

# Inglismaldie and Denlethen

## **Land Management Plan** 2025-2035 **East Region**

Plan Reference No: LMP-42-2025

Plan Approval Date: 2025

**Plan Expiry Date: 2035** 

We manage Scotland's national forests and land 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.







Applicant's details					
Applicant:	Forestry and Land Scotland				
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I hereby apply for a permission to fell the trees described in this application and I certify that:

- I have notified all stakeholders that may be affected by the felling in this application and sought their views prior to submitting this application;
- I am authorised to sign legal contracts on behalf of Forestry and Land Scotland;
- Any necessary consents from any other person(s) if required, have been obtained;
- I have made the necessary checks with the local planning authorities regarding Tree Preservation Orders and Conservation Areas;
- I hereby acknowledge that Scottish Ministers may process any of my personal data contained in or relating to this application in accordance with the terms of Scottish Forestry's Privacy Notice, a copy of which is available at www.forestry.gov.scot;
- Where applicable and appropriate I have submitted an EIA screening opinion form for operations contained within this application under the Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017.
- I have read and understand this application fully and, to the best of my knowledge and belief, the information given in this application is complete, true, and accurate;
- I accept that any false or misleading information provided in this application constitutes an offence and may result in any felling permission based on this application being revoked at any time;
- I have read and understand Scottish Forestry's Privacy Notice, a copy of which is available at https://forestry.gov.scot/privacy-complaints-freedom-of-information-and-requests-for-information.

Signed, Pp Regional Manager	Signed, Pp Conservator	
FLS Region	SF Conservancy	
Date	Date of Approval	
	Date Approval Ends	
	Plan Ref. No.	

#### A. Description of Woodlands

#### A.1 Property Details

Property (LMP) Name:	Inglismaldie and Denlethen
Grid Reference (main entrance):	NO 6515 6747
Nearest town or locality:	Luthermuir and Laurencekirk
Local Authority:	Aberdeenshire Council

#### A.2 Location and Background

Inglismaldie and Denlethen Land Management Plan (LMP) area is made up of three separate blocks, all of which lie adjacent to the A90 trunk road, between Aberdeen and Dundee, and close to the town of Laurencekirk. Together they cover approximately 337 hectares (see **Map 1 - Location**).

They are in the Howe of the Mearns in south Aberdeenshire. They sit in a landscape of intensive agriculture that is almost uniformly flat. The expansive views across the Howe of the Mearns are framed by the surrounding upland. All three blocks have a long history of woodland cover going back for well over a century.

**Inglismaldie** is located 7.5km southwest of Laurencekirk and is made up of two main blocks, Capo Plantation and Inverury Woods by the village of Luthermuir.

**Denlethen** is a single small block adjacent to Laurencekirk.

#### A.3 Existing Schemes and Permissions

Type: Felling Permission Ref. No: FPA-11529

Details: 10.43ha of clearfell in Inglismaldie Wood expiring on 26-04-2026

Type: Felling Permission Ref. No: FPA-11455

Details: 23.87ha of clearfell in Denlethen Wood expiring on 08-04-2026

Type: Felling Permission Ref. No: FPA-11455

Details: 23.87ha of clearfell in Denlethen Wood expiring on 08-04-2026

Type: Land Management Plan

Ref. No: LMP - 42

Details: The previous Inglismaldie and Denlethen LMP was approved on 07/04/2014 and expired on 07/04/2024 meaning there is currently no approved plan for this area. This plan included four amendments and an Exchange of Letters of which details can be provided on request.

#### A.4 Stakeholder Engagement

Summary of the main points raised by stakeholders during Scoping (and where they are addressed in the plan). The full consultation record can be found in Appendix I.

- 1. Gas pipeline through Inglismaldie (Section C.2.14)
- 2. Important Scheduled Monuments (Section C.2.10)
- 3. Recreational use (Section C.2.9)
- 4. Restock of coupes blown during Arwen (Appendix I)

#### A.5 Long Term Vision and Management Objectives

#### <u>Vision</u>

In several decades the forests of Inglismaldie and Denlethen will have an increased diversity and resilience. The windblown crops, resulting from Storm Arwen, will have all been removed and areas replanted with site appropriate species to maximise recreational, environmental and productive objectives.

In and around watercourses, along forest edges, near infrastructure and scheduled monuments, corridors of native broadleaves will have been established to safeguard these features, improve forest stability and improve environmental value. Tree species chosen for the restocks will match site conditions to ensure good growth as well as meeting the demands of species such as red squirrel. Most of the block is continuously thinned to ensure crop stability, provide timber to local markets and to reduce the need for clearfell systems. The use of continuous cover systems will also benefit recreational use by reducing the intensity of forest management and retaining canopy cover.

As most of the block is long-established plantation origin (LEPO), ancient woodland remnants will be protected and enhanced.

In Denlethen, restructuring will continue to take place to change the forest block from an unstable single aged stand to a more diverse woodland with a higher percentage of broadleaves. Species selection will ensure food availability for red squirrel, good growth to ensure quick establishment and species diversity to benefit recreational objectives.

#### **Management Objectives**

**Objective 1:** Maximise recovery of windblown crops.

Indicator of objective being met: Areas with significant windblow are harvested in Phase 1.

**Objective 2:** Maximise area of continuous cover forestry (CCF).

Indicator of objective being met: Wherever areas can be transformed to CCF detailed prescriptions will be provided to achieve this. Any restock will be done assuming the area will eventually be managed under CCF systems.

**Objective 3:** Diversify species to enhance resilience and increase environmental and amenity value.

Indicator of objective being met: Improved species diversity by the end of the plan period with a higher proportion native broadleaved species.

**Objective 4:** Protect and enhance scheduled monuments (SM).

Indicator of objective being met: Open ground in SM area is maintained, when felling adjacent to SM takes place, restock enhances the setting of the SM.

**Objective 5:** Protect key infrastructure and ensure resilience.

Indicator of objective being met: Felling and restocking proposals ensure the long-term resilience near key infrastructure (powerlines, gas pipelines, roads and trainlines).

#### A.6 General Site Description

#### A.6.1 Topography and Landscape

This LMP area is in the Howe of the Mearns in south Aberdeenshire that is almost uniformly flat. The height variation across the blocks is from 30 metres to 80 metres above sea level. The forest rises from the surrounding agricultural land meaning that only the external boundaries and not the internal structure is visible. Therefore, landscape implications of forest operations are limited.

#### A.6.2 Geology and Soils

**Geology** - According to the British Geological Survey Geological Map of the UK all this land management plan area area is underlain by Lower Old Red Sandstone of the early Devonian period. This gives rise to overlying soils having a high nitrogen availability. The underlying geology is formed by psammites of the Dalradian supergroup with an overlying glacial deposit in the glens resulting in moderate nitrogen availability.

**Soils** – The Capo block and Southern half of Inverury wood largely consist of typical podzols with localised gleying where drainage is restricted. Denlethen and the Northern half of Inverury consist of podzolic gleys from the Laurencekirk association. This association is dominated by imperfectly drained brown forest soils with gleying. This has a loam topsoil overlaying clay loam subsoil horizons (see **Map 8 – Soils**).

#### A.6.3 Climate

The Inglismaldie and Denlethen blocks are highly suitable for tree growth because of their warm and moist climate. The current local climate is highlighted on the table below. The north-east of Scotland is predicted to see a change in climate over the next decades which will impact forest management. According to the Forest Research Climate Matching tool, the accumulated temperature and the moisture deficit will both have increased slightly by 2050 matching most closely with the current climate of the Peak District (Forest Research, 2024). Furthermore, UK Climate Projections indicate the climate is expected to become more extreme with increased summer drought, winter flooding and storm events (UKCP, 2024).

