

# CREETOWN

## Land Management Plan

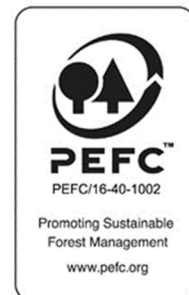
### 2021 - 2031

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

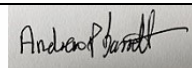


Property Details			
Property Name:	Creetown		
Grid Reference (main forest entrance):	NX 48355873	Nearest town or locality:	Newton Stewart
Local Authority:	Dumfries and Galloway		

Applicant's Details			
Title:	Mr	Forename:	Stephen
Surname:	Stables		
Position:	Planning Forester		
Contact Number:			
Email:	stephen.stables@forestryandland.gov.scot		
Address:	Forestry and Land Scotland, Newton Stewart Office, Minnigaff, Creebridge, Newton Stewart		
Postcode:	DG8 0BY		

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

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	21/05/2021	<b>Date of Approval</b>	
		<b>Date Approval Ends</b>	

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## 1.0 Objectives and Summary

### 1.1 Plan overview, objectives and general site description

Plan name	Creetown
Forest blocks included	Creetown
Size of plan area (ha)	97.3ha
Location	See Location map ( <b>Map 1</b> )

<b>Long Term Vision</b>
<p>Providing a back drop to Creetown village, the Creetown block is currently an area of mixed woodland that also lies on and is adjacent to significant areas of Ancient Semi Natural Woodland (ASNW) and woodland of Long Established Plantation Origin (LEPO). The long term vision for the block is to maintain the mature woodland backdrop to the village for as long as is practical while gradually transitioning the woodland back to broadleaf woodland that will provide a range of natural habitats.</p> <p>Some of the work is already well advanced in Chain Wood, with successful conifer removal during the previous plan and will continue in Balloch Wood with our planned phase 1 clearfelling.</p>
<b>Management Objectives</b>
<ol style="list-style-type: none"> <li>1. Maintain, enhance and restore the Ancient Semi Natural Woodland areas (LEPO) present in the plan area.</li> <li>2. Over time gradually convert conifer woodland to broadleaf woodland and increase species diversity.</li> <li>3. Maintain Community involvement within block through revised working agreement.</li> </ol>
<b>Critical Success Factors</b>
<ul style="list-style-type: none"> <li>• Clearfell of all <i>P ramorum</i> infected larch areas</li> <li>• Successful native broadleaf restocking establishment of phase 1 clearfell sites</li> <li>• Enhance existing and expand Native broadleaf woodland areas throughout plan area</li> <li>• Improve water quality throughout R Cree catchment through enhancement of riparian zones (centred on Moneypool and Balloch Burns)</li> <li>• Increase species diversity throughout plan area notionally using areas cleared for <i>P ramorum</i></li> </ul>

### 1.2 Summary of planned operations

Table 1

Summary of Operations over the Plan Period	
Clear felling	<b>19.5ha</b>
Thinning	0.0ha
Restocking	<b>19.5ha</b>
Afforestation	0.0ha
Deforestation	0.0ha
Forest roads	<b>150.0m</b>
Forestry quarries	0.0ha

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 **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**.

The plan’s objectives were analysed against the constraints and opportunities identified during scoping and consultation. Preferred options were then chosen for delivering the objectives, and these proposals are summarised on the Analysis and Concept map (**Map 3**).

## 3.0 Management Proposals - regulatory requirements

### 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)	N	At its most western tip, the Balloch Wood section of Creetown LMP lies around 0.5km from the Cree estuary SSSI.
National Nature Reserve (NNR)	N	
Special Protection Area (SPA)	N	
Special Area of Conservation (SAC)	N	
World Heritage Site (WHS)	N	
Scheduled Monument (SM)	N	
National Scenic Area (NSA)	N	
National Park (NP)	N	
Deep peat soil (>50 cm thickness)	N	
Tree Preservation Order (TPO)	N	
Environmentally Sensitive Area	Y	Western Southern Uplands
Biosphere reserve	Y	Galloway and Southern Ayrshire Biosphere
Local Landscape Area	N	
Ancient woodland	Y	Chain and Chapelton Woods are recorded in the Ancient Woodland Inventory as Long Established Woodlands of Plantation Origin (LEPO) (class 2b).
Acid sensitive catchment	N	
Drinking Water Protected Area (Surface)	N	

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

Under previous iterations of the Creetown plan the block has been under Low Impact Silviculture (LISS) however little or no thinning (small scale group clearfells) has taken place.

Now with the mature conifer elements of the plan having reached a stage whereby thinning would probably initiate significant windthrow, clearfell becomes the preferred management type by default.

While much of the woodland still appears to be relatively windfirm only two areas have therefore been identified for clearfell within the period of this plan, coupes 86007 and 86008 both contain diseased larch (*P. ramorum*) and require to be clearfelled within the period of the plan.

In 86007 the conifer surrounding the larch (SS & NS P1961) is already showing signs of windthrow and for practical operational considerations will be removed along with the larch. For operational considerations, additional conifer is also scheduled in 86008.

Our proposed phase 1 and 2 clear fell areas are identified on the Management map (**Map 4**).

Table 3

Clearfell Summary by Phase and Coupe Number			
Phase	Coupe Number	Fell Year	Gross Area (ha)
1	86007	2022	6.14
1	86008	2022	13.36
<b>Total</b>			<b>19.50</b>

Table 4

Clearfell by Species													
		Net Area (ha) by Main Species >20% (or MC, MB)											
Coupe Number	Fell Year	CP	DF	EL	HL	JL	LP	NS	SP	SS	M C	MB	Coupe Total
86007	2022	-	-	-	2.0	-	-	4.14	-	-	-	-	6.14
86008	2022	-	1.0	-	-	6.6	-	5.26	-	-	-	0.5	13.36
<b>Plan Area Total</b>		-	<b>1.0</b>	-	<b>2.0</b>	<b>6.6</b>	-	<b>9.4</b>	-	-	-	<b>0.5</b>	<b>19.50</b>

Table 5

Scale of Proposed Felling Areas											
Total Woodland Area					97.0	ha					
Felling	Phase 1	%	Phase 2	%	Phase 3	%	Phase 4	%	Long Term Retention	%	
Net Area (ha)	19.50	20.1	0.00	0.0	7.46	7.7	0.00	0.0	53.00	54.6	

### 3.3 Thinning

Potential sites for thinning within the plan area are now probably confined to the broadleaf areas identified on the Thinning map (**Map 5**). This covers an area of 22.8ha.

There is however no thinning planned for the period of this plan.

