

# Elchies

# Land Management Plan

## 2024 - 2034

This plan sets out the strategic direction for management over the next 20 years and provides details of the operations proposed in the first 10 years.



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.



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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](http://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.	

## Section A. Description of Woodlands

### A.1. Property Details

Forestry and Land Scotland (FLS) is the Scottish Government agency responsible for managing Scotland’s national forests and land. We look after Scotland’s forests and land, for the benefit of all, now and for the future. Our vision is for forests and land that Scotland can be proud of.

<b>Property Name:</b>	Elchies Forest
<b>Grid Reference (main entrance):</b>	NJ 2295 4446
<b>Nearest town or locality:</b>	Archiestown
<b>Local Authority:</b>	Moray Council

### A.2. Location and Background

**See Location Map.**

The Forest of Elchies is located just north of the small village of Archiestown, within Speyside and overlooked by Ben Rinnes, the tallest peak in Speyside. It is close to the A95 trunk road, which leads to the south and incorporates part of the renowned Malt Whisky trail.

The forest block covers 1,501.6 hectares (ha) comprising of high moorland forest in the north that descends to a pastoral landscape in the south, with the elevation ranging from 150 m – 300 m.

### A.3. Existing Schemes and Permissions

The previous Land Management Plan (LMP) approval expired on 31 March 2020. There are no active schemes or permissions.

The purpose of the LMP is to outline felling and thinning proposals over 20 years with the first 10 years (2025-2034) in detail along with restocking proposals for the whole plan area. This first 10-year period is particularly important because it relates to the part of the LMP that requires specific approval from Scottish Forestry (SF). Longer term management of Elchies is included in the plan but to provide an indication of the direction of travel and to provide context.

The plan will be reviewed after five years to ensure the objectives set out in the LMP are still appropriate for the management of the forest in the current conditions. All operations, both planned and completed, will also be reviewed to ensure they are still necessary to achieve the stated objectives.

The management of the woodland is certified and will always adhere to the UK Forestry Standard (UKFS) and the UK Woodland Assurance Standard (UKWAS).

This LMP has been produced in accordance with a range of government and industry standards and guidance as well as recent research outputs. A full list of these standards and guidance can be found on our [website](#).

## A.4. Stakeholder Engagement

During the development of this LMP, we have consulted publicly including with local community representatives and stakeholders known to have an interest in the forest. Appendix D.2 summarises the issues that were raised during initial, final, and face-to-face consultation.

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

The aims detailed below outline the long-term vision for the plan area. They are driven by national policy drivers and are applicable to the whole plan area.

### Ecosystem services and additional public benefits

- Sustainable timber production.
- Peatland restoration to reduce the impact of climate change.
- Secure carbon sequestration through Continuous Cover Forestry (CCF).
- Support for small sawmills.
- Maintenance of high-water quality of salmon rivers.
- High recreation use of Scotland's National Forest and Land (SNFL) contributes to increased health and well-being.

### Other national commitments

- Investment in silvicultural practices.
- Management of tree disease.

### Contribution to financial sustainability

- High quality timber crops.
- Diversity of softwood species.
- Wind farm investment.
- High quality timber crops.

Over the next 20 years, the forest will move towards large areas of restored peatland complimented by riparian habitat enhancement via the planting of mixed native broadleaves. Commercial crops will move towards Scots Pine and Birch, with Sitka Spruce and Lodgepole Pine. Species will be selected that are suitable for the site conditions and will be thinned where appropriate to improve timber quality. Silvicultural systems other than felling and replanting will be used where they are appropriate to meet the plan objectives.

Table 1: Management objectives.

Objective (what we want to achieve)	Critical Success Factor
Restore deep peat and priority habitats to maximise their carbon sequestration and storage potential.	Peat areas are identified, and a programme of restoration works have started.
Production of high-quality timber within targeted location based on site conditions with no additional input (e.g. fertiliser and additional drainage).	Undertake the planned thinning and felling programme during the plan period to increase the quality of the timber and to meet the production targets.

Objective (what we want to achieve)	Critical Success Factor
Management to enhance plant health and to minimise the impact of existing Dothistroma Needle Blight (DNB) via targeted thinning and monitoring of potential <i>Phytophthora ramorum</i> vulnerable crops on timber production.	Undertake planned thinning to minimize the impact of DNB on the existing crop. Monitoring for <i>Phytophthora ramorum</i> .
Enhance the riparian network with high density native broadleaf planting, protect private and commercial water supply points and pipelines.	Riparian networks that are felled within the plan period have been, or are planned to be, restocked with native woodland and open ground. Non-native conifer regeneration will be removed where feasible.
Facilitate the development of Rothes III windfarm farm via selective felling.	Felling programmed to coincide with wind farm infrastructure installation.
Enhancement of habitat suitable for return of Capercaillie and Black Grouse.	Successful restoration of peatland and enhancement of riparian network.