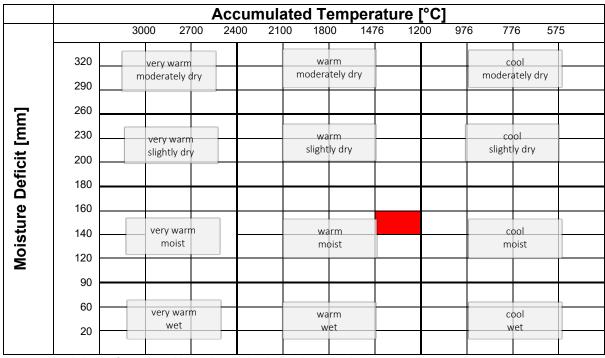


Figure 1: Local climate for Inglismaldie and Denlethen highlighted in red

#### A.6.4 Hydrology

The Inglismaldie and Denlethen blocks contain and are surrounded by several important watercourses. Below, these watercourses are listed with their current quality, quality objective and pressures. The Luther Burn furthermore has a presence of salmon and trout. As can be seen in the table, forestry is not a current negative pressure on the watercourses.

The area is upstream of the Marykirk Objective Target Area (OTA) however, this OTA has no catchment associated with it as it is a pluvial OTA. The SEPA flood risk maps demonstrate a localized risk of surface water flooding within the forest blocks.

Table 1: Watercourses and their current and future classification according to SEPA (SEPA, 2024)

ID	Name	Current Classification	2027 Objective	Pressure
5700	River North Esk (from Cruick Water)	Poor	Good	Finfish Aquaculture
5701	River North Esk (to Cruick Water)	Good	Good	Finfish Aquaculture
5711	Black Burn	Moderate	Good	Crop Production
5705	Luther Water (to North Esk)	Poor	Moderate	Crop Production, Water supply and Wastewater
5706	Luther Water (to Dowrie burn)	Moderate	Good	n/a

#### A.6.5 Windthrow

The blocks have suffered heavily from the storms in the last five years. In November 2021 Storm Arwen caused significant damage with subsequent storms exacerbating the windblow. As a result, the felling permissions as described in A3 were applied for, which removed most of the damaged crops. Currently there is still damage in Denlethen and the northern part of Inverury. The extensive felling in response to the windblow has furthermore resulted in brown edges in Inverury and Capo which has negatively impacted stability in those blocks. Removal of windblow in Denlethen will create further brown edges potentially leading to more windblow.

DAMS in the blocks is between 11 and 12 which generally means there is a very good opportunity for continuous cover forestry. This is however constrained by the state of the current crop and the restricted rooting in places because of gleying.

#### A.6.6 Adjacent Land Use

All the blocks are almost exclusively surrounded by large scale intensive farmland. The only exceptions being where Laurencekirk runs up to the edge of Denlethen and where Inglismaldie borders the woodlands around Inglismaldie Castle. The area is not part of a Deer Management Group.

#### A.6.7 Access

The main block for recreation in this plan area is Denlethen where there are currently several recreation facilities and core paths (See Map 3 – Concept Denlethen). This includes two car parking areas adjacent to the wood and several pedestrian access points from Laurencekirk. This block is very well used by locals from Laurencekirk and the wider area, mainly for (dog)walking. Within the wood there is a network of routes, which are gradually expanding, benches and a pond. The wood is part managed by the 'Friends of Denlethen'. This is a fully constituted group which works together with Forestry and Land Scotland in the management of Denlethen wood for the benefit of the local community of Laurencekirk and the immediate surrounding population regarding recreation, conservation, heritage and archaeology, the environment and good silviculture practice.

Capo and Inverury both see a lower level of recreation than Denlethen but due to the relatively high population density in the wider area these too are very well used and popular for (dog)walking, cycling and horse riding. Capo has a small carpark and at Inverury wood the forest entrances are regularly used for parking. Prior to the storms damaging the blocks, the mature Scots pine was popular for walking and a network of informal trails was present in the woods.

#### A.6.8 Historic Environment

The Inglismaldie and Denlethen blocks contain two scheduled monuments along with several unscheduled heritage features. The scheduled monuments are the Capo Long Barrow (SM4444) and Witch Hillock (SM4823).

The Capo Long Barrow is a well preserved and massive Neolithic long burial barrow.
 The monument is of national importance as an exceptionally fine field monument and because it has the potential to enlarge our understanding of Neolithic burial

- practices and rituals. Information from the well-preserved old ground surface underneath could potentially tell us about Neolithic vegetation and land use in the area.
- The Witch Hillock comprises the remains of a burial mound of the Bronze Age and a
  setting of three large squat stones. The monument is of national importance as a
  burial mound which still, despite antiquarian interference, has the potential to
  enhance our understanding of prehistoric burial practices. The monument is of
  particular importance because of the presence nearby of a stone setting and the
  likely survival in the vicinity of contemporary burials. Its importance is further
  enhanced by the proximity of the Capo long barrow (Historic Environment Scotland,
  2024).

Other heritage features in the area include dykes and banks as well as the remains of the 'King's Road' in Denlethen. This feature consists of a broad track with banks on either side which is said to have been the road taken by the king's couriers.

All heritage features can be found on **Map 9 – Historic Environment**. See Appendix II: Historic Environment Records, for a full list of heritage features and associated numbering.

#### A.6.9 Biodiversity

The Inglismaldie and Denlethen LMP area does not contain any designated conservation sites. The blocks are however almost entirely designated as LEPO sites (long-established plantation origin) in the ancient woodland inventory (AWI). It is important to highlight that it is highly likely that the AWI map is slightly inaccurate for Inglismaldie. The shape of the Inglismaldie block and the LEPO shape on the AWI are very similar but offset by about 160 meters. This is likely the result of an imperfection in georeferencing, and it is therefore assumed that the blocks are almost entirely LEPO.

Red squirrels are regularly sighted within the blocks as well as several raptor species, badgers and their sets. The relative isolation of the blocks within a mostly agricultural landscape means the importance to red squirrel is significant. There have also been several records of creeping ladies' tresses in the Inglismaldie block in recent years.

#### A.6.10 Invasive Species

An area of Himalayan balsam (*Impatiens glandulifera*), *Spiraea douglasi*, and giant knotweed (*Reynoutria sachalinensis*) has been found near the Witch Hillock. Rhododendron (*Rhododendron* ponticum) bushes were identified in the Capo plantation and in Inglismaldie. A patch of Snowberry (*Symphoricarpos alba*) was found in Wester Inverury.

#### A.7 Woodland Description

Map 2 – Current species shows the current tree species composition and pattern.

As mentioned, the blocks suffered heavily in recent storms. Subsequent felling has largely taken place and restocking is currently ongoing. The LMP area therefore has a large percentage fallowed ground. Remaining forests consists largely of conifer and birch planted

in the 1980's in both Inglismaldie and Denlethen. Inglismaldie furthermore contains remaining 1920's Scots pine, larch and Douglas fir along with younger Scots pine plantation and some oak.