Future 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. 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 exceptional 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 covered by this approval is 40 cubic metres per Land Management Plan 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

Our restocking proposals on clearfell sites have been selected by ESC, on-site observations and the previous rotations. Where appropriate, species diversification has been undertaken utilising both BL and alternative conifers for species diversification. Species choice also meets the criteria for restocking under UKFS, UKWAS and internal FC policy.

Native small seeded broadleaf will comprise most of the proposed restocking as well as some native Oak for Ancient Woodland restoration.

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	86007	6.14	2024	BL	R	1600s/ha	
1	86008	13.36	2024	BL	R	1600S/ha	
<b>Total</b>		<b>19.50</b>					

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

### 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.

Table 7

Plan area by Species						
Species	Current		Year 10		Year 20	
	Area (ha)	%	Area (ha)	%	Area (ha)	%
Sitka spruce	6.3	6.5	5.3	5.4	0.0	0.0
Other conifers	30.1	30.9	12.4	12.8	0.1	0.1
Native broadleaves	24.6	25.3	43.3	44.5	60.9	62.6
Other broadleaves	26.1	26.8	26.1	26.8	26.1	26.8
Open ground	10.2	10.5	10.2	10.5	10.2	10.5
<b>Total</b>	<b>97.3</b>	<b>100.0</b>	<b>97.3</b>	<b>100.0</b>	<b>97.3</b>	<b>100.0</b>

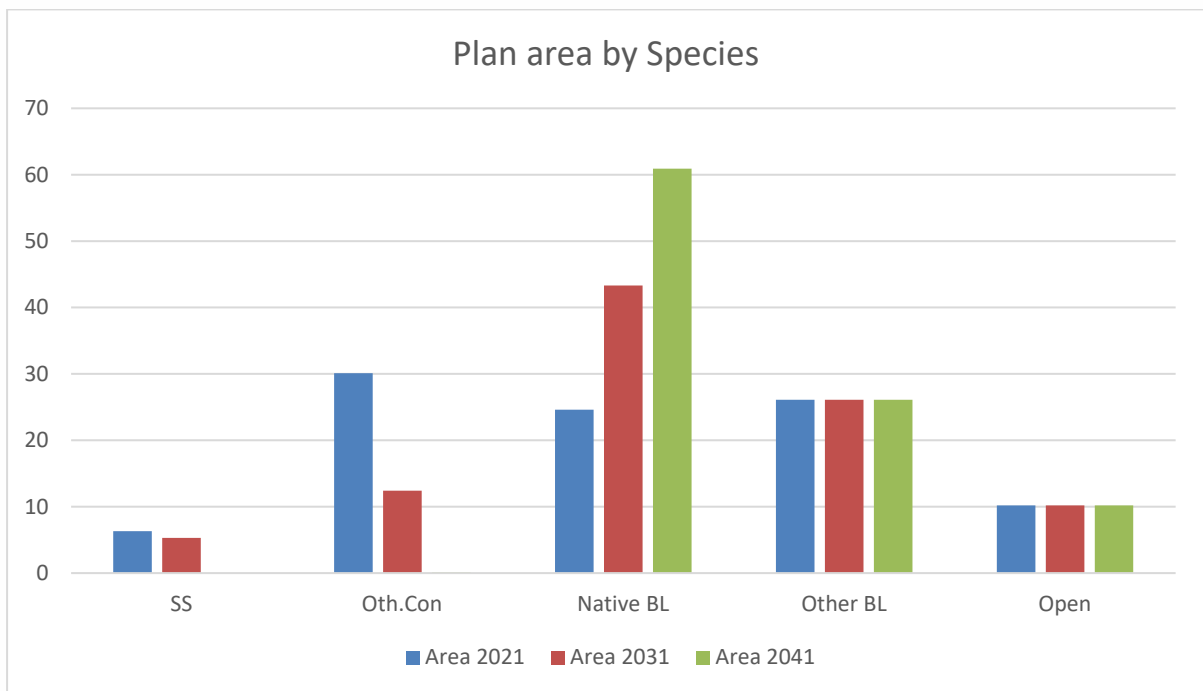
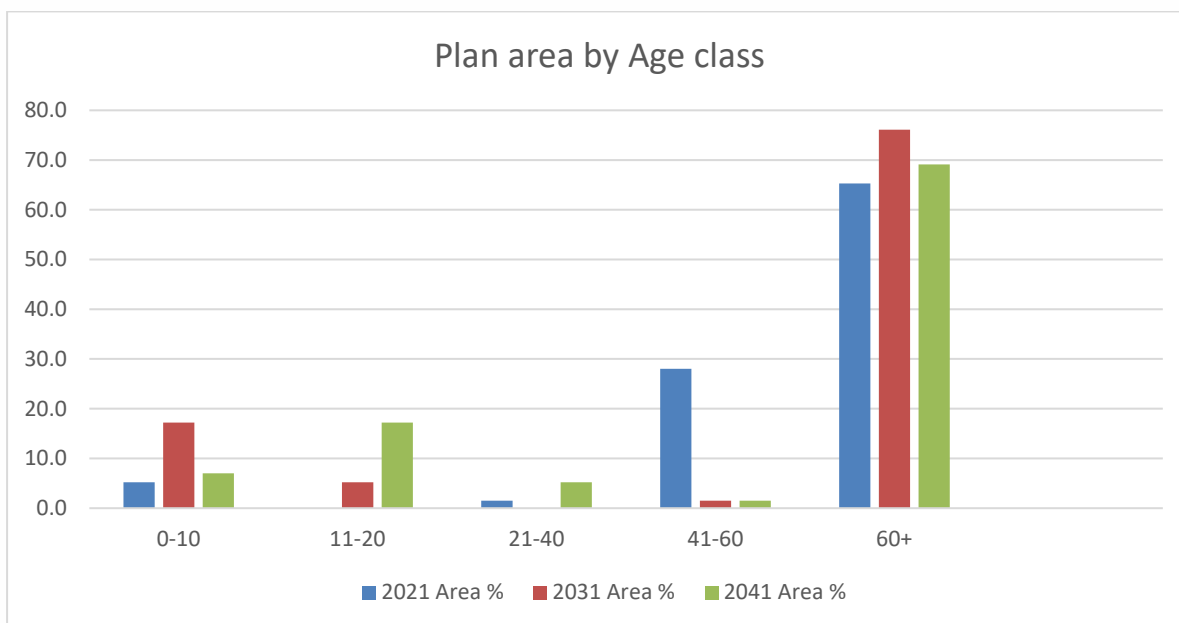


Table 8

Plan area by Age						
Age class (years)	Current		Year 10		Year 20	
	Area (ha)	%	Area (ha)	%	Area (ha)	%
0 – 10	4.5	5.2	15.0	17.2	6.1	7.0
11 – 20	0.0	0.0	4.5	5.2	15.0	17.2
21 – 40	1.3	1.5	0.0	0.0	4.5	5.2
41 – 60	24.4	28.0	1.3	1.5	1.3	1.5
60+	56.9	65.3	66.3	76.1	60.2	69.1
<b>Total</b>		<b>100.0</b>		<b>100.0</b>		<b>100.0</b>



### 3.7 Road Operations and Quarries

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

There are no quarries present in the LMP.

