woodland, as well as planted broadleaves and soft conifers will be the focus for minimising browsing damage from deer. We will also endeavour to keep Roe Deer numbers low around the Potterland Hill natural reserve to give any resilient Ash here a chance to regenerate.

Tree Pests and Diseases

Ash die back is present in the plan area. The primary aim is to identify trees that may become potentially dangerous in the future and take early action to remove them. Where there is no significant danger to the public, ash trees will be left standing even if they become infected. In areas such as the Potterland Hill natural reserve this will create additional standing dead wood which has its own associated ecological value. There is now a more tolerant position on sycamore, which could help to fill the niche left by ash die back disease. Where sycamore is present in the plan area this will be considered as a potential future component of native woodland as long as it does not compromise the overall site objective. Efforts will also be made to reduce browsing pressure around the Potterland Hill natural reserve to help any resilient Ash regenerate.

Larch die back (*Phytophthora ramorum*) is still infecting the remaining larch trees in the plan area. The felling and thinning interventions set out in this plan will remove all remaining larch within the plan period in accordance with the Scottish Forestry 'P. ramorum on larch action plan' (2021). The only exception to this will be in the Potterland Hill natural reserve (see section 4.1.4) At the present time, larch will not feature in the future restock mix.

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.

4.1.9 Road Operations, Timber Haulage and Other Infrastructure

Map 7 shows the existing forest road network, planned new roads, main egress points, and agreed Timber Transport Routes.

No new roads are planned for the next 10 years. Several upgrades and one realignment are proposed (see sections 3.7 and 3.8). Tree felling will be undertaken where this is directly associated with the ground works.

The minor public road (C15S) on which both the Screele and Potterland main access points are located, is a 'severely restricted' timber transport route. Dumfries and Galloway Council Roads Team must be contacted prior to any extraction from these blocks to determine any restrictions required, and the impact on haulage.

The Doach access point is on to the B736 which is a consultation timber transport route. Again D&G council must be notified of any proposed haulage.

4.2 Biodiversity

UK Forestry Standard guidance is to manage a minimum of 15% of the forest management unit with conservation and the enhancement of biodiversity as a major objective. The figure for this plan is 23% and includes areas designated as natural reserve, long term retention, and minimum intervention. These areas include native woodland, riparian corridors, and successional open ground. Screele Hill top (59 ha) will be left as open ground where a mosaic of upland habitats add additional benefits for biodiversity - with this included the percentage is 33%.

4.2.1 Designated sites

There are no designated sites within the plan area.

4.2.2 Native woodland

The plan area currently consists of 86 ha of native woodland and this will increase to 156 ha once the plan is fully realised. The majority of this extra area is made up of the PAWS

restoration area around the Screel car park, with other additions around the upper transition zone and woodland fringe on Screel Hill, as well as many smaller areas that will be established to create habitat corridors. Where the plan shows mixed broadleaf woodland in riparian corridors we will ensure that this is established at the appropriate density (1600sph) and in most cases within a 50:50% mosaic of open space and woodland. This is especially important for creating connectivity along Screel Burn and Troudale Burn where these flow through native woodland downstream on neighbouring land. Most native woodland has been designated as 'minimum intervention'. There are medium levels of herbivore impact, which reduce in busier recreation areas and deer control will be monitored to ensure all native woodland areas establish successfully.

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

The two PAWS sites in the plan area will be restored to their natural native woodland type using current best practice. The original desire was to enable a slow transformation to help maintain a woodland climate for sensitive flora and fauna, with the gradual removal of non-native trees allowing sunlight to encourage natural regeneration. However, Storm Arwen (November 2021) caused extensive damage and most of the area around the car park was blown down. Particular attention now needs to be given to this site to ensure undesirable regeneration is managed to create conditions for a mixed oak wood to develop. Any present desired native species will be protected during forestry operations as well as from browsing damage. See section 4.1.3 - coupes 06031 and 06046 for more detail on the management approach for each site.

4.2.4 Protected and priority habitats and species

All forest management operations involve a planning process before work commences which includes checks for wildlife and important habitats. Work plans will be adjusted if necessary to avoid disturbance, and opportunities to further protect species or enhance habitats will be identified.

After felling operations, planting schemes will be designed around any priority habitats that are revealed. This includes species-rich groundwater dependent terrestrial ecosystems (GWDTEs), which will also be protected during road building and any other forest operations using the current best practice.

Red squirrel

The Scree area has a good population of Red Squirrels. Maintaining a predominantly woodland environment (along with more species and structural diversity) will continue to provide suitable habitat for feeding and shelter. FLS has a single licence to cover forest management activities that may affect red squirrels on the national forest estate (NFE). This is in accord with the Scottish Biodiversity Strategy's aim to resolve species management issues. All works within the plan area will follow the assessment and mitigation actions set out as conditions of this licence.

Invertebrates

The importance of flower-rich wide rides and open space (including forest road corridors) has been incorporated into the plan design to ensure suitable habitat is available to support the important range of invertebrates in the plan area. Road and ride management will be planned carefully to minimise disturbance to these species.

Reptiles

Retained open ground over Scree Hill top, along with new areas as outlined in section 4.2.5 below, will ensure suitable habitat for all three reptile species is protected and enhanced.

Throughout the plan area care has been taken to design in habitat connectivity, linking native woodland areas and riparian zones both internally and with the surrounding land.

4.2.5 Open ground

Most open ground is classified as successional open, where some natural regeneration will be tolerated as long as it is compatible with the plan objectives. Most of this is located around the woodland fringe on the middle slopes of Scree Hill, as well as open ground to the west of Mid Hill, and along riparian zones. This makes up 21% of the plan area. Monitoring of these areas will allow us to identify any significant changes, and Scottish Forestry will be notified if these require amendments to the plan. An additional 59ha of open hilltop over Scree Hill adds to the total proportion of open ground in the plan, which by Year 10 will be 31%.

Managed open ground only contributes to around 2% of the plan area (agricultural field and quarry).

Fallow clearfell sites will contribute to transitional open space throughout the forest.

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.

4.2.7 Invasive species

Grey squirrel

The spread of non-native grey squirrels throughout this area is a concern for the conservation of local populations of native red squirrels. A major squirrelpox outbreak centred around Palnackie in 2019 highlighted the significant threat. FLS is committed to supporting efforts to control grey squirrels in the plan area.