Table 2: Area by species

	LMP area by species							
Species	Current		Year 10		Year 20			
	Area (ha)	%	Area (ha)	%	Area (ha)	%		
Scots pine	59.8	18%	85.5	25%	79.8	24%		
Sitka spruce	59.6	18%	62.4	19%	70.2	21%		
Norway spruce	6.1	2%	37.9	11%	37.3	11%		
Other/Mixed conifer	9.2	3%	2.2	1%	6.5	2%		
Birch	64.4	19%	65.7	20%	53.4	16%		
Other/Mixed broadleaves	4.1	1%	32.5	10%	40	12%		
Open ground	15.4	5%	15.5	5%	20	6%		
Fallow	117.9	36%	34.8	10%	29.3	9%		
Total	336.5	100	336.5	100	336.5	100		

Chart 1: Area by species

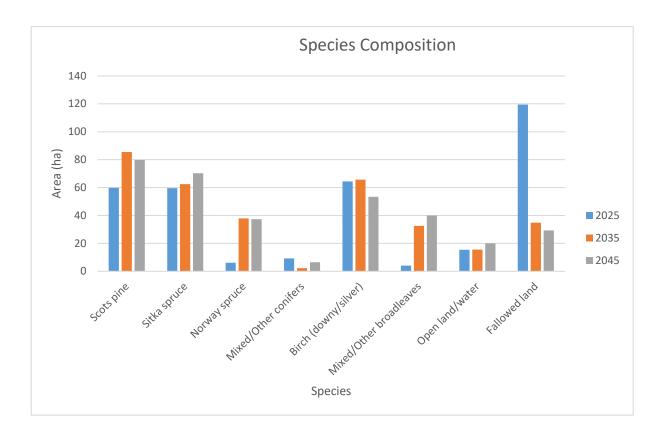
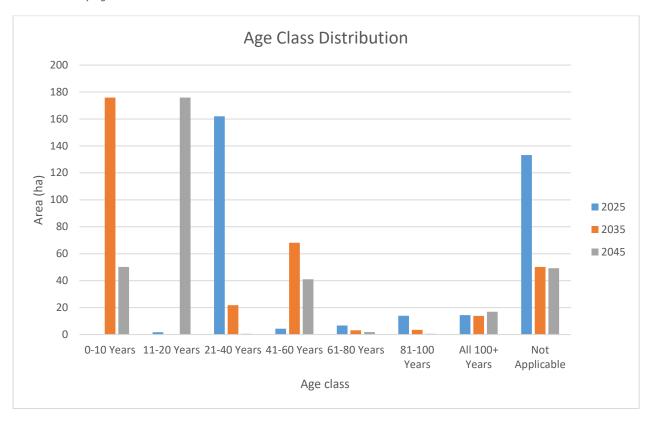


Table 3: Area by age

	LMP area by Age						
Age Class (years)	Current		Year 10		Year 20		
	Area (ha)	%	Area (ha)	%	Area (ha)	%	
0-10	0	0%	175.9	52%	50.2	15%	
11 – 20	1.7	1%	0	0%	175.9	52%	
21 – 40	162	48%	21.8	6%	0.6	0%	
41 – 60	4.4	1%	68.1	20%	41.1	12%	
61 - 80	6.7	2%	3.2	1%	1.8	1%	
81- 100	14	4%	3.5	1%	0.6	0%	
100+	14.5	4%	13.8	4%	16.9	5%	
Not applicable	133.2	40%	50.2	15%	49.3	15%	
Total	336.5	100	336.5	100	336.5	100	

Chart 2: Area by age



#### A.8 Plant Health

There are no major plant health issues within the Inglismaldie and Denlethen blocks. There are no records of recent statutory plant health notices (SPHNs) because of *Phytophthora ramorum* or *Dendodroctonus micans* in the area. The LMP area sit within the Priority Action Zone (PAZ) for larch (Scottish Forestry, 2022) meaning SPHN's require a swift follow-up. In the long-term it is however expected that larch can continue to be grown this far east. Within the Forestry and Land Scotland Larch Strategy the blocks are found in the PAZ 'less vulnerable zone'. In this zone pre-emptive felling will be the exception rather than the rule. There are no felling targets set or strategic access provision proposals for these areas. In the South of Inglismaldie there are signs of a brown cubical rot in the mature pine causing snap. The exact pathogen has not been identified.

Considering the history of woodland cover, the fertility and the pH level, , particularly *Heterobasidion annosum*, is a worry in the blocks. Forest management will need to be mindful of the risks of and limit spread through careful thinning and application of urea on cut stumps.

#### **B.** Analysis of Information

#### B.1 Constraints and Opportunities – and Concept

Table 4: Constraints and Opportunities by factor

	Constraints and Opportunities							
Factor	Constraints	Opportunities						
Wind damage	Removal of windblow crops will need to happen as soon as possible to maximise recovery.	Restock creates opportunity for diversification of species and facilitates work around SM's, forest edges and key infrastructure.						
Historic Environment	Constraint working in and near SMs.	Potential to improve the setting of SMs.						
Recreation/Community	Community/recreational interest constraining other objectives (production, environment).	Improve recreational value through collaborative working, species diversification and maximising CCF areas.						
Infrastructure	Operational constraints around powerlines, gas pipeline, trainlines and road.	Establish long term windfirm edges and minimum intervention areas along infrastructure.						
Environment	Presence of invasive non- native species.	Protect or enhance suitable habitats to promote notable species such as red squirrel and raptor species.						

#### Concept

**Map 3 - Concept** illustrates how the plan concept incorporates the important constraints and opportunities into the management objectives.

As mentioned, the LMP area has sustained significant damage during recent storms, the majority of which has been cleared away and is being restocked. Where felling and/or restocking is still to take place, species choice is guided by long-term viability and productivity of the species, soil conditions, tree health issues, a changing climate and the presence of notable species such as red squirrel. Where mature crops can be retained this will be done for the benefit of environmental and recreational values.

To balance the recreational, environmental and productive objectives of the LMP area, most of the blocks will be managed as or towards CCF with the aim to produce quality timber as well as providing valuable habitat for the environment and for recreation. Besides mixed objective areas, there will be parts of the forest, mainly consisting of native broadleaves, which will have a sole focus on environmental and recreational purposes. Any areas

currently deemed thinnable will receive a thinning prescription to ensure long-term retention and/or CCF.

When felling takes place near important infrastructure the restock will safeguard the infrastructure in the long-term through low density planting with the aim of moving this to Minimum Intervention. Similarly, felling along watercourses will facilitate the establishment of riparian zones which will improve environmental value and water quality.

At Denlethen the restock will facilitate the aspirations of the local user group as well as continuing to provide environmental and productive value. A key consideration in Denlethen is rapid reestablishment of the first felling sites to allow subsequent felling operations to take place.

#### **C.** Management Proposals

#### C.1 Silvicultural Practice

Most of the LMP area will be managed for mixed purposes and will be restocked at productive densities with a majority conifer species. Considering the terrain and exposure all the forest is thinnable and access using harvester/forwarder combinations is possible throughout. Several coupes, which have not been thinned, are now past first thinning age, these will be clearfelled and restocked once they are most marketable.

In the south of Inglismaldie and in Capo, soils are generally better drained and well suited to Scots pine. In the north of Inglismaldie and in Denlethen the gleyed soils are better suited to broadleaves such as birch and conifers such as spruces.

Restocking will in general require ground preparation in the form of hinge or inverted mounding on the gleys and scarification on the podzols. Lower density planting of broadleaved species will be carried out along watercourses and to establish windfirm edges around the block and along key infrastructure. A focus of the restock is to divide the forest into windfirm, manageable units to reduce impacts of climate change and to establish the right species for continuous cover forestry.

#### C.2 Prescriptions

#### C.2.1 Felling

Sites proposed for clear felling in the plan period are identified as Phase 1 and Phase 2 management coupes on **Map 4 – Management Coupes**. **Table 6** sets out the scale of felling.

Table	6:	Felling,	Gross	figures
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Scale of Proposed Felling Areas										
Total Plan Area		33	36.5 ha	а						
Felling	Phase	%	Phase	%	Phase	%	Phase	%	LTR	%
	1		2		3		4		(including CCF)	
Area (ha)	50.5	15	6.7	2	43.1	12.8	20.8	6.	70.5	2
								2		1

Stands adjoining felled areas will be retained until the restocking of the first coupe has reached a minimum height of 2m. Phase 1 and 2 clearfell coupes identified in this plan with known adjacency issues are listed below with the planned approach to achieving height separation. For any future clearfell coupes where adjacency is not possible, and there is no exemption under the Scottish Forestry Act, an amendment will be discussed and agreed with Scottish Forestry before the coupe is felled.