Table 9

Forest Road Upgrades, Realignments, New Roads and New Quarrying				
Phase	Name / Number	Length (m)	Year	Operation
1	Balloch Wood	150m	2021	New forest road construction
1	Balloch Wood	500m	2021	Forest road and associated loading points 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	There is no proposed Afforestation for the LMP.

EIA projects in the plan area		
Deforestation	NO	There is no proposed woodland removal within the LMP. Where there has been an identified benefit to the wider environment or community, modest increases to permanent open space, mainly focussed within the riparian zones may however be likely.
Forest roads	YES	A modest length of new forest road is required to access the area of infected larch planned for phase 1 removal and some upgrading and maintenance of the existing road network and associated loading points may also be required to facilitate the harvesting operations, up to around 500m. An assessment of the roading network throughout the National Forest Estate has been undertaken to see if a Construction licence from SEPA is required for works; none of the planned roading projects within the forest block will exceed the threshold requirements. Currently all timber haulage from the block, and from private plantation to the east, uses existing forest road and the minor county road network as a haulage exit route west to the A75(T).
Forestry quarries	NO	There are no active quarries within the LMP. To avoid the risk of using rock of unsuitable chemical content and to reduce the impact of stone transportation, stone material for forest road upgrade and other new construction to service the planned timber harvest will be sourced from our main quarry in the area, Queensway block.

### 3.9 Tolerance table

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

## 4.0 Management Proposals – guidance and context

General
General
<p>The Creetown Land Management plan area lies adjacent to the east side of Creetown village around 10km to the south west of Newton Stewart, Dumfries and Galloway. Apart from where it adjoins the village and other woodland on its western boundary, this small LMP area of only 97.0ha is generally surrounded by agricultural and open hill ground.</p> <p>The plan area comprises mainly broadleaf and mixed conifer woodland. The forest is FSC certified and the management seeks at all times to meet the UK Woodland Assurance Standard.</p> <p>Community involvement is the key issue for this Land Management Plan (LMP) and since 2009 the Creetown Woodlands, Balloch Wood Management agreement with the Balloch Community Woodlands group has been in place.</p> <p>Additional issues include restructuring of the plantation area to introduce greater age and species diversity, water quality within the Moneypool Burn subcatchment, effective deer control to promote the establishment of native broadleaves and alternative conifer species and the expansion of native broadleaf woodland focussed around the existing Ancient Woodland relict.</p> <p>This plan presents our felling and replanting proposals and our forest road formation and upgrade plans for the next ten years (2021 to 2031) in detail. Longer-term management (beyond 2031) of the plan area is also considered, mainly to provide context and to indicate the direction of travel.</p> <p>The initial ten year period is important because it relates to the parts of the LMP that require specific approvals from Scottish Forestry (South Scotland Conservancy).</p>

Silviculture
Clear felling
<p>As previously stated coupes 86007 &amp; 86008 have been identified for clearfell within the period of this plan.</p> <p>Coupe 86002 previously identified as a Group Shelterwood coupe, is now also identified for clearfell. Whilst relatively windfirm, the coupe is showing signs of incremental windthrow damage and with little previous preparatory group felling work having taken place the coupe has now reached a stage where future thinning / group felling would almost certainly compromise stand stability. Accordingly clearfell is planned for a later phase (outwith the plan approval period ) of the plan.</p> <p>The plan area and this site will be regularly assessed further windthrow damage.</p>
Other clearfelling
See section 3.4 Other tree felling in exceptional circumstances
Thinning

## Silviculture

Future thinning will generally be restricted to the broadleaf areas identified for Group Shelterwood.

## LISS

With low to moderate DAMS scores (Detailed Aspect Method of Scoring) and site types that should accommodate management under LISS, Group Shelterwood will be the dominant management type.

With little previous preparatory group felling work having taken place across the plan area the conifer crops have now reached a stage where future thinning / group felling would almost certainly compromise stand stability however the moderate to low stocking density broadleaf in coupes 86003 and 86004 remains thinnable and will persist as Group Shelterwood coupes.

Group Shelterwood treatment will comprise a mix of thinning and small size patch clearfell of up to 0.5ha. Much of the work will however focus on very light, almost single tree selection to accommodate the sensitive Community interests but generally encompassing:

- progressive thinning
- clearance of windthrow patches
- small-scale felling patches of up to 0.5ha to stimulate restructuring and promote regeneration of target BL tree species

Coupe 86006 was previously identified as a Group Shelterwood coupe. The coupe, on a PAWS site, is however showing signs of significant windthrow damage and is now at the stage where future thinning / group felling could almost certainly compromise stand stability. The coupe, as recommended by our national Native Woodland ecologist, will in future be managed as Irregular Shelterwood through an ongoing, gradual clearance of windthrow patches.

## Long term retentions / minimum intervention / natural reserves

The woodland known as Chapelton and Chain Wood (coupe 86001) is being left to gradually colonise with native trees following felling of conifer plantation trees. Although there is a significant area of broadleaf woodland and the current biodiversity value of the site is good it would not be appropriate at this time to classify this area as a Natural Reserve. Minimum Intervention is the appropriate classification in the short to medium term and, if a biologically rich native woodland community develops here in the future, it can be later reclassified as a Natural Reserve if required.

Management will be restricted to:

- Wildlife management
- removal of invasive exotics/non-native tree regeneration that could reduce value for biodiversity
- actions to benefit specific species of conservation priority
- fire fighting

Coupe 86005 consists of mature riparian broadleaf that will also be managed as Minimum Intervention.

## Silviculture

### Tree species choice

Our restocking proposals on clearfell sites have been selected by ESC, on-site observations and the previous rotations. Where appropriate, species diversification has been undertaken utilising both BL and alternative conifers for species diversification. Species choice also meets the criteria for restocking under UKFS, UKWAS and internal FC policy.

Native small seeded broadleaf will comprise most of the proposed restocking as well as some native Oak for Ancient Woodland restoration.

### Natural regeneration

Whilst there is evidence of really successful native woodland regeneration in Chain Wood and parts of Balloch Wood generally there is little in the way of natural regeneration across the block.

### New planting

There is no new planting scheduled for the plan area.

### Protection

Historically deer management has been very limited in the Town wood due its location behind the village, Roe deer are present throughout the LMP unit in high numbers, there is however little evidence of damage due to the structure and age of the current growing stock.