Feral pig

Feral pigs are recorded several times a year in the forest, and also entering neighbouring land where they have caused damage. FLS will continue to liaise with NatureScot on this issue and will work constructively with neighbours to manage the situation.

4.3 Historic Environment

Refer to **Map 12**.

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.

4.3.1 Designated sites

There are no known designated historic environment sites within the plan area

4.3.2 Other features

There are two known undesignated historic environment features in the plan area of regional importance. Scree Hill cairn sits on the summit and will be unaffected by any management proposals. There is also a farmstead / head dyke recorded at Glen of Scree Burn (NX791545) which is described by Canmore as '*A farmstead 'in ruins', comprising a large unroofed structure of four compartments and a length of head-dyke are depicted on the 1st edition of the OS 6-inch map (Kirkcudbrightshire 1853, sheet 45). The head-dyke is shown on current edition of the OS 1:10000 map (1982)*'. Today there is little evidence of the features and the area has been planted with Sitka spruce (P2008). Prior to felling of this crop the D&G council regional archaeologist will be consulted to discuss opportunities for future protection.

Three additional undesignated features were highlighted in the plan area by the D&G council archaeologist and are recorded in Appendix V.

4.4 Landscape

4.4.1 Designated areas

Map 11 shows the location of the two landscape designations – East Stewartry Coast National Scenic Area and Solway Coast Local Landscape Area. **Appendix VI** presents an assessment of the landscape considerations and how these have been addressed in this plan.

4.4.2 Other landscape considerations

See 4.4.1.

4.5 People

4.5.1 Neighbours and local community

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.

Due to Covid 19 restrictions FLS were unable to hold face-to-face meetings with the local community, however a publicised online consultation generated much interest. See **Appendix III** for the feedback and how FLS has responded.

FLS has a long relationship with the South West Community Woodlands Trust (SWCWT) who own and manage 'Taliesin', a community woodland which sits between Potterland and Screele. Volunteers from the trust have also been managing an area of coppice woodland on FLS land since 2001, maintaining this traditional woodland management whilst providing opportunities for training and education. See Appendix III for their feedback and the FLS response.

4.5.2 Public access

The whole plan area is very popular with visitors who enjoy the beauty and tranquillity of the forests and open hilltop, making use of formal paths and open access for walking, running, cycling and horse riding.

The Screele Hill core path has been carefully considered during the development of this plan. With delivery of the proposed management changes, walkers will start their journey in oak woodland and then pass under well-thinned big conifers before these give way to a scattered

Scots pine and broadleaved woodland fringe and finally out on to the open ridge with its spectacular views. We will continue to liaise closely with the D&G Council access team and support their management work and aspirations.

The popular informal path from Taliesin leading up to the forest road and beyond will be marked and protected as much as possible during felling operations. Post-felling the route will be cleared and restocking planned so as not to obstruct this route. (NB – Storm Arwen damage has made this route impassable but hopefully after clearance works in 2023/24 visitors will re-establish a new line).

The Doach wood formal waymarked trail will continue to be promoted and maintained. Management of the wood aims to keep the ‘big tree’ feel, and the viewpoint will be kept open. As a result of feedback during the community consultation we are currently investigating how to make the bottom level path more wheelchair friendly for visitors who are less-abled.

Both car parks at Screel and Doach will remain open and continue to be managed for visitors’ use.

Visitors are welcome to explore FLS land, and will only be asked to avoid routes while certain work is going on that will create serious or less obvious hazards for a period (e.g. tree felling). Scotland’s outdoors provides great opportunities for open-air recreation and education, with great benefits for people’s enjoyment, and their health and well-being. The Land Reform (Scotland) Act 2003 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, and will keep disruption to a minimum.

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 on **Map 13**.

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

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

4.5.3 Renewables, utilities and other developments

An overhead powerline on neighbouring land runs parallel to the Glenyerrock track running through the eastern edge of Potterland. This will be flagged up during the work planning of any operations nearby.

Two water supplies and pipelines are recorded in the plan area (Potterland and Scree) and will be protected during any operations.

4.5.4 Support for the rural economy

Scree and Doach are part of the local landscape that attracts visitors to the area, who take advantage of local businesses and services. Careful forest design with this in mind, along with responsible delivery of forestry operations will provide a positive visitor experience and encourage return visits to the area.

FLS supports a sustainable rural economy by managing the national forests and land in a way that encourages sustainable business growth, development opportunities, jobs and investment.

4.6 Soils

4.6.1 Protection and Fertility

There will be minimal soil disturbance and machine movement on sites with clayey soils to reduce the risk of compaction or damage to the soil structure. Brash mats (or alternative measures) will be used to protect sensitive soils. Felling residue will usually be left on site to allow nutrient recycling, with consideration for the practicalities of restocking.

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.

4.6.3 Deep peats

There are no known deep peats within the plan area

4.7 Water

4.7.1 Drinking water

All private drinking water supply points (and pipes) are recorded as a layer in our Forester Web GIS (included in Map 2). This is consulted during the work plan process for all forest operations to ensure their protection. Affected neighbours will be consulted prior to any works commencing. Features will be clearly marked on all contract maps, as well as on the ground. The design of the future forest has incorporated an open space or broadleaf buffer of at least 50m around these supply points to minimise future disturbance.

4.7.2 Watercourse condition

There are no water bodies within or adjacent to the plan area which are currently at “less than good” ecological status/potential as a result of forestry activities. To maintain this status all forestry and land management activities will meet the requirements of the UK Forestry

Standard Guidelines on Forests and Water, and follow the good forestry practice advocated by the Forestry & Water Scotland initiative. All watercourses that are identified as a potential downslope receptor to an increased risk of phosphate leaching or sedimentation will be highlighted at the Work Plan stage and all necessary precautions taken to avoid water quality deterioration.

4.7.3 Flooding

There are no specific flood prevention considerations within the plan area at this time (see Description of Woodlands).