The only two coupes with a potential adjacency issue are coupes 42060 and 42719 in Capo. Coupe 42719 has recently been felled and restocked in response to severe damage during Arwen. The remaining coupe (42060) is extremely unstable and has significant brown edges with the restock around it, wind damage is already visible in the coupe. Felling is planned

late in phase 2 to ensure the surrounding crop will have grown to an average of 2 meters in height.

Considering the geomorphology, soils and access, all coupes are expected to be worked using harvester/forwarder combinations. An element of hand felling might be required for the felling of large edge trees or oddly shaped trees and/or near infrastructure.

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

#### Other tree felling in exceptional circumstances

FLS will normally seek to map and identify all planned tree felling in advance through the LMP process.

However, there are some circumstances requiring small scale tree felling where this may not be possible and where it may be impractical to apply for a separate felling permission due to the risks or impacts of delaying the felling.

Felling permission is therefore sought for the LMP approval period to cover the following circumstances:

- Individual trees, rows of trees or small groups of trees that are impacting on important infrastructure (as defined below\*), either because they are now encroaching on or have been destabilised or made unsafe by wind, physical damage, or impeded drainage. \*Infrastructure includes forest roads, footpaths, access (vehicle, cycle, horse walking) routes, buildings, utilities and services, and drains.
- The maximum volume of felling in exceptional circumstances over the plan area covered by this approval is 75 cubic metres per calendar year. A record of the volume felled in this way will be maintained and will be considered during the five year 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].

#### C.2.2 Thinning

Potential sites for thinning in the plan period are identified on **Map 5 – Thinning Coupes**. **Table 7** indicates the potential area.

Table 7: Thinning areas

Thinning Areas				
Species	Thinning (ha)			
Birch	54.0			
Scots pine	45.9			
Sitka spruce	37.1			
Norway spruce	6.2			
Oak	2.8			
Hybrid larch	1.0			
Beech	0.3			
Douglas fir	0.1			
Total	147.3			

Wherever possible the region will continue to maximise the area managed through thinning. FLS policy assumes that all productive conifer crops will be thinned. The only exceptions are where:

- Thinning is likely to significantly increase the risk of windblow.
- A single thinning operation is likely to require an unacceptably large initial investment in relation to the potential benefits due to access or market considerations.
- Thinning is unlikely to improve poorly stocked or poor-quality crops.

There are several areas of young conifer plantation within the plan area which would benefit from thinning as soon as possible, therefore carrying out thinning activities throughout the area in phase 1 is a priority.

The growth rates within the blocks are good, Scots pine will be thinned on average at a 7-year interval and non-native conifers at a 5-year interval.

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 mean annual increment (MAI), or Yield Class (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.

#### C.2.3 Low Impact Silvicultural Systems (LISS)

Areas identified for LISS management are shown on Map 4 – Management Coupes.

LISS areas within Inglismaldie and Denlethen currently mainly consist of young and semimature crops as many of the mature crops suffered heavy storm damage during Arwen. The remaining mature Scots pine crops in Inglismaldie (42001/42002) will be retained to preserve forest structure. In Phase 2 a CCF intervention will be carried out with the aim to significantly increase disturbance and light levels to promote regeneration of Scots pine, larch, Douglas fir and native broadleaves. To do this a uniform shelterwood system will be used, reducing the stocking throughout the block to a basal area of between 10 and 15 m<sup>2</sup>.

Soils consist of podzols and gleys and signs of natural regeneration are already present. An element of Western hemlock will be tolerated within the regenerating crop with the aim to thin this out at subsequent thinnings.

The young and semi-mature crops will not require a CCF intervention focusing on regeneration and will be thinned as per C.2.2 with a focus on stability, timber quality, recreational value, environmental value and species composition.

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

Several Long-Term Retentions are found in the Inglismaldie block (See **Map 4** – **Management Coupes Inglismaldie**). These consist mainly of remaining mature Scots pine and broadleaved areas. The remaining Scots pine is found around the Capo Long Barrow and north of the council road through Inglismaldie. The broadleaved areas are found around the Witch Hillock and along the Black Burn.

No areas in Inglismaldie and Denlethen are designated as Natural Reserve.

#### C.2.5 Restocking Proposals

Planned restocking of felled areas, and proposals for the future habitats and tree species over the whole plan area are shown on Map 6 – Future Habitats and Species. See Table 8 and Appendix IV – Restock Prescriptions for areas, establishment, and mix proportions. Timing of restocking will comply with the plan tolerance table shown in Appendix III – Tolerance Table.

Table 8: Restocking

Felling Phase	Map Identifier (coupe number)	Species to be planted - or established through natural regeneration (nr)	Area (ha)*	Comments
Felled	42719	40% SP	26	Currently ongoing, restock as
		30% NS	19.5	per previous plan.
		30% Bi	19.5	
Felled	42120A	40% SP	9.75	Currently ongoing, restock as
		30% SS	7.31	per previous plan and Exchange
		30% MB	7.31	of Letters.
	42120B	60% NS	5.39	
		30% SP	2.69	
		10% MB	0.9	
	42120C	50% SP	4.29	
		50% MB	4.29	
	42120D	60%SP	2.21	
		30%DF	1.11	
		10%MB	0.37	

Felling Phase	Map Identifier (coupe number)	Species to be planted - or established through natural regeneration (nr)	Area (ha)*	Comments
	42120F	100% Open	0.75	
Felled	42333A	100% Open	6.11	
reneu	42333R	100% N3	2.97	
	42333C	50% Oak	0.66	
	423330	50% Bi	0.66	
	42333D	60% MB	0.41	
	123332	40% Open	0.28	
P1	42674A	60% MB	5.27	
		40% Open	3.52	
	42674B	100% SS	7.91	
	42674C	100% NS	4.32	
	42674D	100% Oak	3.15	
	42674E	100% Open	1.18	
P1	42942A	100% SS	19.94	
	42942B	60% MB	3.1	
		40% Open	2.07	
P2	42029A	100% Open	0.94	Tree removal over gas main,
				under EIA threshold.
P2	42060A	80% SP	3.73	
		10% MB	0.47	
		10% Open	0.47	
	42060B	60% MB	0.43	
		40% Open	0.29	
	42060C	100% Open	0.21	
		Total Restocking Area (ha)	170.04*	

<sup>\*</sup>net area to be planted excluding designed open ground

Coupes 42719 and 42120 are highlighted as phase 1 restock on **Map 6** as they are currently being restocked (winter 2024/2025) as per plan amendments to LMP-42 and felling permission FPA-11529. No changes to the restocks have been made as these are approved and ongoing.

Stocking densities will be at least 2,500 stems per ha for conifers and 1,600 stems per ha for broadleaves unless stipulated otherwise in **Appendix IV – Restock Prescriptions**. If the restock should fail to reach these levels 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.

Hot planting (i.e. 6-12 months post felling) will be the default position with other factors (Hylobius, weed growth, regeneration, resources etc.) accounted for in decision making to decide the most appropriate establishment window. Sites must be planted within 2 years of felling

Native broadleaves of local origin such as birch, aspen, oak and willow will be preferred if available. If not available, then trees from an alternative origin will be used provided this origin makes them suitable to grow and thrive in the prevailing site conditions. Where Sitka spruce is to be used for restocking, we will endeavor to use improved SS transplants, provided the nursey is able to supply them in sufficient quantities. If appropriate sites present themselves, i.e. good soils, low risk of Hylobius attack and the potential of yield class 14 or higher crops, then VPSS (Vegetatively Propagated Sitka Spruce) will be used if available. Over and above this, only certified material will be used for species covered by the Forest Reproductive Material Regulations.