The current Region Deer Management Strategy is such that the deer population will be managed by deer shooting lease to facilitate the long-term establishment of broadleaf and soft conifer trees without recourse to physical protection. An annual cull, set using a variety of data including population counts, fecundity and mortality rates and damage levels, will allow us to meet current objectives. With future felling planned, these areas will be reviewed in order to assess whether safe deer management can be carried out utilising SNH 18(2) Night shooting authorisations (if granted) and looking ahead the requirement to identify suitable open areas for effective and safe culling.

Much of the neighbouring land supports local sheep farming so the maintenance and regular checking of stock fences is crucial to ensure future incursion to vulnerable restocking sites.

The blocks are also actively monitored and when resources allow trapped for Grey squirrel incursion.

### Road operations

Roads access is generally restricted with the minor road to Chapelton Farm not really suited for articulated vehicles. Minor roads from Creetown to Gatehouse of Fleet (routes not currently categorised in the D&G Timber Transport Group Agreed Routes Map for Timber Haulage) will however be used for limited timber haulage to access on to the main trunk roads. The Area Engineer Roads and Transport Division should be consulted at least 5 weeks prior to start of operations.

In the plan period there is a small section of new forest road construction and other road network maintenance required prior to harvesting operations commencing Balloch Wood. All proposed / planned forest roads are identified on the suite of maps.

## Silviculture

### Public Access

The Balloch Wood block is essentially a town wood adjacent to Creetown with trails from the village and private sector woodland linking to it.

The Sustrans National Cycle Network (route 7) runs along the public road to the north of Chain and Chapelton Woods.

## Biodiversity

### Designated sites

See Native Woodland below for Ancient Semi Natural Woodland sites.

### Native woodland

Ancient Semi Natural Woodland (including PAWS sites) are present in both blocks.

Chain and Chapelton Woods are recorded in the Ancient Woodland Inventory as Long Established Woodlands of Plantation Origin (LEPO) (class 2b). Most of Balloch Wood, including Balloch Wood, is similarly classified and the western end of this block appears in the Inventory as "Other Woodland" which was present on Roy's 1750 map but not on the 1850 maps.

Previous conifer planting has generally suppressed the native ground flora but a Scottish Wildlife Trust survey in 2000 recorded 88 species of flowering plants including Bluebell (LBAP priority species) and elements of native woodland mainly Oak and Birch but also Ash, Hazel, Alder, Willow, and Holly remain.

Restoration to Oak Woodland in Chain and Chapelton woods and proposed open space creation throughout the block allowing greater light penetration should significantly enhance the native ground flora and post conifer removal evidence of really successful native woodland regeneration with exceptional species diversity and impressive ground flora is present. Although this area is mapped as a LEPO, it is clear that there was a semi-natural 'heart' to the nineteenth century plantation.

To the western end the broadleaf regeneration is 'ripe' for respacing being at the perfect height and still retaining good canopy depth. The eastern end of the wood where conifer was felled to waste is relatively inaccessible, broadleaf regeneration is however present.

Timber production is a low priority across the wood due to access difficulties and in places fairly wet soils.

The decision to respace should be made on aesthetic grounds to clean out non-native regeneration (occasional Sitka spruce saplings) and favour non-birch native species such as oak, hazel, goat willow, bird cherry etc. which can easily become suppressed and shaded out by birch otherwise. Favouring ash is also worth doing if there appear to be any resistant genotypes. Opportunities for Community based involvement exist.

The block appears to be a clear candidate for Minimum Intervention although some, albeit restricted, opportunities for future active stand management and could be ascribed Irregular Group Shelterwood to the east.

Most of Balloch Wood, including Balloch Wood, is similarly classified as LEPO and the western end of this block appears in the Inventory as "Other Woodland" which was present on Roy's 1750 map but not on the 1850 maps.



## Silviculture

This area has been actively managed by the community and contains way-marked trails and interpretative signs.

The birch area north of the road is not terribly inspiring although it is notable that areas of rhododendron control have worked well with minimal regrowth. Ground vegetation is however slow to recover (while mosses and ferns respond quickly post clearance treatment, grasses and herbs can take a long time to recover).

This area could be managed through Minimum Intervention.

Native woodland in the main area south of the road is more impressive and there may well have been an ancient/long-established semi-natural core to this wood along the burn. Ground flora is diverse and intergrades between upland mixed Ashwood, base rich lowland mixed deciduous and Wet alder woodland (i.e. NVC W9, 8 and 7).

There is a diverse mix of broadleaf trees here including a good semi-natural mix of alder, oak, birch, goat willow and ash (the latter showing similar rates of die-back to other ash in the area – category 2 to 3 in survey terms).

There are patches of planted beech and a scatter of mature beech plus some regeneration within the block. There is an argument for felling beech to safeguard the diverse flora within the core native woodland area however, given the plantation origin of much of this wood and the cultural and aesthetic qualities of beech in this much visited location, clearance of beech is a low priority.

The Norway spruce stands between Balloch Burn and the road are analogous to PAWS with High Ecological Potential. They are however in the 'understorey re-initiation' stage, with canopy gaps caused by sporadic windblow regenerating well with native trees and there is a rich ground flora. Whilst it is appreciated that this area looks tatty from the road and there may be some concerns about windblow, from an ecological perspective, this area should be managed through irregular group shelterwood or even minimum intervention as the native component is increasing without management. The processes here reflect why UKWAS promotes gradual restoration of PAWS as woodland conditions are maintained without a reversion to 'ground zero' through clearfelling and safeguards ecological continuity – the process that makes ancient woodlands so valuable.

Whilst the previous conifer under planting has generally suppressed the native ground flora, a Scottish Wildlife Trust survey in 2000 recorded 88 species of flowering plants including Bluebell (LBAP priority species) in the blocks.

### PAWS

There is Native Woodland (Ancient woodland and LEPO) within the block and on private ground close to the block (Cassencarie Wood, Long Wood and Falbae Plantation) and other sites some 5km from the block, along the Palnure Burn valley.

Increased levels of BL woodland are however proposed for subsequent rotations (see Native Woodland above for management).

### Protected and priority habitats and species

Red Squirrel (UKBAP) is present within the block at low densities but given the high proportion of existing large seeded broadleaf, our intention to restore parts of the block to Oak woodland and the valley connectivity that the blocks have to surrounding

## Silviculture

broadleaf woodland the area is not considered to be part of the “Red Squirrel Stronghold site”. Stronghold sites are areas designated by the Scottish Government as sites where Red Squirrel can be assisted to survive through positive management practices. The Creetown blocks do however lie within the local Glenkens Priority Area for Red Squirrel Conservation (PARC) designation.