## A.6. General Site Description

### A.6.1. Topography

The elevation of the plan area runs from about 200 m above sea level where the Ballintomb Burn exits the forest, up to 365 m at the top of Hunt Hill on the northeastern boundary. The forest lies around the U-shaped valley of the Ballintomb Burn.

### A.6.2. Geology and Soils

According to the British Geological Survey, Geological Map of the UK the plan area is underlain with Psammite of the Nethybridge formation. This is a metamorphic rock formed 541 to 1000 million years. It was originally a sedimentary rock that was later altered by low-grade metamorphism. There are small areas of Archiestown Pluton, a monzogranite. This is an igneous rock formed 419 to 444 million years ago in the Silurian Period from intrusions of silica-rich magma. The Netherly Diorite is similar but was created from intrusions of silica-poor magma.

The Psammite leads to the creation of soils with a low level of nitrogen availability. While both the Archiestown pluton and Netherly diorite leads to soils with medium levels of nitrogen availability.

About 30% of Elchies is Calluna Blanket Bog (11c), another 30% is Typical Ironpan Soils (4), while 20% is Typical Peaty Surface-water Gley (6) with the remaining 20% made up of small areas of the other soil types shown below. These soils have a wide range of moisture regimes from very wet through to slightly dry and nutrient regimes that run from very-poor to medium. These factors influence the species of trees that will grow successfully in these woodlands.

### A.6.3. Climate

The climate data for Elchies obtained from the Ecological Site Classification system (ESC). The results of interrogating this system gave the following data.

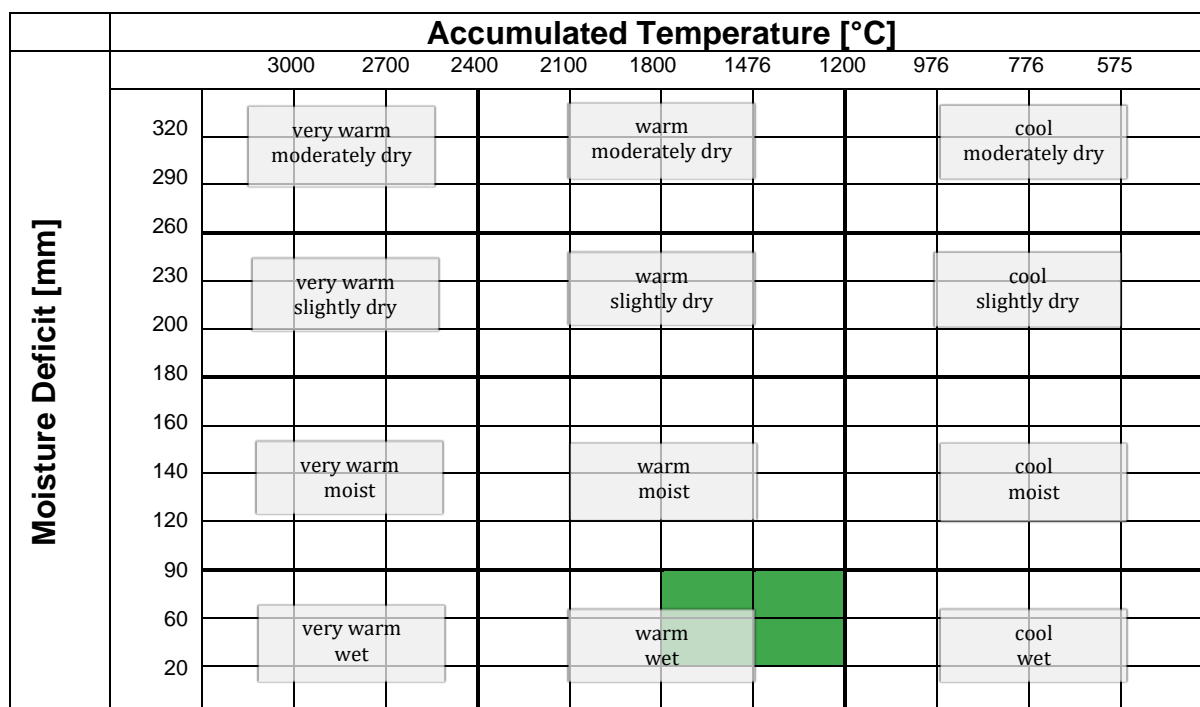


Figure 1: climate data for Elchies.