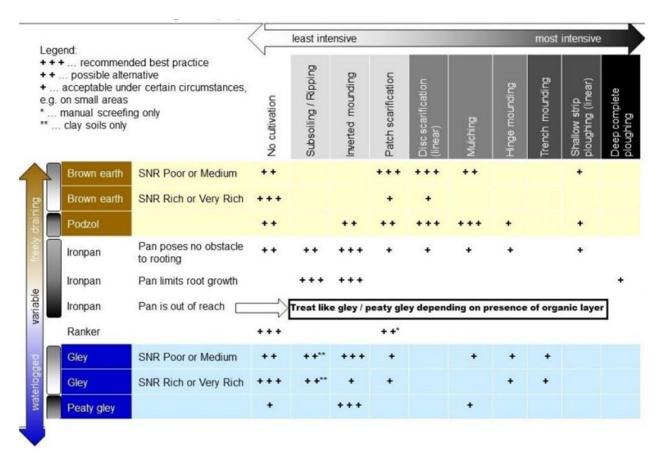
All areas identified for restocking by natural regeneration will be recorded and programmed for inspection in accordance with the East Region Policy on Restocking Felled Ground. This policy sets out that, for Natural Regeneration, the sites are to be under effective management by year 4 after felling. At this point it is necessary to have trees across the site at a suitable density with a reasonable expectation of establishment to 30cm within 2 years. Where this is unlikely to occur after monitoring at year 3-4, the site will be changed to restocking by planting.

Enrichment planting might be used to ensure the target stocking densities of minimum 25,00 stems per hectare for conifers and 1,600 stems per hectare for broadleaves are achieved if, on inspection, it is thought there is insufficient natural regeneration present to achieve restocking without intervention.

The choice of ground preparation for each site will be decided at the operational planning stage by the relevant establishment forester. Ground preparation techniques can vary greatly even across individual sites, so the most up to date advice will be applied at the time of the operation to ensure that soil structure and water quality is preserved whilst also providing an optimal environment for establishment depending on the species and site conditions. Forest and Water Guidelines, UK Forest Standard and UKWAS can all be used to help with the decision-making process if required.

Forest Research's **Field Guide to Soil Cultivation** (Jens Haufe, 2019) and Scottish Forestry's **Cultivation for upland productive woodland creation sites** will be referenced where necessary to help aid in the specific choice applied across any restock sites. The below table is a good indication of what ground preparation techniques will be applied, with the "Best Practice" option the target if possible. The majority of restock operations within the plan period take place on intergrade soils, with Ironpans, Podzols and Surface-water Gleys all present, best practice options set out below:

- **Ironpans**: Inverted mounding or no cultivation if site conditions suitable.
- Podzols: Disk scarification or mulching if weed competition is high, no cultivation if site conditions suitable.
- Surface water gleys: Inverted mounding or no cultivation, depending on nutrient availability on individual sites. Table 5: Soil types and preferred ground preparation methods



FLS is following a chemical reduction strategy. This involves limiting chemical applications only to occasions when they are essential. To allow this strategy to be followed the Hylobius Management Support System will be applied and the minimum recommended fallow period used prior to restocking. This reduced fallow period will also reduce the potential need for herbicide applications to restocked areas.

#### C.2.6 Protection

Management of deer is an underpinning activity essential for the delivery of benefits from Scotland's National Forest Estate. The aim is to manage healthy wild deer populations and manage deer impacts across the Estate consistent with the carrying capacity of the land and successful delivery of FLS land management objectives. Deer Management Plans direct the priorities for management and are available on request.

The deer population in Inglismaldie and Denlethen consists almost exclusively of roe deer because of the surrounding farmland. Browsing of young trees does take place but is currently not at a concerning level. Deer control will be carried out by FLS employees and/or contractor stalkers, and a mix of daytime and night-time stalking will be used.

#### C.2.7 Fence erection / removal

There are currently no plans for perimeter fencing the blocks. Small scale enclosures or tubes might be used to establish particularly palatable species. These protection measures will be of temporary nature and will be removed once the broadleaves have sufficiently established. The protection measures will be sited there were access, and construction is easiest and where the benefits of broadleaves are highest. In case of fencing, because of the temporary nature, a low specification fence will be used to keep costs to a minimum. FLS

will regularly check protection measures to ensure they provide sufficient protection. Materials will be removed from site once no longer necessary and where possible recycled on other sites. If they cannot be recycled, they will be disposed of through appropriate waste channels.

#### C.2.8 Road Operations

**Map 7 -Timber Haulage** shows the existing forest road network, timber haulage egress points, and any local 'Agreed Timber Transport Routes'. There are no roads or quarry upgrades planned for these blocks.

Road upgrades will be carried out to facilitate forest operations. Material for road maintenance and upgrades will be bought in from local quarries. In case of a changes to the footprint of the road a detailed workplan will be created and **Appendix III – Tolerance table** and the EIA Scoping Opinion Request thresholds will be adhered to.

#### C.2.9 Public Access

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 must manage their land and water responsibly in relation to access rights, and FLS will only restrict public access where it is necessary and will keep disruption to a minimum.

As mentioned in previous parts of the plan the forest blocks in this plan area are well used for recreation. As such, particular care will be taken during operations to ensure safe working and provide alternatives for recreation where possible. Closure of the core paths in Denlethen will be kept to a minimum and a suitable alternative will be provided in agreement with the local authority access officer. After operations the core path will be reinstated to ensure its usability. Desire lines will be protected during operations where this is operationally feasible. The protection and reinstatement of desire lines is not an objective.

Long term informal recreation will be managed by providing a diverse age and species structure throughout the forests. Recreational usage itself will ensure the maintenance and development of informal paths. Where operations result in a change of forest structure recreational use will adapt to the changed structure. Maximization of the area of forest managed under CCF will ensure a high recreational value through maximization of canopy cover and more open and mature stands better suited to recreation.

Forestry and Land Scotland will work together with the Friends of Denlethen to facilitate the objectives of the community group where this does not conflict with the objectives of FLS. Regular liaison with the community group will take place to ensure users are informed of the forest management and any works carried out by the group are agreed upon. FLS is open to working together with other community groups to facilitate works within the Inglismaldie block.

#### 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 either covered by a felling permission or thinning permission to allow for any works within this zone.

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.

#### C.2.10 Historic Environment

The Regional Historic Asset Management Plan includes conservation management intentions for designated historic assets on Scotland's National Forests and Land. Details of all known historic environment features are held in FLS's Heritage Dataset 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. At establishment and restocking, work prescriptions remove relevant historic environment features from ground disturbing operations and replanting. Areas of historic environment interest will be checked both on FLS's records and with the Council's Historic Environment Register (HER) prior to the commencement of forestry activities. Any upstanding features will be clearly marked, both on the ground and on operational maps. Care will be taken to avoid any damage to surviving structural elements.

For any works that have the potential to impact the SM's Scheduled Monument Clearance will be applied for with Historic Environment Scotland (HES). Works will not commence until clearance has been granted from HES. Opportunities to enhance public access or interpretation of SM's will also be explored at this point.

Map 9 – Historic Environment and Appendix II provide more information about the historic environment features within and adjacent to the plan area.

The SM's will be monitored, and trees and shrub will be regularly removed. At the Capo Long Barrow (SM4444) it was requested that FLS explores the option of removing trees to the south of the barrow to improve the setting. This option has been explored in the plan process but due to the large area of clearfell in Capo the retention of tree cover in the block is deemed a priority in this LMP. Once the clearfell site has re-established the removal of these trees will be reconsidered and an appropriate buffer agreed upon with HES. A 20-meter buffer has been applied to both SM's in **Map 6 – Future Habitats and Species** to ensure the protection of the feature and its setting. Where appropriate this has been expanded by an area of broadleaves surrounding the 20m buffer.

#### C.2.11 Biodiversity

UK Forestry Standard guidance is to manage a minimum of 15% of the forest management unit, the LMP area. with conservation and the enhancement of biodiversity as a major objective. The figure for this plan is 21%.