For now, our plans to delay clearfelling of conifer areas in Balloch Wood (NS, DF and SP) along with our planned additional increase in BL areas (generally small seeded) will ensure that the block does not further disadvantage Red squirrel.

Grey squirrel have however recently been detected close to and in the Creetown area. The block is actively monitored and, when resources allow, are trapped for Grey squirrel incursion.

The presence of Black Grouse to the east and outwith the boundary of the block is noted. Increased native broadleaf cover should benefit the species.

Numerous records of Otter (EPS/UKBAP species) mortality on the A75 near Creetown supports the fact that existing riparian habitats are well used by them with the Moneypool Burn a recognised breeding site and movement route from the Cree estuary to the Dee system via the Palnure Burn and Loch Grannoch. Increased BL cover and our aim to keep sections of stream banks permanently vegetated and allow them to persist throughout subsequent rotations will increase both the availability and connectivity of suitable breeding and feeding habitat. These measures should also benefit Water voles (UKBAP species) known to use the area.

UKBAP fish species (Brown trout, Sea trout, Atlantic salmon and European eel) should all benefit from our continued positive riparian management. The relatively recent conifer removal in Chain Wood, as part of our restoration to Oak woodland, and LISS management in Ballochanamour Wood has reduced conifer overshadowing issues along the Moneypool Burn and Balloch Burn respectively.

Badgers use the block. Sett locations will be identified and protected with conifer retentions during harvesting operations.

## Open water

The former curling pond to the east end of Balloch Wood is, along with other more recently created ponds, currently in an area of open ground and associated broadleaf and is in good condition.

All work undertaken will comply with the Forests and Water Guidelines (pending Fifth Edition) and our additional guidance “Managing Forest Ops to Protect the Water Environment (2019)”

## Open ground

In these narrow valley woodlands open space occupies less than 10% of the block. Planned open space tends to be a mixture of permanent open space centred on heritage sites, the many partnership recreation features and open areas along the main watercourses. Natural regeneration of native species may be accepted along watercourses where the regeneration will not be detrimental to water quality but will be

## Silviculture

monitored on the other open space sites. For maximum benefit wetland areas will be coincident with other open space areas to provide important wildlife habitat. There are no quarry developments planned during the period of the plan.

## Dead wood

Potentially the significant broadleaf component in the block should provide a source of deadwood close to riparian features. Site level retentions of broadleaf deadwood and occasional conifer will be identified in and around the BL expansion areas.

## Invasive species

Invasive non-native species (INNS) can impact directly on many environmental aspects of an area and are specifically recognised as a significant risk to water environments potentially causing problems for communities who rely on rivers and lochs for their livelihoods.

Despite control measure treatment over the years, areas of *Rhododendron ponticum* still persist through the woodland. Monitoring is ongoing and identified groups will continue to be treated as per the Region's INNS Policy.

Grey squirrel have recently been detected in the Creetown area and with the obvious external links to other external broadleaf areas along the wooded valley bottoms there are opportunities for their incursion. The block is actively monitored and, when resources allow, are trapped for Grey squirrel incursion.

Near the car park there are patches of what is believed to be a species of *Inula* (some species of this genus seem to be invasive based on some information on the internet) that should be removed.

## Plant health

*Dothistroma* Needle Blight (DNB) has been identified on Corsican and Scots Pine crops across the Region although at present is only causing mortality in CP.

Whilst there is little evidence of DNB within the Creetown plan area (little or no pine present) the pathogen has been identified in other local forest blocks and its wider presence in the block cannot be ruled out.

*Hylobius*, the Pine weevil, can cause extensive damage to young conifer crop (and at times young broadleaves) and is found both in this plan area and throughout the district. As part of the districts chemical minimisation strategy, the *Hylobius* Management Support System (HMSS) is used to measure *Hylobius* numbers on clearfell sites. Using billet traps virtually all of the districts conifer restock areas are assessed. Weevil numbers are recorded and used along with other site data to determine the optimum time for site restocking. This more flexible fallow period between felling and re-stocking may result in restocking not taking place within two years of felling (see Tolerance table section 2.7 as agreed with SF).

*Phytophthora ramorum* infection has been confirmed on Larch throughout the district. Many infected areas were initially felled to comply with the requirements of a Statutory Plant Health Notice (SPHN) but are now generally treated under a "management zone"

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agreement (removal to be carried out as soon as practical within the timeframe of the approved LMP). Areas of infected mature larch have been identified for removal. Planned restocking will avoid the use of larch focussing on native broadleaf woodland species to bring additional species diversity to the block.

*Heterobasidion annosum* is not endemic in the block. Stump treatment with urea post felling may however be required in the areas of poorer site types.

Ash dieback *Chalara fraxinea* is present in the LMP area (notably impacting mature Ash in Chain Wood.) Monitoring is ongoing and identified specimens will be treated as per the FCS published *Chalara* Action Plan for Scotland in 2013.

### Historic Environment

These woodlands have played an important role in the parish of Kirkmabreck.

In the 18th Century much community employment was provided in local sawmills, in the lead and shot business and in sand and gravel quarries in the woodlands at that time.

In 1958 the plan area was purchased by the Forestry Commission as two acquisitions; 506 Cassencarie from the trustees of J A Henryson Caird and 543 Larg Farm exchange from Mr A C Campbell and others.

There is comparatively little evidence of human settlement in the steeply wooded valleys with most of the archaeological remains confined to the less steep formerly unwooded parts of the Balloch Wood block.

### Designated sites

There are no Scheduled Monuments or Category A listed buildings present within plan boundaries but there are unscheduled historic sites present.

### Other features

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

## Silviculture

included within work plans for specific operations to ensure damage is avoided. Significant historic environment features will be depicted on all relevant operational map and machine operators will be fully briefed on their responsibilities prior to all sites being worked.

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 (see Appendix V).

## Landscape

The Creetown woodlands lie in a small-scale pastoral landscape much valued for its scenery, land around the Moneypool Burn lies within the Regional Scenic Area. Forming an important backdrop to Creetown, connecting the village on the coastal fringe to the surrounding uplands, the woodland impacts significantly on the landscape, viewed intermittently from the public road network. Managing continuity of woodland cover on the site through a LISS management regime is important.

The 1994 Dumfries and Galloway landscape assessment classifies the plan area as "Type 4 Narrow Wooded River Valleys", typically narrow valleys with steep wooded slopes enclosing flatter valley floors surrounded by "Type 16 Upland Fringe" an area of high, gently rolling pastures with numerous minor valley ridges and hollows. The 2000 Galloway Forestry framework classifies the Creetown woods as "Coast 8" Moneypool catchment where valley planting should be restricted to broadleaf to complement existing woodland and water quality issues are important and "Coast 11" Moneypool Forest where the creation of diverse forest edges is critical.