**AT5 (Accumulated Temperature)** is the accumulated total of the day-degrees above the growth threshold temperature of 5°, which provides a convenient measure of summer warmth. The results for AT5 place the entire block in the warm zone.

**MD** is the Moisture Deficit for the area. Moisture deficit reflects the balance between potential evaporation and rainfall and therefore emphasises the dryness of the growing season (rather than the wetness of the winter or entire year). These results place the block in the wet zone.

Each tree species has tolerances for these, and other factors and they can be used to identify species suitable for the site conditions. The results above will be used to help assist in the choice of tree species for restocking in this plan.

Further information on these criteria and the application of ESC can be found in [Forestry Commission Bulletin 124 - An Ecological Site Classification for Forestry in Great Britain](#).

### A.6.4. Hydrology

See Concept Map.

The Findhorn, Nairn and Speyside Local Plan District has identified that Rothes and Aberlour is a Potentially Vulnerable Area (05/09). The watercourses impacted are the River Spey, Burn of Rothes, Back Burn and Black Burn. Five percent of the catchment of Rothes Burn falls within the LMP area. We are proposing a large amount of felling in Elchies to support peatland restoration, we are confident that this will have an insignificant influence on the overall flood risk in the downstream operational target area (OTA) (Rothes). There are no OTAs associated with the Ballintomb Burn.

The River Spey catchment rises in the Monadhliath Mountains and enters the Moray Firth at Spey Bay. It is the second longest river in Scotland, with a catchment area of over 3,000 km<sup>2</sup>. The



River Spey is designated as a SSSI and SAC for Atlantic salmon, freshwater pearl mussel, lamprey and otter, and the lower Spey is a SAC for coastal shingle and floodplain woodland features. Over 60% of the catchment falls within the Cairngorms National Park. The Ballintomb Burn is one of the Spey's tributaries, it originates in Elchies, and is the main burn to flow out of the forest, and most significant catchment. Is of moderate ecological status as per SEPA's Water Classification Hub and River Basin Management Planning. South of Elchies, the Ballintomb Burn has SSSI status for the largest and least disturbed example in Moray of an ancient semi-natural alder woodland.

Elchies also drains into two additional burns, Rothes and Knochando (poor ecological status) although the forest makes up a minor part of their respective catchments.

There is one small body of standing water in Elchies, a result of stone quarrying within the forest.

### A.6.5. Windthrow

The wind throw risk is measured by the DAMS score for the forest area. DAMS is the Detailed Aspect Method of Scoring. This represents the amount of physically damaging wind that forest stands experience in the year. The range of DAMS is from 15 – 17 and windiness is the limiting factor to tree growth at higher elevations in Britain. Elchies is moderately exposed, this indicates that, as you would expect, the areas at the tops of the Elchies are most exposed and therefore more liable to wind throw. This information will be used when felling coupes are planned and LISS prescriptions are to be implemented to reduce the potential impacts.

### A.6.6. Landscape and Adjacent Land Use

Elchies forest is located on the edge of a smooth, even sloped upland plateau of moorland and forestry. It falls on the margin of the Moorland and Forestry Landscape Character Type, Nature Scot 2019, just north of Broad Farmed Valleys Landscape Character Type (LCT). Its character is mostly that of the moorland however it influences and is influenced by the nature of the adjoining valley.

The Upland Moorland and Forestry character area comprises inaccessible areas of broad, rounded hills and upland plateau with smooth, even, gentle slopes. Although there are scattered areas of semi-improved pasture the area is an almost equal balance of heather and grass moorland and large-scale coniferous plantations which form simple, large-scale patterns in the landscape.

To the south of Elchies the landscape character changes to that of Broad Farmed Valley LCT. It comprises farmed, enclosed, descending side valleys with traditional scattered buildings, farms, and rural estates with their policy plantings, extending up gentler slopes and interspersed with woodland and small forests with pasture in the upper reaches, as around Elchies.

Archiestown is an example of the occasional but prominent historic towns, villages, distilleries, and bridges, which are connected by winding roads which follow the river valley landform and convey a strong cultural identity of Speyside. Parts of the Broad Farmed Valley around the Spey are within a Local Landscape Area (see Key Features map), designated for its local landscape quality. To maintain and strengthen landscape quality of the LLA the parts of Elchies visible from it should contribute to its special qualities.