Inglismaldie and Denlethen contain significant red squirrel populations and are at the edge of the grey squirrel distribution. Although not a Red Squirrel Stronghold the plan area will be managed with a particular focus on red squirrel. As per the Practice Note 'Managing forests as red squirrel strongholds' (Forestry Commission Scotland, 2012) species selection will be done to benefit red squirrel and to not give grey squirrel an advantage. In practice this means a focus on conifer species and keeping large-seeded broadleaved species to a minimum. It is however recognised that oak is particularly beneficial to both environmental and recreational values and a percentage of oak will be integrated in the restocks.

## <u>Long-established woodlands of plantation origin (LEPO) and Plantations on Ancient Woodland Sites (PAWS)</u>

As per **Maps 3 - Concept** and **A.6.9**, most of the LMP area is covered under LEPO. Furthermore, an issue with the georeferencing in the AWI (Ancient Woodland Inventory) is assumed meaning that almost the entire LMP area will be treated as LEPO.

As part of forming a more robust approach to our management of LEPO areas and to ensure they are being managed as per guidance in the relevant section of the UKFS, we will be carrying out several management steps as detailed below.

All areas designated as PAWS and LEPO will be assessed using the criteria in the table below to ensure that the current LMP proposals are appropriate and any additional LEPO areas that are known but not covered in existing databases will be added.

Table 9: Assessment criteria LEPO

ECOLOGICAL POTENTIAL	OLD PLANTATION FEATURES ONLY	OLD SEMI-NATURAL FEATURES INCLUDED
High		A few remarkable ancient/veteran trees/notable woodland flora and/or frequent c. 150-year-old native trees and other old woodland remnants (e.g. abundant woodland specialist flora) within the plantation. And/or, in a substantial native woodland network
Medium	Frequent c. 150-year- old non-native trees embedded within younger plantation	Occasional c. 150-year-old native trees, occasional patches of woodland specialist flora and / or in a fragmented native woodland network. <sup>1</sup>
Low	Rare or occasional c. 150-year-old non- native trees embedded	No obvious signs of old semi-natural woodland and isolated from a native woodland habitat network 1, 2

ECOLOGICAL	OLD PLANTATION	OLD SEMI-NATURAL FEATURES INCLUDED
POTENTIAL	FEATURES ONLY	
	within younger plantation <sup>2</sup>	

- 1. For Medium and Low Ecological Potential sites with native/semi-natural features, there could be old plantation features as well.
- 2. Those LEPO that were in the HCV sub-set and have been added to the PAWS layer, can be managed conventionally if they have Low Ecological Potential. If there are rare or occasional c.

After assessment, the future management is decided based on the following advice from FLS' Native Woodland Ecologist:

"There is no imperative to convert to native species if the LEPO is currently dominated by non-natives. As with PAWS restoration, there is a strong preference for LISS management to maintain woodland conditions — avoiding huge changes to light levels, loss of humidity and increase in the water table — all consequences of clear-felling. The guiding principle should be to undertake sustainable management that will protect features of interest in the long-term.

As with PAWS restoration, sites with High Ecological Potential and Critical threats are the priority for management. LEPO with High Ecological potential will include features normally associated with ancient woodland sites and an increase in native species over time will normally be appropriate to embed veteran native trees and other flora in a wider native woodland matrix. This will be best achieved by favouring interesting features in repeated thinning operations.

The Ecological Potential of LEPO with frequent non-native veteran trees and no other features of biological interest will be Medium, therefore management of these sites should not take precedence over the highest value LEPO and true PAWS with frequent semi-natural veteran trees/rare native woodland flora."

For this plan, a general assessment has been made by the regional environment teams and planning staff to ensure the LMP proposals are appropriate.

In summary, much of the LMP area designated as LEPO have recently blown over or have been established with non-native conifer which has never been thinned and is now unsuitable for LISS management due to a lack of stability. Throughout Inglismaldie and Denlethen next to no trees of over 100 years old exist. Areas with non-native plantation and/or restock sites are therefore assumed to be of low ecological potential.

There are several areas with mature Scots pine (+/- 100 years old) which also contain native woodland specialists such as creeping ladies' tresses. These areas are therefore assumed to be of medium ecological potential. Any operations within these areas will be carried out sensitively to protect any old features. In addition, the regeneration will be designed to retain and enhance old trees and native woodland specialists. As mentioned previously there is a presence of Western hemlock within these areas which will be thinned out

through continuous thinning operations. Benign conifers such as larch, Norway spruce and Douglas fir will be tolerated but thinning will focus on promoting Scots pine.

Any areas of high or medium ecological potential will be assessed as part of the pre-felling checks carried out by FLS staff and any opportunities for retentions of high ecological value trees, habitats or deadwood reserves will be identified and built into the work planning process for any upcoming operations.

Restock species on all restock sites in Inglismaldie and Denlethen have been chosen with a long rotation in mind and are planned to be managed under LISS systems in the future as biodiversity values increase as woodlands mature.

#### Deadwood

Deadwood will be managed in accordance with the FCS Practice Guide: Managing Deadwood in forests and woodlands (Humphrey and Bailet, 2012) and supplemented by the FLS Guidance note: Deadwood Management – Summary Guidance for FLS Staff (Kortland, 2021).

#### Key principles applied:

- Retain and create as much deadwood as possible and create new deadwood on a continuing basis.
- Retain and create as many kinds of deadwood as possible.
- Favour native tree species when creating and retaining deadwood.
- Favour the retention and creation of large-diameter deadwood.
- Retain and create high stumps and snags (standing deadwood) within woodland and permanent open areas (but not on clear fells that will be restocked).
- Design the distribution of deadwood to maximise connectivity at the woodland management unit and coupe scale, ensuring they are not in obtrusive locations within the landscape.

**Map 10 – Deadwood Ecological Potential** shows the ecological deadwood potential of Inglismaldie and Denlethen, based on the following criteria:

Table 10: Description of Deadwood Ecological Potential classes

Deadwood Ecological Potential (DEP) class	FES woodland management categories included in this DEP class
High	Natural reserves, ancient semi-natural woodlands, native pinewoods, riparian buffers along watercourses, PAWS with high ecological potential, wood pasture.
Medium	Minimum intervention areas of broadleaved woodlands, PAWS, LEPOs, long-term retentions, LISS coupes.
Low	All other stands (i.e. stands where timber production is the priority).

Table 11: Description of management prescriptions for each DEP class

(DEP) class	Deadwood Management Prescription
High	<ol> <li>Retain all existing veteran trees and deadwood apart from that which is a health and safety risk or where it would be highly obtrusive in the landscape</li> <li>Retain all wind blow apart from that which is a health and safety risk</li> <li>Deadwood distributed throughout the coupe</li> <li>Seek opportunities to create particularly valuable deadwood e.g. import some large-diameter logs from nearby coupes when they are thinned or clear felled.</li> </ol>
Medium	<ol> <li>Retain all existing veteran trees and deadwood apart from that which is a health and safety risk</li> <li>Only harvest windblow of significant value or which poses a health and safety risk</li> <li>Seek opportunities to create particularly valuable new deadwood e, g when felling big trees, retain some large diameter logs at the edge of the coupe</li> <li>Where windblow is harvested, retain some blown trees in a group as 'future deadwood' where not obtrusive in the landscape</li> </ol>
Low	NA

#### C.2.12 Tree Health

There are few specific concerns around tree health in Inglismaldie and Denlethen. Therefore, tree health will largely be managed through improving species and age diversification, continued thinning and ensuring appropriate species selection taking soils

and climate change into account. As set out in **C.1** tree species will be carefully matched to soil type, this ensures resilience and reduces the opportunities for pathogens.

As noted in **A.8** there is a presence of butt and root rot fungi. To minimise the impact of these pathogens, forest management, including civils operations, will take care to minimise damage to stems and roots during operations. Furthermore, urea will be sprayed on stumps during felling or thinning operations to inhibit colonisation by *Heterobasidion annosum*.