With few dominant features in the gently sloping woodland, landscaping will focus internally on the increased use of open space along forest trails and watercourses. Our small scale clearfells, driven by our statutory felling of infected larch obligation coupled with a planned increase in native BL restock and significantly extended rotation lengths will gradually enhance views of the block through time.

## People

### Neighbours and local community

During the development of this plan we have actively consulted with the local community and other stakeholders.

Kirkmabreck Community Council received the latest version of our local Strategic Plan, however local community involvement in the Balloch Wood block has to date been defined by the previous management agreement that FLS (previously FES) enjoyed with Creetown Initiative Ltd. Both parties joint managed agreed projects with the aim of enhancing public enjoyment and involvement in the social, environmental and economic benefits to the area. Whilst a wide range of facilities including the car park and picnic area, an extended trail network, wildlife pond creation, artwork developments and construction of a roundhouse viewing structure have been established over the last few years, future developments will be guided by the outcomes of a local consultation

<b>Silviculture</b>
exercise currently being carried out (see Appendix VI) and any future revised management / volunteer agreement. All facilities are recorded on the Features map and will be protected / conserved during any future forest operations. Fly tipping remains an issue along some of the minor roads bordering the northern block.
<b>Public access</b>
The Balloch Wood block is essentially a town wood adjacent to Creetown with trails from the village and private sector woodland linking to it. Part of the Core path network the trail is heavily promoted / used by local and visitor alike and through ongoing local community partnership has been maintained and developed to the extent that now, the block is considered part of the core Recreation facilities for the west of the Region. The Sustrans National Cycle Network (route 7) also runs along the public road to the north of Chain and Chapelton Woods, warning signs should be present when operations are ongoing.
<b>Soils</b>
<b>Ground preparation</b>
Inverted mounding will be preferred, but hinge and trench mounding may also be used as site dictates. No ploughing will be undertaken due to the excess carbon release on peaty soils and the development of asymmetrical root plates that impact on long term stand stability. Restocking will involve internal staff or external planting operators utilising trees of appropriate provenance sourced from various nurseries.
<b>Deep peats</b>
There are no candidate deep peat areas within the plan area for peatland restoration.
<b>Water</b>
<b>Drinking water</b>
Water pipeline identified running along roadside to north of Balloch Wood.
<b>Watercourse condition</b>
See section The Moneypool Burn supports a number of UKBAP fish species including Brown trout, Sea trout, Atlantic salmon and European eel. The Balloch Burn is an important watercourse for Brown trout. At the lower end of the Balloch Burn is the “Chalybeate”, meaning water containing iron salts or “Red Well”, basically a hole in the Sandstone bank of the valley where water drains to the burn. The red water, due to the high iron oxide or rust content of the water, was thought to have curative properties in days gone by but is in fact poisonous. Despite this water quality in both burns is good. Management of water catchment areas is a key environmental issue and we aim to comply with best practice and minimise sediment release from any forest operations. None of the watercourses in the block have figured in the Region’s water sampling programme monitoring.
<b>Flooding</b>

## Silviculture

FLS has considered flood risk of peak flows at the exit of the site and also further downstream.

Creetown LMP area lies within the Creetown PVA (Potentially Vulnerable Area 14/17) located in the west of the Solway Local Plan District that incorporates the town of Creetown. There is a risk of both mainly coastal flooding, in the town where the Ferry Burn discharges to the R Cree which is tidal at this location, and some river flooding mostly attributed to the Moneypool and Balloch Burn.

A series of selected actions set by SEPA and agreed following consultation with flood risk management authorities describe where and how flood risk will be managed. The actions identified below essentially focussing on non-forest activities are recognised as the most appropriate for the Creetown Potentially Vulnerable Area.

Selected Actions
Flood protection study
Maintain flood warning
Maintain flood protection scheme
Strategic mapping and modelling
Flood forecasting
Awareness raising
Self help
Maintenance
Emergency plans/response
Planning policies

Local authorities have a duty to assess watercourses and carry out clearance and repair works where the works would substantially reduce flood risk and as a riparian landowner along sections of the Moneypool and Balloch Burns FLS are responsible for the maintenance and management of their own assets to help reduce flood risk.

It is appreciated that new planting with associated operations of draining and ploughing can give rise to a very slight increase in peak flow (up to 20% at site scale), however with no additional areas of new planting proposed for this LMP, a planned optimal clearfell and management programme, well designed and significant riparian buffers and where appropriate forest wetland creation to minimise this effect, no increase to the existing flood risk is anticipated as a result of planned forest operations.

For enquiries about this plan please contact:

Stephen Stables  
Planning Forester  
Forestry and Land Scotland  
South Region  
Newton Stewart Office

Minnigaff  
Creebridge  
Newton Stewart  
DG8 6AJ

Stephen.stables@forestryandland.gov.scot  
+44 (0)7881 501586



## Appendix I: Description of Woodlands

<p><b>General Site Description</b></p>
<p>Creetown LMP is located around 4km south east of Newton Stewart and comprises two narrow, linear, detached woodland blocks of relatively even aged first rotation conifer afforestation and older mixed broadleaf / conifer woodland, essentially surrounded by arable farm ground and upland hill grazing, that to the west directly borders the village of Creetown.</p> <p>The Balloch Wood block is essentially a town wood with Community involvement the primary objective.</p> <p>Whilst some small areas of Community broadleaf restock are evident, no significant clearfell operations or restock has recently taken place. The plan area is not part of the Galloway Forest Park but does lie in the Galloway and Southern Ayrshire Biosphere and within an even larger area designated as an Environmentally Sensitive Area.</p>
<p><b>Topography</b></p>
<p>The topography of the block essentially comprises two narrow wooded valleys, steep in places, in a matrix of gently rolling pastureland. Elevations range from 30m in the valley bottom of Chain Wood up to 100m at Garrocher Farm.</p>
<p><b>Geology and Soils</b></p>
<p>Solid geology is composed of sedimentary Greywackes and shales of the Ordovician / Silurian period modified by glacial deposition and erosion. Although close to estuarine deposits the block is situated on the steeper ground, probably part of the previous coastline.</p> <p>The low elevations and steeper slopes have resulted in generally free draining brown forest soils on valley terraces around the Moneypool Burn area with poorer peaty and surface water gley soils on the wetter depressions and gentler slopes.</p>
<p><b>Climate</b></p>
<p>The south west of Scotland has a predominantly mild windy oceanic climate influenced by the Gulf Stream. Annual rainfall in the block ranges from 1200–1400mm mainly falling during the winter months October to February.</p> <p>Guidance on Climate Change suggests that the Region can expect an increased frequency of extreme weather events with the climate remaining wet and mild. Whilst there will be little impact on this LMP block with regard to primary species choice (mainly native broadleaf) there may be future threats towards the maintenance of wildlife habitat networks.</p>
<p><b>Hydrology</b></p>
<p>Whilst both the Moneypool and Balloch Burns showed high values for access for fish migration, water quality, water flows and levels and freedom from invasive species in the 2014 SEPA classification assessment, only the Balloch Burn was classified as “Good”. Due to its moderate ecological assessment the Moneypool Burn was classified as “Moderate”. Both burns are projected to have a “Good” classification in 2021.</p>