### A.6.7. Public Access and Recreation

See Concept Map

Recreation in Elchies is low-key but it is important in the context of the village and surrounding environs. Most usage centres on and around the informal footpath and forest road network that starts at the Elchies main entrance. The walks range from 1.5 km to 7.5 km.

Many visits are by residents exercising their dogs although there is an upward trend in visitors from outside the area. Mountain bikers do use the forest and there is evidence of them throughout Elchies. However, numbers are low and the impact manageable. Usage for horses has remained constant. In the main it is locally stabled horses that are exercised in the forest. There is seasonal use of the forest by cross-country skiers, but this is becoming increasingly less frequent.

### A.6.8. Historic Environment

See Concept Map

No scheduled sites or features of regional importance are present within the plan area. There are a wide range of unscheduled sites across the forest, some of which have been known of for some time and others discovered more recently through pre-operation site checks and surveys conducted by a local archaeologist.

### A.6.9. Biodiversity

To support the Scottish Biodiversity Strategy, FLS are focusing on the following:

- Forest and woodland management will have led to **sustainable natural regeneration**; a greater **diversity of woodland species**; **increased woodland cover** with a healthy understorey, **enhanced woodland connectivity**; and improved integration of trees into other land uses.
- Ensure that productive forests and woodlands are designed and managed in ways that deliver **increased biodiversity and habitat connectivity** whilst sustaining timber production and carbon sequestration to meet the climate crisis and reduce their vulnerability to climate risks.

The Scottish Biodiversity List is a list of animals, plants, and habitats that Scottish Ministers consider to be of principal importance for biodiversity conservation in Scotland. Biodiversity List species and FLS Key Species are recorded in Elchies, these include:

- Afforested bog, that shows evidence of previously being active Blanket Bog is present throughout Elchies.
- Both Capercaillie and Black Grouse have been recorded in Elchies, however there have been no active leks since 2018 (Capercaillie) and Black Grouse (2011) within the forest.
- Red Squirrel is recorded throughout the forest, along with records of Badger setts.

Within Elchies, there is 216 ha of Long-established Woodlands of Plantation Origin (LEPO). This is interpreted as plantation from maps of 1750 or 1860 and continuously wooded since. These sites have developed semi-natural characteristics, especially the oldest ones, which may be as rich as Ancient Woodland.

## A.6.10. Invasive Species

There are no records of invasive species within Elchies.

## A.6.11. Utilities, Renewables, and other developments

### A.6.11.1. Rothes III Windfarm

Planning consent for 29 wind turbines (of these 10 are within Elchies). The turbines comprise of 3 of a maximum height base to tip not exceeding 149.9 m, eight of a maximum height base to tip not exceeding 200 m and 18 of a maximum height not exceeding 225 m, which will generate approximately 137 MW. More information can be found on [Scottish Government - Energy Consents Unit - Application Details](#).

### A.6.11.2. Public Water Supplies and Associated Pipelines

Scottish Water have advised FLS that a mains distribution point is present within the block boundary. All other Scottish Water infrastructure within Elchies, primarily along the main forest road into the forest is confirmed abandoned and FLS does not need to abide by any water protection measures for this infrastructure.

### A.6.11.3. Private Water Supplies and Associated Pipelines

Private water supplies (PWS) are located within the forest. They are a combination of Type A or Type B supply; each being governed by separate legislation. The management of these will be addressed in sperate confidential appendix submitted separately to Scottish Forestry.

### A.6.11.4. Electricity Lines

SSEN have advised on the presence of overhead electricity power lines (see Appendix D.2 Stakeholder Engagement for further details).

## A.7. Woodland Description

See Current Tree Species Map

Extensive areas of Elchies were felled in the last plan period due to Dothistroma Needle Blight (DNB) this will lead to a higher percentage of establishment aged crops as restocking is undertaken (Table 2). By 2043 the age profile is even aside from pole stage crops, which is a relic of DNB felling.

Table 2: change in age profile over the next 20 years (2024-2044).