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Appendix I: Description of Woodlands

Description of woodlands
<p>Topography and Landscape</p> <p>Elevation ranges from 20m at the foot of Potterland, to 344m at the summit of Scree Hill. Prominent hills rising sharply from the valley floor create a striking landscape. Steep slopes (>25 degrees) are found around Potterland Hill, Scree Hill and Mid Hill.</p> <p>Most of the plan area sits within the East Stowrtry Coast National Scenic Area. All of the plan area sits within the Solway Coast Local Landscape Area. See Map 11</p> <p>Map 11 shows the SNH Landscape Character Types relevant to Scree:</p> <ul style="list-style-type: none"> Coastal Uplands (LCT 179)
<p>Geology and Soils</p> <p>The bedrock lithology for Doach, Potterland and most of Scree is sedimentary Wacke, but there is a transition to igneous granodiorite in the south part of Scree. Superficial deposits are scarce.</p> <p>Soils in Doach, Potterland and the lower elevations of Scree are dominated by Brown Earths. Surface-water Gleys feature around the northern slopes of Scree Hill and Mid Hill, and the high ground of Scree Hill is all Rankers. Deep peat soil types are absent.</p> <p>Soil types in the forest are shown on Map 9</p>
<p>Climate</p> <p><u>Accumulated temperature (day-degrees above 5°C)</u> Min: 1437, Max: 1934, Mean: 1754</p> <p><u>Moisture Deficit (mm)</u> Min: 76, Max: 127, Mean: 108</p> <p>The climate of the LMP area is highlighted pink on the table below</p>

Description of woodlands

		Accumulated temperature (day-degrees above 5°C)								
		>1800	1800-1475	1475-1200	1200-975	975-775	775-575	575-375	375-175	<175
Moisture Deficit (mm)	>200									
	180-200	Warm	Dry							
	160-180									
	140-160									
	120-140	Warm	Moist		Cool	Moist				
	90-120									
	60-90		Warm	Wet						
	20-60				Cool	Wet		Sub-Alpine		
	<20							Alpine		

Climatic Zones in Great Britain (shading indicates combinations not present)

Hydrology

Map 2 shows all watercourses, open water, and recorded water supplies.

The forest sits in the Solway Tweed river basin district.

Water quality

Bodies of surface waters (as identified by SEPA) in the plan area:

Name: Auchlane Burn Overall Condition: Good

Flooding

There are no Objective Target Areas, Potentially Vulnerable Areas, or known areas prone to significant flooding downstream from the plan area.

Water supplies

The plan area does not lie within a Drinking Water Protected Area.

There is one private drinking water extraction point (Screel Farm) and two water pipelines in the Plan area.

Windthrow

Map 10 illustrates the DAMS measurements for the Plan area. Most of the plan area is sheltered or only moderately exposed. Small areas of high exposure are found around the summits of Screel Hill and Mid Hill.

Adjacent land use

Plantation, rough grazing, fields and farms.

Description of woodlands

Public access

Scree Hill is a popular hill walk and attracts many visitors who use the well-established route up the eastern side of the hill from an official FLS car park (see **Map 2**). There have been recent upgrade works carried out by D&G Council. The route is also a Core Path.

There is a formal FLS walking trail at Doach which is popular with locals. This is also a Core Path.

Visitor zones have been identified around the car park and formal routes (see **Map 13**).

There are many desire lines and wild trails established throughout the plan area.

There is an agricultural tenancy for the fields in Scree. South West Community Woodlands have an agreement to manage the coppice woodland in Potterland. There are no other active leases or agreements granted by FLS to any third party within the plan area.

There are several third party access rights established in the plan area (Scree fields; Potterland Bridge; Glenyerrock)

There are no residential neighbours within the forest, however there are several located around the edges of the forest (Scree Farm; Chapelyard; Kirkmirran; Potterland; Glenyerrock; Gelston Lodge; Whitehill; Doach Cottage). Also see below regarding Taliesin.

All of the plan area has significant community interest. Scree and Doach are very popular local destinations for recreation. Potterland has an area of coppice woodland that is being managed by the South West Community Woodlands group. This group also own an area of land between Scree and Potterland (known as Taliesin) which they use for conservation, education and events.

Historic environment

Historic environment records for the forest are shown in **Appendix V** and on **Map 12**. There are no designated features within the plan area.

Biodiversity

Designations

There are no designated conservation areas in the plan area. The western edge of the plan area borders the Galloway and Southern Ayrshire Biosphere.

Description of woodlands

Priority Habitats

Other than native woodland, no priority habitats have been recorded in the plan area.

Priority Species

The plan supports a wide range of species, and is rich in biodiversity. Red Squirrels are present (although threatened by grey squirrels). Important butterfly species include Pearl-bordered Fritillary, Dingy Skipper, Grayling and Wall. Hairy Dragonfly (LBAP priority species, Scottish Biodiversity List species) breeds in the ponds at the adjacent Taliesin Community Woodland and will likely use adjacent forest rides for foraging. There has also been a recent (as yet unverified) record of a very rare beetle at Screele (the species is usually confined to southern and eastern England and if confirmed this may well be the only known Scottish site for the species). Open ground, particularly with sunny aspect provide ideal habitat for Adder, Slow Worm and Common Lizard

Ancient Woodland / PAWS

There are five sites classed as Long-Established of Plantation Origin, with almost all of Doach and Potterland being covered by this type. There are three sites classed as Ancient of Semi-natural Origin, located around Potterland Bridge and the main entrance into Screele, all of which are recorded as PAWS. All of these sites are shown on **Map 2**.

Natural Reserves

Three sites are currently identified in the plan area:

- Screele - top of Troudale Gill
- Summit of Potterland Hill
- Potterland – south of Glenyerrock

These are shown on **Map 2**.

Deadwood ecological potential

The greatest potential is within the Natural Reserves, in PAWS, and along all riparian buffers. There is also good potential at LEPO sites and in areas managed under Low Impact Silviculture.

Open ground

The summit of Screele Hill is unplanted and unmanaged (~60 ha). Although not recorded as important habitat, the mosaic of acid grassland, upland heath, mire and bare rock creates opportunities for a variety of flora and fauna.

Invasive species

Grey Squirrels are now present in the area and pose a significant threat to the survival of the native Red Squirrel.

Description of woodlands

Feral Pigs have been expanding their range along the Solway Coast over recent years and have been spotted leaving forest areas and going on to neighbouring farmland where they have caused damage.