General Site Description	
Windthrow	
<p>The James Hutton Institute "Land Capability for Forestry" classification for the area is principally F4 (land of moderate flexibility for growth and management of tree crops) with additional small areas of F3, land with good flexibility.</p> <p>Whilst the risk of windthrow is suggested to be moderate and most of the P1960 mature conifer to the west seems well able to stand for some time, there are however pockets of blown trees across the block. The area to the south of the carpark, that has over the years suffered incremental windthrow, is particularly unattractive, has impacted significantly on the trails network and is certainly the poorest section of the block for windthrow.</p> <p>Over the last 10-15yrs the lack of focused thinning operations in the Creetown block has resulted in the situation where any invasive thinning now, even utilising small scale groups, would probably initiate significant windthrow that would in turn necessitate clearfell before the proposed clearfell phases.</p>	
Adjacent Land Use	
<p>The western part of Ballochamour Wood backdrops and frames the village of Creetown. Although there is woodland development (Christmas tree plantations) to the east of Balloch Wood, the neighbouring land use generally comprises arable farm ground and upland hill grazing.</p>	
Access	
<p>Access is generally restricted with the minor road to Chapelton Farm not really suited for articulated vehicles. Minor roads from Creetown to Gatehouse of Fleet (routes not currently categorised in the D&amp;G Timber Transport Group Agreed Routes Map for Timber Haulage) will however be used for limited timber haulage to access on to the main trunk roads. The Area Engineer Roads and Transport Division should be consulted at least 5 weeks prior to start of operations.</p> <p>New forest road construction (timber access point) is planned for phase 1 of the plan. All proposed / planned forest roads are identified on the suite of LMP maps. A proposed Timber Transport Haulage Plan can be found at Appendix VII.</p>	

Maps	
Location	Map 1 Creetown-Location map
Topography and Landscape	Map 2 Creetown-Key Features map
Public access	Map 2 Creetown-Key Features map
Historic environment	Map 2 Creetown-Key Features map
Biodiversity	Map 2 Creetown-Key Features map
Analysis and Concept	Map 3 Creetown
Management	Map 4 Creetown-Management map
Thinning	Map 5 Creetown-Thinning map

Maps

Future

Habitats and  
Species

Road

Operations

and Timber

Haulage

Woodland

composition

Geology and

Soils

Windthrow

Hydrology

Map 6 Creetown-Future Habitats and Species map

Map 7 Creetown-Road Operations and Timber Haulage

Map 8 Creetown-current woodland composition

Map 9 Creetown-Soils map

Map 10 Creetown-DAMS map

Map 11 Creetown-Natural Flood Management map

**Appendix II: EIA screening opinion request form**  
**Overleaf if required**

## Appendix III: Consultation record

Consultee	Date contacted	Date of response	Issues raised	FLS response
Dumfries & Galloway Council: Countryside Development, Anna Johnson	12.Oct.20	07.Dec.20	<ul style="list-style-type: none"> <li>* stress community engagement for locally important asset</li> <li>* highlighted Timber haulage on narrow access route and proposed road / loading facility issues</li> <li>* query regarding proposed species restock to replace larch</li> </ul>	Reply to these comments sent 08 Dec.20; other comments noted in LMP text
Susan Parker	Creetown resident	05.Dec.20	<ul style="list-style-type: none"> <li>* lack of public information</li> <li>* a “fait accompli” and not a true consultation process</li> </ul>	Reply to these comments sent 08 Dec.20
SEPA: Simon Watt (Peter Minting reply)	12.Oct.20	10.11.20	<ul style="list-style-type: none"> <li>* no objection to plan</li> <li>* flood risk potential (historical comment)</li> <li>* general good practice guidance and regulatory requirements identified</li> <li>* possible requirement for A Controlled Activities Regulations (CAR) construction site licence and CAR General Binding Rule 10 applies (all reasonable steps must be taken to ensure that discharge does not result in pollution of the water environment)</li> </ul>	Noted in LMP text

Red Squirrels in South Scotland: Stephanie Johnstone	12.10.20	05.11.20	* LMP lies within the Glenkens Priority Area for Red Squirrel Conservation (PARC) (follows SSRS 2019 review) * Due to accessibility and significant area of BL, there is a need to identify grey squirrels as an invasive species of concern and to commit to support of their long term control	Noted in LMP text
RSPB: Ed Tooth	12.10.20	23.10.20	* potential black grouse presence to the east of the site identified (clearfelled larch should be replaced with native broadleaved species)	Noted in LMP text
M Edwards	From Creetown Initiative website	21.10.20	* condition of council access roads * impact of fallen trees on Moneypool Burn and potential for flooding * proximity of restocking to county road	Site meeting on 27.10.20 Notes and responses within LMP text
Galloway & South Ayrshire Biosphere: Ed Forrest	12.10.20	19.10.20	* supportive of proposals, no issues raised	Noted
L Grindley: Falbae Cottage	From Creetown Initiative website	19.10.20	* on concept map clearfell coupe should be 86006 not as stated 86006 * query re. renewables * query re. road usage	Telephone discussion re. previous community Hydro project and road use Noted in LMP text
Balloch Wood Community Ventures: Dorothy Scherrer	12.10.20	14.10.20	* supportive of proposed restock species diversity and the semi natural woodland and ancient woodland restoration * concerns regarding our woodlands' impact of localised flooding within the	Noted in LMP text

			surrounds of Creetown village and possible mitigation measures * supportive of opportunities to incentivise renewable developers who could provide / support community benefits * concerns regarding rising Red Deer population and culling thereof	
Dumfries & Galloway Council: Countryside Access Office Richard Masters	12.Oct.20	13.10.20	* Maintain access for Core path	Noted in LMP text
Historic Environment Scotland: Sandra Archer	12.Oct.20	13.10.20	* No scheduled monuments, category A-listed buildings or Inventory gardens and designed landscapes within land management plan area, no issues	Noted in LMP text
Creetown Initiative: Amy Dee Watson	16.Oct.20		No reply received	
Dumfries & Galloway Council: Flood Officer Brian Templeton	15.Oct.20		No reply received	
Scottish Forestry: South Scotland Cons. Alasdair Hendry	12.Oct.20		No reply received	
Galloway Fisheries Trust: Jamie Ribbens	12.Oct.20		No reply received	
CONFOR: Jamie Farquhar	12.Oct.20		No reply received	