Age Profile	Current (2024) Area (ha)	Year 20 (2044) Area (ha)
Establishment (0-10 years)	451	137.2
Thicket (11-20 years)	131.8	118.7
Pole Stage (21-30 years)	390.3	305.5
Mature High Forest (41-60 years)	50.4	162.2
Old High Forest (61+ years)	274	175.4
<b>Total</b>	<b>1297.5</b>	<b>899</b>

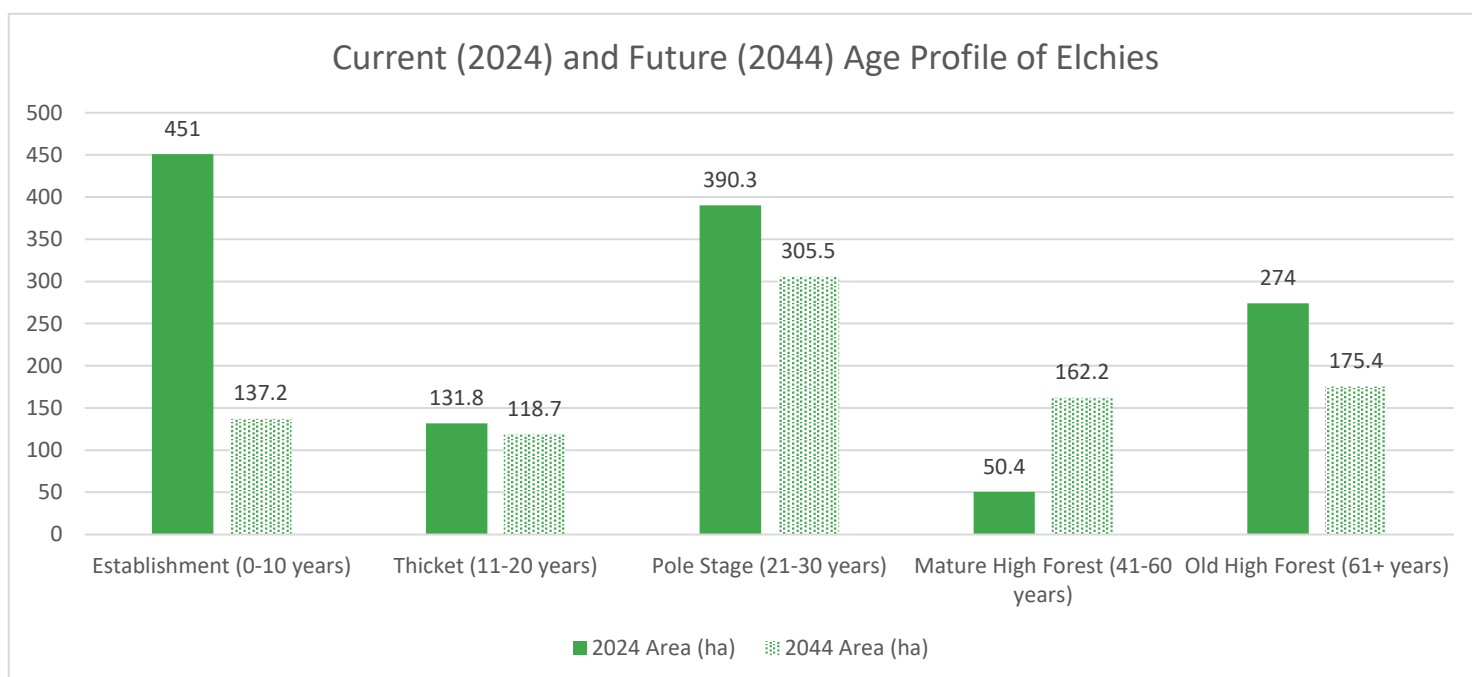


Figure 2: Current (2024) and Future (2044) Age Profile of Elchies

Scots Pine and Sitka Spruce are the two largest species components of Elchies, currently making up 56% of the forest, with low levels of Native Mixed Broadleaves (6.2%). However, over the next 20 years, the percentage of Sitka Spruce will decline, with an increase in Native Mixed Broadleaves and open space because of proposed peatland restoration and riparian habit enhancement (Table 3).

Table 3: change in species composition over the next 20 years (2024-2044).