There are no known invasive flora in the plan area.

Woodland composition

The current composition of the plan area is shown on **Map 8**.

29% (128 ha) of High Forest is first rotation. 71% (309 ha) is second or subsequent rotation.

Current woodland management (and % of plan area):

Clearfell (71%)

Long term retention (<1%)

CCF / LISS (12%)

Minimum intervention (<1%)

Natural reserve (1.5%)

Plant health

Phytophthora ramorum

The plan area is in the P. ramorum Risk Zone 1 (greatest risk). It is also in the P. ramorum Management Zone within which Scottish Forestry no longer issue Statutory Plant Health Notices (SPHN). The majority of mature larch was removed from the Screel block in 2013/14 (in response to an earlier SPHN and as sanitation felling).

Dothistroma needle blight (DNB)

DNB has been recorded in the plan area at Screel and Potterland.

Ash dieback

The number of trees in the local area effected by ash dieback has increased significantly in recent years. Ash is common in the natural reserve in Potterland.

Infrastructure

The main vehicle access into the forest blocks is at NX800 547 (Screel), NX 796 553 (Potterland) and NX794 577 (Doach). These are also the main egress points for timber transport, which merge onto a 'consultation' timber transport route for Doach, and a 'severely restricted' route for Screel and Potterland.

Description of woodlands

There is a well-established road network through the plan area, providing adequate access to most sites. Most are Class A and B roads, but some less well used sections would require upgrading for use by timber traffic. There are no bridges.

There is an active quarry in Potterland.

Other than boundary fences, the only other significant fence line is a deer fence around the coppice area in Potterland.

No electricity powerlines or gas pipelines pass through the plan area, although several adjacent overhead powerlines are close to the boundary.

The B736 passes alongside Doach, and a minor public road passes between Screele and Potterland.

Official FLS car parks are maintained at the entrances to both Screele and Doach.

Appendix II: EIA screening opinion request form

Refer to separate attached document

Appendix III: Consultation record

Consultee	Date contacted	Date of response	Issues raised	FLS response
D&G council – roads team	8/10/20	No response		
D&G council - archaeology	8/10/20	2/11/20	<p>A number of additional heritage features of local interest were highlighted within the plan boundary.</p> <p>Management proposals should follow the UKFS on the Historic Environment, which requires a 20m buffer of open ground be left round archaeological features on restocking. This is advisable for the most important sites, but on most of the features within the current plan a smaller buffer may be more proportionate. This can be discussed with the archaeology service as individual felling applications are brought forward.</p> <p>The areas of historic environment interest should be ground-checked 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</p>	The additional features have been added to Map 12 and Appendix V. Prescriptions for the management of heritage features within the plan area are set out in section 4.3

Consultee	Date contacted	Date of response	Issues raised	FLS response
			avoid any damage to surviving structural elements.	
D&G council – biodiversity / outdoor access / landscape	8/10/20	7/12/20	<p>The proposed management objectives are greatly welcomed in this sensitive location.</p> <p>Support the [concept] approach of:</p> <ul style="list-style-type: none"> species and structural diversity on the lower slopes of Screel areas of open hill at Screel summit and creating an open area on the top of Potterland Hill. Maintaining and increasing the open rocky tops and areas of open hummocky ground will help conserve scenic qualities restoration of PAWS sites to native woodland – however the management of the upper slopes of Potterland and Doach plantation (identified as long- established plantation) is unclear. broadleaves in riparian corridors and their use to help meet the plan objectives (they could be used to respond to topographic variation) maintaining open space around viewpoints 	<p>The lower slopes of Screel have been designed to incorporate a future diversity of species and structure.</p> <p>Screel Hill will remain open. It has been decided to incorporate Potterland Hill into a large ‘natural reserve’ where existing natural regeneration will be allowed to establish further – maintaining Potterland Hill as open would require clearing existing natural regeneration and a concerted resource effort which is not practical or desirable.</p> <p>The final plan shows clearly how we intend to manage the upper slopes of Doach and Potterland.</p> <p>Riparian corridors, native woodland and wetland buffers have been planned to maximise biodiversity value whilst contributing positively to the forest design.</p> <p>All key viewpoints will be maintained as part of our Visitor Zone management. These are identified as: Screel Hill summit; Screel Hill path road-crossing ‘resting point’ and bench; Doach bench/viewpoint.</p>

Consultee	Date contacted	Date of response	Issues raised	FLS response
			<p>Have concerns about:</p> <ul style="list-style-type: none"> • decreasing species diversity and increase of coupe size on Mid Hill <p>Other comments</p> <p>Consideration should be given to:</p> <ul style="list-style-type: none"> • the maintenance and creation of flower-rich wide rides and open space for invertebrate species • retention of open rides and open areas of suitable habitat and sunny aspect to ensure that reptile populations are not harmed. • increasing car parking capacity at Screel • management of regeneration alongside core path routes 	<p>The choice of coupe size and shape around Mid Hill and the southern 'ridge' has responded to the landscape. Slightly larger coupe sizes are more in keeping with higher elevation (and the open hilltops above). Smaller coupes would create a patchy appearance. Species choice in these higher locations had to respond to soils and climate, where conditions are less suitable for most productive species.</p> <p>The design of the plan has protected, incorporated and created open areas for the benefit of biodiversity. This also adds internal landscape diversity for the visitor experience.</p> <p>Our Visitor Services team will continue to monitor use of the Screel car park and undertake any necessary reviews. We cannot commit to making the car park larger at present, but will consider future options based on these reviews.</p> <p>Management along core paths will aim to maximise the visitor experience. See section 4.5.2.</p>
ConFor	8/10/20	No response		

Consultee	Date contacted	Date of response	Issues raised	FLS response
South of Scotland Timber Transport Officer	8/10/20	No response		
Butterfly Conservation Scotland	8/10/20	No response		
Visit Scotland	8/10/20	No response		
British Horse Society of Scotland	8/10/20	No response		
Saving Scotland's Red Squirrels	8/10/20	5/11/20	<p>Overall very pleased with the approach that FLS are taking for this key area of habitat and feel that this will benefit red squirrels in the long term.</p> <p>Key points:</p> <ul style="list-style-type: none"> [the LMP area] is now situated within the Solway Forests Priority Area for Red Squirrel Conservation (PARC) following a review of these areas undertaken by SSRS in 2019 	<p>Maintaining diverse woodland cover in the plan area will continue to support local populations of Red Squirrels.</p> <p>FLS are committed to supporting efforts to control Grey Squirrels in the plan area, as stated in section 4.2.7.</p>