Scotland Nature: Francois Chazel	12.Oct.20		No reply received	
IUCN: Rosemary Green	12.Oct.20		No reply received	
Kirkmabreck Community Council: Sandra Sainty	12.Oct.20		No reply received	

<b>Consultee</b>	<b>Issues raised from LMP being on public register</b>	<b>South Region Response to consultee</b>	<b>SF consideration</b>
<b>Dumfries &amp; Galloway Co.: Archaeologist, Andrew Nicholson</b>	<b>The Creetown LMP considers a number of undesignated historic environment assets within the woods, and appropriate management has been identified. In general the Council's Historic Environment Record concords with the historic environment records from Forester GIS. However, there is a difference in the recording of the course of the Old Military Road from Sark Crossing to Portpatrick (HER ref. MDG10189). West of the corner at NX4851 5892 the FES data shows the road either curving round the NW under the line of the current road, or passing in a straight line to the south of Holm Park. However the first edition Ordnance Survey map clearly depicts it turning south-</b>	<b>Alternative Old Military road route noted and advised internally to environment function for data checking; negligible impact on current LMP proposals.</b>	•



	<p><b>westwards at this point, following the northern edge of Englishman's Burn before entering Creetown by the site of the old parish church (MDG2959) south of Hill House and turning north-west to the head of Church Street. I have attached a copy of the HER mapping as the road may be just within, or skirting the boundary of the woodlands at this point.</b></p>		
	•	•	•

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

### 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
<b>FC Approval not normally required</b>	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.	
<b>Approval normally by exchange of letters and map.</b>  <b>In some circumstances Approval by formal plan amendment may be required</b>		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

SITE	GRID	COMMENT
Wauk Mill; ruins	NX 48505887	Single unroofed building annotated 'Wauk Mill (in ruins)' and two short lengths of wall extending to stream are depicted on the 1st edition of the OS 6-inch map (Kirkcudbrightshire 1853, sheet 42). <b>Maintain as open space</b>
Ballochanamour, Balloch Burn; ruins	NX 48615872	Farmstead, comprising two unroofed buildings annotated 'Ruins' aligned E/W and some walls are depicted on 1st edition OS 6-inch map (Kirkcudbrightshire 1853, sheet 42) in poor condition identified near to Balloch Burn. <b>Maintain in open space</b>
Beardie's bridge; building	NX 47785855	Single unroofed building attached to west side of boundary wall, aligned N/S depicted on 1st edition OS 6-inch map (Kirkcudbrightshire 1853, sheet 42). <b>External</b>
Curling pond	NX 49345906	Curling pond shown on 2nd edition OS maps, with sluice and now associated with two other artificial ponds in Community Recreation hub area. <b>Maintain in open space</b>
Culchronchie mines	NX 50116085	Mines workings are removed but some 'concrete winding posts' and 'mine gear' have survived. <b>Maintain in open space</b>
Associated dykes	various	In various stages of condition. <b>Maintain in open space</b>

## Appendix VI: Local Community Consultation

A management agreement has been in place since 2009 between Forest Enterprise Scotland and the Balloch Community Woodlands group for Creetown Woodlands and a continued community involvement is considered to be one of the key objectives for this Land Management Plan (LMP).

Much has already been achieved through the community / FES partnership but over time a mutual acknowledgment that the current agreement is no longer considered fit for purpose has developed and work is currently underway to prepare a revised agreement for the future of the block.

Active discussions with interested parties, as an early part of the LMP stakeholder consultation process, to build on these previous successes and to further raise and improve community awareness of the woodland resulted in the local community developing and carrying out a questionnaire and *ad hoc* interviews with the intention of getting greater insight in to what the block means for users and how those thoughts may impact not only on the Land Management plan itself but also on the form and content of any future management agreement. (see Creetown Local Community Consultation report)

## Appendix VII: Timber Haulage Management Plan

### Requirement

The unclassified minor public roads from Creetown to Gatehouse are the only routes that access the Creetown block they are however not currently categorised in the Dumfries and Galloway Timber Transport Group Agreed Routes Map for Timber Haulage. The routes are acknowledged as being in moderate to poor condition but have previously been used for limited timber haulage.

Having considered the situation FLS are to take a sympathetic approach to timber extraction to avoid irresponsible damage to the roads and include a Timber Haulage Management Plan within the Land Management Plan resubmission that will detail the limitations we will place on haulage traffic for the 10-year approval period of the plan.

Note, it must be recognised that this plan refers only to timber haulage / forest road construction traffic from Creetown to the LMP area. Whilst other HGV traffic on this route is very limited, it does still occur however low loader machinery deliveries will be infrequent and of limited likelihood to be concurrent with timber traffic.

### Vehicle Specification

"Standard" super-single configuration lorries will not carry out timber haulage unless they are equipped with Central Tyre Inflation (CTI) and are running at lower pressures, as on the forest roads, from Creetown to the forest. Lorries with double wheel configurations will also be permitted.

Other "low ground pressure" configurations, which are appropriate for use on public roads, will be considered if their potential impact is not greater than those specifications identified above.

Consideration will be given to reduced weight loads if required.

### Traffic Intensity

Lorries will not be allowed to approach or leave the site in tandem or in convoys.

There will only be one timber lorry onsite at any given time.

Uplift times will be controlled to ensure lorries are at least 1 hour apart to facilitate road recovery between loads.

### Phasing of Felling operations

As per requirements for sustainable forest management both Low Impact Silviculture Systems (LISS) Minimum Intervention and clearfelling management will take place in Creetown LMP.

To minimise the timber volume produced during the proposed harvesting operations and therefore the potential subsequent impact on the surrounding county road infrastructure, different clearfell years have been identified for the two medium sized phase 1 coupes identified for clearfell (*P ramorum* infected larch coupes). The remainder of the block will be managed under a version of Group Shelterwood or Minimum Intervention.

There will be a preference towards summer working in this area when the ground is at its driest.

#### Forest Road Construction

There are no quarrying opportunities in the block.

The standard construction method for the forest road construction will apply using roadstone from nearby FLS quarries.

Lorry movements will be subject to the same traffic intensity constraints as the timber lorries..

#### Monitoring

Throughout any periods of haulage FLS will monitor the timing of lorries via the issue of time restricted uplift permissions.

We will monitor the road condition via visual assessment from our civil engineers and should this raise any concerns we will discuss the matter with the local roads authority.