#### C.2.13 Invasive Species

As set out in **A.6.10** the Inglismaldie block contains several invasive non-native species (INNS). There is a localised presence of Himalayan balsam (*Impatiens glandulifera*), *Spiraea douglasi*, giant knotweed (*Reynoutria sachalinensis*) and snowberry (*Symphoricarpos alba*). A program of removal and treatment is in place for 2025. Monitoring will be carried out and in case of reappearance removal/treatment will take place. Where the presence of INNS crosses into neighbouring properties contact with neighbours will be sought to jointly remove INNS where possible.

Rhododendron (*rhododendron ponticum*) is more widely spread through the Capo and Inglismaldie blocks. Removal and treatment works will be done using contractor resource as and when practically available. Regular monitoring will take place post removal and if necessary, a further round of removal/treatment will take place.

<u>C.2.14 New Planting</u> Not applicable.

#### <u>C.2.15 Other</u>

#### Wildfire

FLS continues to work closely with 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.

#### Utilities, Renewables and other developments

As mentioned in section A there is key utilities infrastructure running through and adjacent to the Inglismaldie and Denlethen blocks. The plan considers and safeguards the infrastructure through felling current productive crops and establishing long term open or minimum intervention areas. Within the easement of the gas pipeline the current crop will be felled in Phase 2 of the plan and the area will be kept open 12 meters either side of the pipeline. The area proposed for deforestation is under the EIA scoping opinion threshold. Prior to operations National Gas will be contacted to agree a working method. Works will be done in accordance with SSW/22 and a RAMS will be provided to National Gas Transmission prior to the works.

Along the railway and powerline in Denlethen native woodland will be established at low density. This will ensure a long-term stable forest which can be managed as a minimum intervention area.

There are proposals for the development of an overhead line (OHL) through northern Capo and Drumhendry plantation in the northwest of Inglismaldie. Considering the stage this development is currently at, no changes to the plan to have been made in relation to the proposed OHL. In case the development of the OHL goes ahead it is likely that amendments to the plan will be required.

#### **Private water supplies**

As part of the design process for this LMP, a concerted effort has been made to identify any private water supply sources either within the plan area or within approximately 2km of the boundaries.

This was done by setting up an indicative "private water supply screening zone" around the LMP blocks and within this area checking against all relevant water supply data currently available including:

- FLS local private water supplies data
- Data provided by the local authority
- Drinking Water Protected Area data provided by SEPA
- Using a database of addresses to identify all residents of rural properties within 2km which are not located near a water main

No records of private water supplies were found within the forest blocks, in the above datasets, or came up through public consultation. Considering the presence of water mains

surrounding the block and land use in the area it is furthermore assumed that neighbours are on mains water supplies.

#### Hydrology

Where operations along the main watercourses take place opportunities will be sought to naturalize watercourses by removing non-native species from the banks and re-establishing with open grown riparian woodland.

Surface water drains will not discharge directly into the water environment. East Region staff will remediate legacy drains of this type to avoid siltation problems during and after forestry operations by using tree roots and other natural methods to install anti siltation devices during harvesting operations and addressing the drains permanently during subsequent ground preparation operations. When natural means are not available plastic dams or semi-permeable netting might be used temporarily. When operations are finished this will be removed and reused.

Where opportunities exist to deliver environmental improvement by the alteration or removal of inappropriately designed or redundant structures - for instance upgrading of a culvert to allow fish passage or removal of a redundant weir - this will be undertaken in consultation with the relevant stakeholders, and we will register the operation on the SEPA website. Opportunities for morphological and ecological improvements may also be considered.

Where specific operations produce waste material not detailed above, East Region staff will liaise directly with SEPA to establish the level of permission/licensing required on a site-by-site basis.

## C.3 Environmental Impact Assessment (EIA) and Permitted Development Notifications

Total area (hectares) for each project type and details by sensitive or non-sensitive area.							
Type of Project	Sensitiv	tive Area	Total				
Afforestation					ha		
Deforestation			100% Con		0.94ha		
Forest Roads	ha	3	ha		ha		
Quarries	ha	Э	ha	3	ha		
Provide further details on your project if required.							
Deforestation v	vorks over gas p	oipeline under	threshold for S	coping Opinio	n Request.		

#### C.4 Tolerance Table

#### See Appendix III.

#### **Appendices**

Map 1 – Location

Map 2 – Current tree species

Map 3 – Concept

Map 4 – Management Coupes

Map 5 – Thinning Coupes

Map 6 – Future Habitats and Species

Map 7 – Timber haulage

Map 8 - Soils

Map 9 – Historic Environment

Map 10 – Deadwood Ecological Potential

Map 11 – Restock Coupes

Map 12 – Thinning Approvals Map

Appendix I – Consultation record

Appendix II – Historic environment records

Appendix III – Tolerance table

Appendix IV – Restock Prescriptions

Appendix V – Public Consultation Record

### **Appendix I: Consultation record**

See section A.4 for a summary of the main points raised below by stakeholders and where they are addressed in the plan.

Issue	Raised by	Requirement / Recommendation / Concern /	FLS Response
		Aspiration	
Scheduled Monuments	Historic Environment Scotland	- Recommend control of regeneration for both monuments.	- Included in plan.
		- Recommend improving setting of Capo Long Barrow through removal of trees to the south.	- Agreed to postpone out with plan period.
		- Recommends highlighting importance of consultation with HES in plan.	- Included in plan.
		- Highlights the need for scheduled monument clearance in case of operation.	- Included in plan.
		- Recommends establishment of appropriate buffers.	- Buffers included in future habitats.
Water Quality	Esk District Salmon	- Highlights Luther Burn containing salmon and trout.	- Acknowledged in plan.
	Fishery Board	- Requests removal of non-native trees and replacement with native trees in a buffer along the Black Burn.	- Included in plan where felling is planned.
		- Requests any drainage ditches entering the watercourse from the plantation to be blocked.	- Included in plan.
		- Requests that, if the burn is bunded with floodbanks, these are to be removed.	- Not relevant.
Access	Friends of Denlethen	- Highlights the need for continued access where possible whilst operations are ongoing.	- Included in plan.
		- Requests open areas within the block.	- Percentage of open ground increased in plan.
Environment	Friends of Denlethen	- Requests whether water availability to the pond can be improved.	- Future habitats should reduce evapotranspiration around pond.
		<ul> <li>Asks whether wildlife is a key consideration in the plan</li> <li>Asks whether broadleaved trees in edges will be retained.</li> </ul>	<ul><li>Yes.</li><li>Yes, unless these pose a risk to infrastructure or people.</li></ul>
Environment	RSPB	- Highlighting presence of red kites and the need for pre- felling checks.	- Included in plan.

Issue	Raised by	Requirement / Recommendation / Concern /	FLS Response
		Aspiration	
Infrastructure	National Gas	- Highlighting the responsibility of the landowner to	- Included in plan.
		safeguard gas infrastructure and setting out the process	
		in case of operations over/near gas pipeline.	
Water	SEPA	- Requests maximisation of riparian woodland.	- Included in plan.
		- Highlighting industry best practise and guidance	- Referred to in plan.
		- Highlights need for appropriate waste and water	- Referred to in plan.
		management.	
Restock	Neighbours/Users in	- Concern regarding potential for future wind damage to	- Restock plans provided demonstrating use of
	response to signage	property.	shrub and broadleaves along boundary.
Harvesting	put out on site	- Request for removal of brash adjacent to property.	- No further action will be taken.
Historic Environment		- Request for detail regarding working near historic	- Detail provided.
		environment.	
Utilities		- Concern raised regarding proposed powerline.	- Not within remit of FLS.
Restock		- Request for prioritising Norway spruce over Sitka	- Considered in restock in light of red squirrel
		spruce.	presence but weighed up against establishment
			speeds and site suitability.
			- Will be included where appropriate.
Recreation		- Suggests adding aspen to broadleaves.	- Acknowledged in plan.
		- Highlighting recreational value of Inglismaldie.	- Request passed on to local squad.
		- Requests removal of windblow over historic path.	- FLS is currently not in a position to lead on this
		- Requests creation of parking at forest entrances.	but is keen to work together with community
			groups to facilitate this.
Restock	Neighbours/Users in		- Planting at low density would sacrifice
	response to signage	- Request for planting at low density to prevent wind	productive value. Measures to prevent wind
	put out on site	damage.	damage will be establishment of stable forest
			edges, early and regular thinning and appropriate
			species selection.
			- Included in plan.
		- Request for higher percentages of broadleaves between	·
		productive coupes on forest edges and along roads and	
		watercourses.	- Information provided.