Consultee	Date contacted	Date of response	Issues raised	FLS response
			<ul style="list-style-type: none"> • the three forest blocks [within the LMP area] currently all support good populations of red squirrels • there is a significant threat from the incursion of pox carrying grey squirrels. The importance of this area for red squirrels and the threat that they face from invading grey squirrels should be noted within your plan. • we would like to see grey squirrels identified as an invasive species of concern and a commitment to the support of grey squirrel control on the site in the long term. 	
SEPA	8/10/20	6/11/20	<p>Site specific comments:</p> <ul style="list-style-type: none"> • there are no water bodies within or adjacent to the plan area which are at “less than good” ecological status/potential as a result of forestry activities. The plan should highlight this fact, emphasising the importance of maintaining the 	<p>The importance of maintaining good water quality has been highlighted in section 4.7.2.</p> <p>All proposed road upgrades have been set out in the plan and will be assessed through the EIA screening opinion request form that makes up part of this plan submission. All current guidance and best practice will be adhered to during operations.</p>

Consultee	Date contacted	Date of response	Issues raised	FLS response
			<p>good quality of the surrounding water environment.</p> <ul style="list-style-type: none"> it is unclear if new tracks or upgrading of existing tracks will be required as part of the plan. Guidance on the design of water crossings can be found in our Construction of River Crossings Good Practice Guide <p>the UKFS Forest and Water Guidelines states that the leaching and run-off of phosphate and nitrate from the land represents a loss of soil fertility and can reduce surface water and groundwater quality. [...] Due to the number of tributaries, including tributaries of Gelston Burn/Carlingwark Lane, which could be affected by forestry there is an increased risk to the water environment. [...] Appropriate mitigation should therefore be provided in the plan and subsequent work plans for how this will be addressed. [...] All watercourses that are identified as a potential downslope receptor to an increased risk of phosphate leaching or sedimentation should be highlighted in</p>	<p>The plan highlights the importance of avoiding detrimental leaching and diffuse sedimentation through careful operational work planning. See section 4.7.2.</p>

Consultee	Date contacted	Date of response	Issues raised	FLS response
			the plan, accompanied with detailed mitigation options.	
NatureScot	8/10/20	9/11/20	<p>In general [...] the plan [is] restricted in terms of its ambition to restructure the existing conifer blocks, as it proposes very little that will create a woodland resource which can help to address the current climate and biodiversity crises.</p> <p>Specific comments:</p> <ul style="list-style-type: none"> • we welcome PAWS restoration; but consider expanding native woodland in these areas, and connecting with adjacent fragments • herbivore impacts [...] are too high to allow palatable woodland species to regenerate. [These] will need to be significantly reduced and so a deer management plan needs to be an important element of these proposals • We welcome the proposal to create riparian corridors of native woodland across the site. However we would encourage that there should be more of these with all of the main watercourses addressed, 	<p>Hopefully the final plan demonstrates FLS's commitment to creating a more diverse woodland combining productive conifers, native woodland and open space – helping to sequester carbon, add resilience, enhance habitats and provide an attractive wild place for visitors to enjoy.</p> <p>A considerable expansion of native woodland around the PAWS restoration sites (and elsewhere) will provide significantly improved habitat connectivity.</p> <p>The Scree LMP area sits within the FLS Solway Deer Management Unit. Our Wildlife team will play a critical role in managing deer numbers to allow all native woodland (and soft conifers such as Douglas fir) to establish. Monitoring of native woodland will highlight undesirable browsing damage and the need for action. Deer fencing is not a preferred option at this site due to its popularity with walkers and so targeting deer control (along with other crop protection measures) at vulnerable sites will be a top priority.</p>

Consultee	Date contacted	Date of response	Issues raised	FLS response
			<p>and for there to be an increase in the average width of these corridors</p> <ul style="list-style-type: none"> It is disappointing to see the proposed use of clearfell coupes on Doach – we would prefer to see more use of continuous cover forestry to protect soil and watercourses. Similarly it is disappointing to see the proposal to decrease species diversity and increase clearfell coupe size with elevation on Mid Hill. Alternative plans for continuous cover forestry or to restore to native woodland/scrub in this area might have delivered greater resilience to changing climate we would agree that there are excellent opportunities for diverse tree species and high yields across the site. Increasing the diversity of planted species across the site will also increase its resilience to pests and pathogens and improve its value for biodiversity. We would have expected to see much more creation of new native woodland 	<p>All the main watercourses through the plan area have been given a generous riparian buffer of native broadleaves and open space (mostly exceeding the UKFS guidance). In many locations the watercourses will run through large areas of native broadleaf woodland, such as Potterland Burn and the lower reaches of Screele Burn.</p> <p>Clearfelling of the very top of Doach wood is considered the most appropriate silvicultural method at the current time. The three coupes to be felled in the plan period (08005, 08008, 08010) all contain larch and Western Hemlock which need to be removed to meet other plan objectives, and only taking these species as a selective thinning would leave the remaining trees highly vulnerable to windblow.</p> <p>Regarding Mid Hill - refer to response to D&G Council. A large area of the plan to the west of Mid Hill has been classified as Minimum Intervention where a scrubby / open mosaic of habitats is likely to establish.</p> <p>Hopefully the final plan demonstrates the significant commitment to increasing native woodland throughout the plan area. Native</p>

Consultee	Date contacted	Date of response	Issues raised	FLS response
			<p>across the area either through expansion of existing remnants or through the planting of native species either for biodiversity or for timber</p> <ul style="list-style-type: none"> • We would encourage keeping roe deer numbers low to allow for ash regeneration at Potterland (and elsewhere on the site) – the more natural regeneration, the more chance of seeing some resistance to ash dieback emerging in the new generations. As ash is an extremely palatable species, currently regeneration will be being held back, so this opportunity cannot be developed <p>We welcome and are supportive of the development of the concept plan for the Scree Land Management Plan [in regard to the East Stewartry Coast NSA]</p> <p>Key NSA issues relevant to the plan:</p> <ul style="list-style-type: none"> • need for sensitive forest design • loss of small woodlands 	<p>woodland will have almost doubled when the plan is fully realised.</p> <p>Roe deer numbers will be managed to appropriate levels over the plan area. Particular focus will be on reducing browsing pressure on recovering / young native woodland, but we will also endeavour to minimise damage in the Potterland Hill natural reserve area to benefit any resilient Ash growing here. See section 4.1.8.</p> <p>Landscape response:</p> <p>Refer to Appendix VI for a full assessment of the area’s landscape qualities and how the land management plan responds to these.</p>

Consultee	Date contacted	Date of response	Issues raised	FLS response
			<ul style="list-style-type: none"> • conservation and expansion of native woodlands • conservation of riparian woodlands • recreational opportunities • regard for key long views (panoramic views from the summit of Screel should be maintained) <p>Key NSA opportunities of relevance:</p> <ul style="list-style-type: none"> • Encourage a high standard of design for forests and woodlands in the NSA, including regard for key long views. • Support and encourage the regeneration and replanting of small woods, shelterbelts and riparian trees, including the renewal of boundaries where necessary. • Encourage identification of opportunities for the expansion of native woodlands. <p>Screel Hill is an important landmark feature [in the NSA]. The preservation of the open character of the hilltop, including the balance between the open land with rocky outcrops and heathland and the</p>	

Consultee	Date contacted	Date of response	Issues raised	FLS response
			more heavily forested slopes is an important part of its character and should be preserved. Care should be taken to avoid harsh edges to coupes, between transition zones and edges.	
Historic Environment Scotland	8/10/20	29/10/20	From the information provided it would appear that no designated features would be affected by the Management Plan Revision and, therefore, HES has no comments to make.	No response required.
Scottish Water	8/10/20	26/10/20	There are no [recorded] Scottish Water drinking water catchments or water abstraction sources, which are designated as Drinking Water Protected Areas under the Water Framework Directive, in the area that may be affected by the proposed activity. There are no [recorded] Scottish Water assets (including water supply and sewer pipes, water and waste water treatment works, reservoirs, etc.) in the area.	No response required.
Community councils – Auchencairn, Buittle, Kelton	8/10/20	No response		

Consultee	Date contacted	Date of response	Issues raised	FLS response
<p>South West Community Woodlands Trust (owners and managers of neighbouring Taliesin community woodland)</p>	<p>9/10/20</p>	<p>1/12/20</p>	<p>General agreement that the plan was positive. We particularly like that landscape/visitor experience is objective number one.</p> <p>Keen to continue to manage the coppice [on FLS ground in Potterland] for the next 10 years [...] so, we are happy to see this proposed in the plan.</p> <p>It is positive that broadleaf trees and native trees are being re-instated, especially in a few areas so close to Taliesin. It is also good to see some intention of creating open spaces. We'd like to see more of this.</p> <p>We are keen to see a sensible solution to the habitat that thrives between Taliesin and FLS boundaries to encourage the continuation of endangered insects and invertebrates in those strips of land [e.g. along tracks]. This would need an increased level of communication between FLS, Taliesin and forestry contractors.</p> <p>Desire to see Lower Kildow waterfalls and upstream area designated as minimal intervention for biodiversity benefits</p>	<p>FLS will continue to support the trust in this work offering advice and resources where necessary, and will review this partnership project on an ongoing basis. The restocking design of the slopes to the south west of Taliesin incorporates a fringe of oak woodland amongst the Douglas fir which will soften the transition along the shared boundary, and complement the rich native woodland establishing in Taliesin. Plans for all management activities close to Taliesin will be shared with SWCWT.</p>

Consultee	Date contacted	Date of response	Issues raised	FLS response
Local community / general public (online consultation publicised via social media and posters)	Open for responses between 19/10/20 and 13/12/20		<p>A total of 40 online responses were received in addition to a number of direct correspondences and have been grouped into the following themes (the full list of comments is shown below):</p> <p><u>Good points / Values</u></p> <p>Views and landscape Big trees and forest cover Physical and mental health benefits Formal paths and facilities Informal paths Wildlife</p> <p><u>Bad points / Concerns</u></p> <p>Damage to paths / Access restrictions Undesirable natural regeneration Slow pace of restocking Excessive clearfelling Irresponsible behaviour of visitors Impacts of land management on neighbours Feral pigs</p>	<p><u>Good points / Values</u></p> <p>The key viewpoints (Screel summit and mid-point resting point, Doach top) will all be kept open to ensure visitors can continue to enjoy the panoramas from these locations. The impact of all planned management on the special qualities of the local landscape has been carefully considered, see Appendix VI for more details.</p> <p>There are excellent conditions in the plan area to grow conifers beyond their standard rotation to develop stands of 'big trees'. Existing stands of mature conifers have been considered against other plan objectives, for example the Western Hemlock stand on the eastern side of Potterland will be felled as it is producing seed which compromises the establishment of native broadleaved woodland, however other areas (such as the Douglas Fir at the Doach) will be managed for continuous cover by nurturing natural regeneration of the desired tree species to develop an understorey of future 'big trees'. The premature felling of larch (due to larch dieback disease) left large areas of open ground on Screel, and it is critical that these are</p>

Consultee	Date contacted	Date of response	Issues raised	FLS response
				<p>restocked promptly to re-establish woodland cover.</p> <p>The primary objective of this plan is visitor experience, and this was further justified by the high number of respondents mentioning the importance of the forests and hills for their physical and mental health. Every effort will be made to minimise the impact of land management operations on public access, and the plan design will give visitors a varied experience amongst different types of woodland and open space (see section 4.5.2).</p> <p>FLS will continue to promote and manage the parking and formal trail at The Doach, and will also investigate opportunities for easier access. Dumfries and Galloway Council are responsible for the upkeep of the Scree Hill path but FLS will work in partnership to ensure visitors have a high quality experience, including maintaining the car park. The design of the future forest (see Map 6) has sought to establish interest and diversity in the small-scale landscape around popular trails.</p> <p>Known popular informal trails (such as the hill access from Taliesin) will be recorded in work planning prior to forestry operations. Routes</p>