Issue	Raised by	Requirement / Recommendation / Concern /	FLS Response
		Aspiration	
		- Request for information regarding restock densities,	
INNS		drainage and ground preparation methods.	- Included in plan.
Environment		- Request for removal of Rhododendron.	- Acknowledged and species composition chosen
		- Highlighting importance of Denlethen for red squirrel.	to benefit red squirrel.
Recreation			
		- Request for reinstatement and expansion of informal	- Users have the right to responsible access under
	Neighbours/Users in	- Concern raised regarding the consultation on coupes	SOAC and new routes will become established through time and persistent use. Early and regular thinning will furthermore open the forest for recreation at a younger age. We are open to working with local user groups to improve access and facilities within the forests but unfortunately do not have the funding or resources to carry out these works ourselves at this time.  - Process regarding previous plan, amendments
Consultation process	response to signage put out on site	currently being restocked.	and felling permissions provided.
Various	Public Consultation	See Appendix V – Public Consultation Meeting Record	See Appendix V – Public Consultation Meeting Record
The following stakehorstle	olders responded with	no comment or no issues: NatureScot, Inglismaldie	
The following stakehors Sawmill and Quarry,	olders were contacted	during scoping but did not respond: Neighbouring	

## **Appendix II: Historic Environment records**

	Historic Environment Records									
Map ref	Designation	Name	Feature Description	Grid Reference	Importance	Area (ha)				
1	Scheduled	Capo Long Barrow (SM4444)	Prehistoric ritual and funerary: long barrow	NO 63350 66463	National	2.16				
2	Scheduled	Witch Hillock (SM4823)	Prehistoric ritual and funerary: cairn (type uncertain); stone setting	NO 64404 67325	National	0.32				
3	Undesignat ed	Capo Bank/Dyke	Low bank 3-4m wide and up to 1m high	NO 6338 6648	Local	0.7				
4	Undesignat ed	Capo Field boundary	Field boundary dyke	NO 6326 6719	Local	0.34				
5	Undesignat ed	Capo Trackway	Double banked trackway	NO 6332 6728	Local	0.41				
6	Undesignat ed	Capo Earthen Bank	Large earthen bank	NO 6354 6692	Local	1.09				
7	Undesignat ed	Capo/Inglism aldie Banks	Linear Banks	NO 6387 6738	Uncategorized	0.57				
8	Undesignat ed	Capo Feature	Steep sided hollowed-out feature, potentially old quarry	NO 6346 6759	Local	0.12				
9	Undesignat ed	Capo Trackway 2	Double banked trackway	NO 6385 6692	Local	0.2				
10	Undesignat ed	Areas of Rig and Furrow	N/A	NO 6350 6715 and NO 6353 6740	Uncategorized	0.02				

	Historic Environment Records								
Map ref	Designation Name		Feature Description	Grid Reference	Importance	Area (ha)			
11	Undesignat ed	Inglismaldie banks	Linear banks	NO 6500 6715	Local	0.42			
12	Undesignat ed	Inglismaldie Platform	Concrete platform	NO 6452 6700	Uncategorized	0.01			
13	Undesignat ed	Muirton Rigs	Area of rigs	NO 6557 6731	Uncategorized	0.47			
14	Undesignat ed	Muirton Tank	Concrete tank	NO 6527 6702	Uncategorized	0.01			
15	Undesignat ed	Muirton Hollow	Circular Hollow (2m deep)	NO 6546 6706	Local	0.01			
16	Undesignat ed	Muirton Bank	Bank with no ditch	NO 6536 6686	Uncategorized	0.1			
17	Undesignat ed	Muirton Quarry	Area of quarrying	NO 6558 6689	Uncategorized	0.29			
18	Undesignat ed	Muirton Rig and Furrow	Area of Rig and Furrow	NO 6564 6696	Uncategorized	0.2			
19	Undesignat ed	Muirton Bank	Low Linear Bank	NO 6565 6701	Local	0.06			
20	Undesignat ed	Denlethen Kings Road	Kings Road. Broad track with banks on either side.	NO 7010 7034	Regional	0.59			
21	Undesignat ed	Dyke	Remains of dyke	NO 6977 7033	Uncategorized	0.03			
22	Undesignat ed	Roadway	Broad well-made roadway	NO 7023 7024	Uncategorized	0.24			

	Historic Environment Records							
Map ref	I Decignation   Name   Feature Deccription   Grid Reterence   Importance   7							
23	Undesignat ed	Boundary bank	Boundary bank	NO 7034 7030	Local	0.09		

## **Appendix III: Tolerance table**

#### **EAST REGION TOLERANCE TABLE - 2025**

	Map Required (Y/N)	Adjustment to felling period *	Adjustment to felling coupe boundaries **	Timing of restock	Change to restocking species	Changes to roadline	Designed open ground ***	Windblow clearance ****
SF approval not normally required	N	Felling date can be moved within 5 year period where separation or other constraints are met	Up to 10% of coupe area	Up to 2 planting seasons after felling	Change within species group e.g. evergreen conifers or broadleaves	-	Increase by up to 5% of coupe area	-
SF approval by exchange of email and map	Y	-	Up to 15% of coupe area	Between 2 and 5 planting seasons after felling subject to the wider forest and habitat structure not being significantly compromised	-	Additional felling of trees not agreed in plan.  Departures of more than 60m in either direction from centre of road	Increase by up to 10% Any reduction in open ground within coupe area	Up to 5 ha
SF approval by formal plan amendment may be required	Υ	Felling delayed into second or later 5 year period Advance felling into current or 2 <sup>nd</sup> 5 year period	More than 15% of coupe area	More than 5 planting seasons after felling subject to the wider forest and habitat structure not being significantly compromised	Change from specified native species Change between species groups	As above, depending on sensitivity	More than 10% of coupe area Colonisation of open areas agreed as critical	More than 5 ha

#### **EAST REGION TOLERANCE TABLE - 2025**

#### 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 separate felling permission due to the risks or impacts of delaying felling.

Felling permission is therefore sought for the LMP approval period to cover the following circumstances: Individual, rows or small groups of trees that are impacting on important infrastructure (ie. Forest roads, footpaths, access routes (vehicular, cycle, equestrian or pedestrian), Buildings, Utilities and services and drains) either because they are now encroaching on or have been destabilised or made unsafe by wind, physical damage or impede drainage.

The maximum volume of felling in exceptional circumstances covered by this approval is 75 cubic metres per Land Management Plan per calendar year.

A record of the volume felled in this manner will be maintained and will be considered during the five year LMP review.

- Felling sequence must not compromise UKFS in particular felling coupe adjacency. Felling progress and impact will be reviewed against UKFS at 5 year review.
- No more than 1 ha, without consultation with SF, where the location is defined as 'sensitive' within the Environmental Impact Assessment (Forestry) 1999 Regulations (EIA).
- Tolerance subject to an overriding maximum of 20% designed open ground
- Where windblow occurs, SF must be informed of extent prior to clearance and consulted on clearance of any standing trees