Consultee	Date contacted	Date of response	Issues raised	FLS response
				<p>will be protected where possible and appropriate clear access left after completion.</p> <p>Scree, Potterland and The Doach are rich in biodiversity. FLS is committed to protecting important species and habitats, and the plan identifies opportunities for further enhancement (see section 4.2).</p> <p><u>Bad points / Concerns</u></p> <p>All formal and known popular informal paths will be recorded during work planning prior to any operations. Care will be taken to avoid damage, but where this is unavoidable then appropriate reinstatement works will be undertaken. FLS will make safe any known dangerous trees where these pose a risk to the public.</p> <p>The negative implications of allowing undesirable natural regeneration to establish has been highlighted in the plan. In particular, stands of mature Western Hemlock have been targeted for early felling to remove the seed source, and where this species is establishing on clearfell sites and open ground it will be</p>

Consultee	Date contacted	Date of response	Issues raised	FLS response
				<p>controlled before it compromises the site objectives.</p> <p>Unfortunately the requirement to prematurely fell large areas of larch at Screele has left large unplanned areas of open ground, and undone the progress that had been made on diversifying the age structure of the forest. This will take some time to recover from. On sites previously planted with larch, and subsequently felled due to P. ramorum it is recommended that the site is not restocked immediately to reduce the risk of further infection. This has delayed restocking programmes but these are now on track for re-establishing woodland cover.</p> <p>FLS encourages responsible public access on Scotland's forests and land. The Scottish Outdoor Access Code explains what is acceptable behaviour and most visitors are respectful of this. However a small minority of visitors choose to behave irresponsibly such as littering and not controlling dogs. FLS will continue to work with partners including Dumfries and Galloway Council and Police Scotland to educate visitors, and where necessary to take appropriate action.</p>

Consultee	Date contacted	Date of response	Issues raised	FLS response
				<p>Planning prior to works commencing will identify where land management operations may impact directly or indirectly on neighbours. In such cases FLS will communicate plans with neighbours and discuss any issues or concerns. Similarly, FLS will engage constructively with neighbours on wider issues, such as managing the impacts of feral pigs.</p> <p><u>Suggestions and Opportunities</u></p> <p>In addition to the above, we have considered all the suggestions, opportunities and significant features or issues submitted during the public consultation, and where possible they have been incorporated into the plan. Some issues are ongoing and have been shared with local FLS staff to ensure they consider them during the planning and delivery of works, and take any necessary action.</p>

A summary of the comments received from members of the public (with number of responses)

Use / Connection

Running 5

Horse riding 2

Walking 23

Cycling 6

Education (inc. forest school, nursery) 2

Neighbour 5

Orienteering 1

Good points / Values

Views from top of Screele hill 1

Scattered trees regenerating along the ridge line, which adds to interest 1

Shelter of tree canopy (especially from mature conifers in Doach) 1

Ongoing harvesting as this just adds change to the forest (e.g. views opening up and then closing over again) 1

Douglas fir in the Doach (extremely impressive trees; some of the best trees visible to the public in the region; eventually will need harvesting or will blow over) 1

Parking and facilities 1

Space for children to learn and develop in the outdoors 2

Local green space / 'wild' land for physical and health benefits 1

Mixture of formal and less-defined trails 1

Views 3

Good for mental health 4

Important for my survival – I visit in times of personal hardship 1

Best place locally for short intensive hill walking and running 1

Good easy but rewarding hill to climb 1
Doach Wood paths are well marked and comfortable – no reason to change 1
Physical exercise 4
Would be lost without these facilities 1
Accessible by cycling – no need to use car 1
Beauty and tranquility 1
As an 80 year old, love the flat doggy walk from Doach car park 1
Good for tourism 1
Berry picking on Screel hill 1
Nearest hill to Castle Douglas - any other hill at least 30 min drive away 1
Mindful walking in easy reach 1
Quiet 2
Wildlife 4
Local knowledge routes away from core paths 2
Part of the landscape 1
Close to home 2
The sight, sound and smell of dense woodland on the lower slopes are an immediate attraction on arrival at Screel or the Doach 1
'Big tree' feeling 1
I have a great and enduring interest in the area in question. As have my children and grandchildren from our constant enjoyment of it 1
Recent oak planting along the north east side of Screel 1
The area between Screel and Mid Hill is developing nicely after the fellings a dozen years or so ago along with the lowering of the upper planting limit 1
My second garden 1
Glad to see that plenty of Douglas has been planted behind Glenyerrock, as well as the areas of Pine along the top 1
Wilderness 1

Quality of trees [high yield class] particularly the Douglas fir [Screel, Potterland and Doach] 1

Bad points / Concerns

Slow pace of restocking 1

Western Hemlock natural regeneration 1

Disturbance and irresponsible public behaviour (1 neighbour)

Restricted access for horse riders along Glenyerrock track 1

Risk from windblown leaning trees over paths and desire lines 1

Sitka regeneration on Potterland Hill 1

Well used path [desire line] from Taliesin up Screel could become obstructed due to felling 1

Changes to water drainage and exposure to winds (1 neighbour)

Adder population seems to have got out of control 1

What will be the strategy to eradicate the feral pigs issue? (1 neighbour)

Some litter in car park [Screel?] 1

Nowhere safe to secure bikes / e-bikes 1

No warning signs in Potterland when lorries are using the quarry – have had some close encounters 1

Irresponsible owners who don't tidy up after their dogs 1

Rubbish and human waste 1

Recent clearance of the middle slopes on Screel have materially diminished the overall attractiveness of the Hill 1

Members of the public being abusive to residents, littering, leaving human faeces in the verges (1 neighbour)

Loose dogs accessing farmland adjacent to the Doach woods, killing and injuring sheep. The fence needs to be adequate to protect farmers livestock 1

Destruction of the land surface [by harvesting machinery destroying footpaths] runs very counter to policies of open access and amenity 1

Sitka spruce natural regeneration on Potterland Hill 1

Overnight camping and human waste at both Doach and Screel 1

Suggestions / Opportunities / Significant features or issues

Faster restocking to establish conifer trees more quickly 1

Doach is well known for its large, well thinned Douglas fir. Should be establishing future 'big trees' now with prompt restocking of suitable species 2

Open up the Lower Kildow waterfall and enhance the upstream flat riparian areas with native woodland 5

Paying to park to increase revenue is not an issue for me 1

Multi-use is hopefully the way forward for these areas 1

Upgrade the bottom path at Doach to all-ability (wheelchair) standard 1+

Replace the map and info board at Doach 1

Restoration of old mill pond south of Taliesin 1

Transformation to native woodland around old mill pond site south of Taliesin 1

Peat bog conservation 1

Increase in broadleaved trees 1

Effective deer management 1

Difficult to access good sites for taking groups of children (no vehicle access) 1

Leave wide margins along burns to benefit visitors and wildlife 1

Keep hills free of conifers 1

Car park about right size 1

Ensure tracks and paths are kept open 1

More native hardwoods 1

Improved informal access to lochan west of Chapelyard 1

Events in partnership with other local visitor destinations 1

Forest continues to require sympathetic management 1

Scree Hill signage on public roadside needs improvement 1

Conservation is an important element of the NSA 1

Regeneration of woodland essential for climate change issues 1

More seating and picnic benches to assist the less-able 1

Secure parking for e-bikes 1

Dog waste bins in car parks 1

Should be maintained as commercial woodland to generate funds for path upkeep 1

Keep a continuous canopy? I'm sure the local folk would be most appreciative however coupe felling is probably a more likely scenario 1

Please leave the ridge untouched, great for technical running 1

Tracks on east side of Scree going up from Taliesin through the trees 1

Preserve single track through forest up from Taliesin 1

Preserve ridge in its natural state 1

Cattle free link through fields from Castle Douglas to Scree 1

Composting toilet in the forest 1

Avoid straight line patterns and regular spacing for deciduous tree planting 1

Directly opposite Taliesin, there is a steep area with quite a lot of birch and a few other native species which might usefully be left to regenerate naturally (or be planted in more native species) following harvesting of the present conifer crop 1

Mid Hill adjoins some fine native woodland, and the native-dominated zone along the Troudale Burn should be retained and perhaps enhanced 1

Designate the rather small area of apparently natural and probably 'ancient' woodland on the north western side of Potterland Hill / south eastern slope of Croach Hill (nx79185657) for native woodland expansion 1

Maintain a "Big Tree" feeling around the Scree entrance. There should be no hurry in significant changes to its structure [as it moves towards native woodland] 1

Appendix IV: Tolerance table

	Maps 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	<ul style="list-style-type: none"> Fell date can be moved within 5 year period where separation or other constraints are met. 	<ul style="list-style-type: none"> Up to 10% of coupe area. 	<ul style="list-style-type: none"> Up to 3 planting seasons after felling. 	<ul style="list-style-type: none"> Change within species group e.g. evergreen conifers or broadleaves. 		<ul style="list-style-type: none"> Increase by up to 5% of coupe area 	
Approval by exchange of letters and map	Y	<ul style="list-style-type: none"> Advance felling of Phase 2 coupe into Phase 1 	<ul style="list-style-type: none"> Up to 15% of coupe area 	<ul style="list-style-type: none"> Between 3 and 5 planting seasons after felling, subject to the wider forest and habitat structure not being significantly compromised. 		<ul style="list-style-type: none"> Additional felling of trees not agreed in plan. Departures of > 60m in either direction from centre line of road 	<ul style="list-style-type: none"> Increase by up to 10% of coupe area Any reduction in open space of coupe area by planting. 	<ul style="list-style-type: none"> Up to 5ha
Approval by formal plan amendment may be required	Y	<ul style="list-style-type: none"> Felling delayed into second or later 5 year period. Advance felling (phase 3 or beyond) into current or 2nd 5 year period. 	<ul style="list-style-type: none"> More than 15% of coupe area. 	<ul style="list-style-type: none"> More than 5 planting seasons after felling, subject to the wider forest and habitat structure not being significantly compromised. 	<ul style="list-style-type: none"> Change from specified native species. Change Between species group. 	<ul style="list-style-type: none"> As above, depending on sensitivity. 	<ul style="list-style-type: none"> In excess of 10% of coupe area. Colonisation of open space agreed as critical. 	<ul style="list-style-type: none"> More than 5ha.

NOTES:

* Felling sequence must not compromise UKFS, in particular felling coupe adjacency

** No more than 1ha, without consultation with FCS, where the location is defined as 'sensitive' within the Environmental Impact Assessment (Forestry) 1999 Regulations (EIA)

*** Tolerance subject to an overriding maximum 20% open space

**** Where windblow occurs FCS should be informed of extent prior to clearance and consulted on where clearance of any standing trees is required

Table of Working Tolerances Specific to Larch

	Adjustment to felling period	Adjustment to felling coupe boundaries	Timing of restocking	Changes to species	Changes to road lines
FC Approval not normally required	Fell date for all larch can be moved and also directly associated other species	Larch areas can be treated as approved coupes. Other conifers directly associated with larch being felled, may also be removed up to an equivalent of 20% of the area occupied by the larch or 5 ha, whichever is greater	To be undertaken within the overall plan approval period.	Replacement as per the agreed restock plan, but where this is not specified or is larch this may be replaced with either another diverse conifer (not SS) or Broadleaves.	
Approval normally by exchange of letters and map. In some circumstances Approval by formal plan amendment may be required		Removal of areas of other species in excess of the limits identified above.	Restocking proposals outwith the plan approval period.	Restocking proposals for other species which do not meet the tolerances identified above.	New road lines or tracks directly necessary to allow the extraction of larch material.

Appendix V: Historic Environment records

Refer to Map 12

Historic Environment Records					
Designation	Name	Feature Description	Grid Reference	Importance	Area (ha)
Undesignated	GLEN OF SCREEL BURN	FARMSTEAD, HEAD DYKE	NX 791 545	Regional importance	0.43
Undesignated	SCREEL	CAIRN	NX 779 553	Regional importance	0.01
Undesignated	Mill pond for Potterland Mill		NX 7953 5369	Local importance	
Undesignated	Sheep ree		NX 7978 5417	Local importance	
Undesignated	'Garie' farmstead		NX 7989 5621	Local importance	

Appendix VI: Landscape Assessment and 3D Visualisations

Refer to separate attached document