Tree Species	Current (2024) Area ha	Current (2024) %	Year 10 (2034) Area ha	Year 10 (2034) %	Year 20 (2044) Area ha	Year 20 (2044) %
Mixed Conifers	21.4	1.4	17.8	1.2	14.8	1.0
Larch	63.1	4.2	45.2	3.0	32.7	2.2
Lodgepole Pine	280.5	18.7	153.6	10.2	95.1	6.3
Sitka Spruce	472.4	31.5	256.7	17.1	182.0	12.1
Scots Pine	367.3	24.5	349.6	23.3	368.2	24.5
Native Mixed Broadleaves	92.9	6.2	179.7	12.0	246.0	16.4
Open	204.0	13.6	499.0	33.2	562.8	37.5
<b>Total</b>	<b>1501.6</b>	<b>100%</b>	<b>1501.6</b>	<b>100%</b>	<b>1501.6</b>	<b>100%</b>

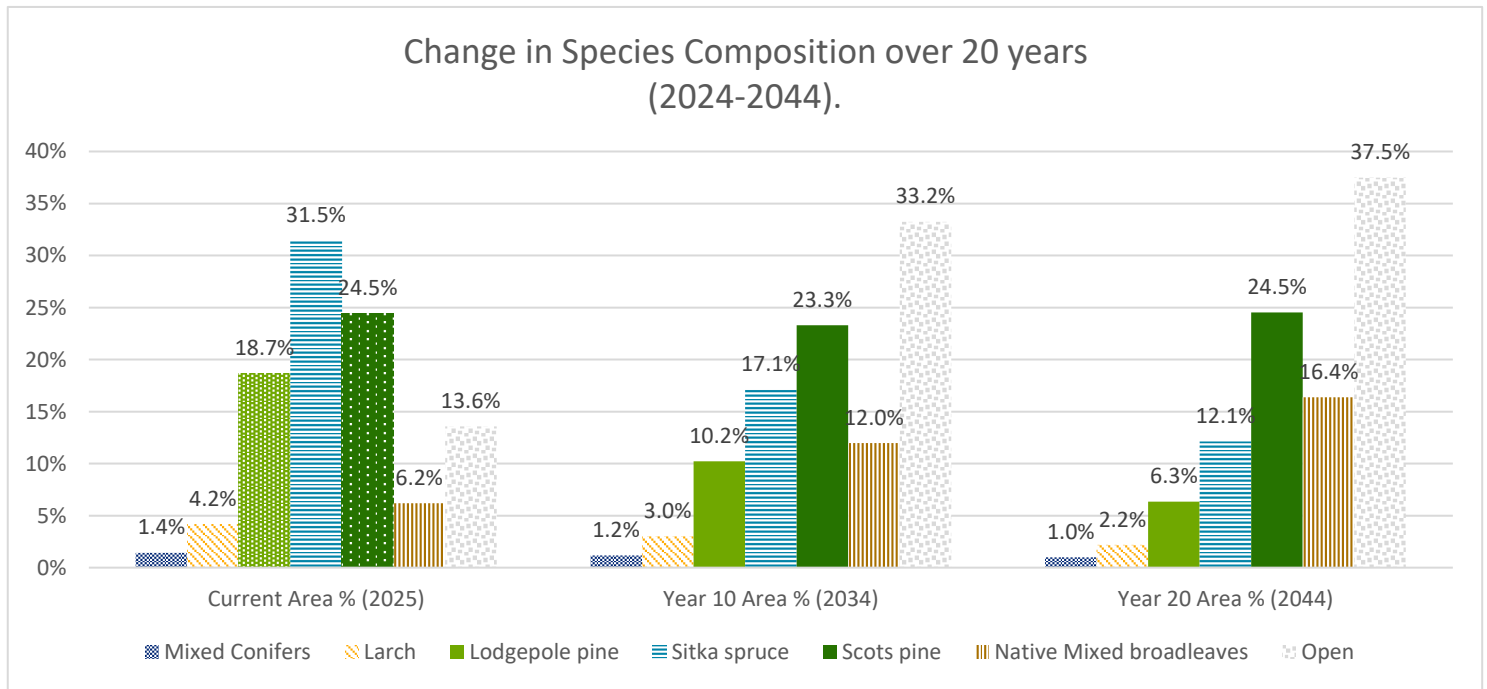


Figure 3: Change in species composition over the next 20 years (2024-2044).

The majority of Elchies is currently high forest (86.4%), where the non-native conifer crop (Sitka Spruce and Lodgepole Pine) is performing poorly on deep peat soils. Over the next 20 years, 35.1% of the forest will be managed as open ground via the proposed peatland restoration of UK Biodiversity Acton Plan (BAP) Blanket Bog habitat.

Table 4: land use change over 20 years (2024-2044).

Land Use	Current Area (%) 2024	Year 10 Area (%) 2034	Year 20 Area (%) 2044
Felled awaiting restock	9.2	1.8	1.8
Other Open	1.6	0.8	0.6
Managed Open	11.5	30.6	35.1
High Forest	77.7	66.8	62.5
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

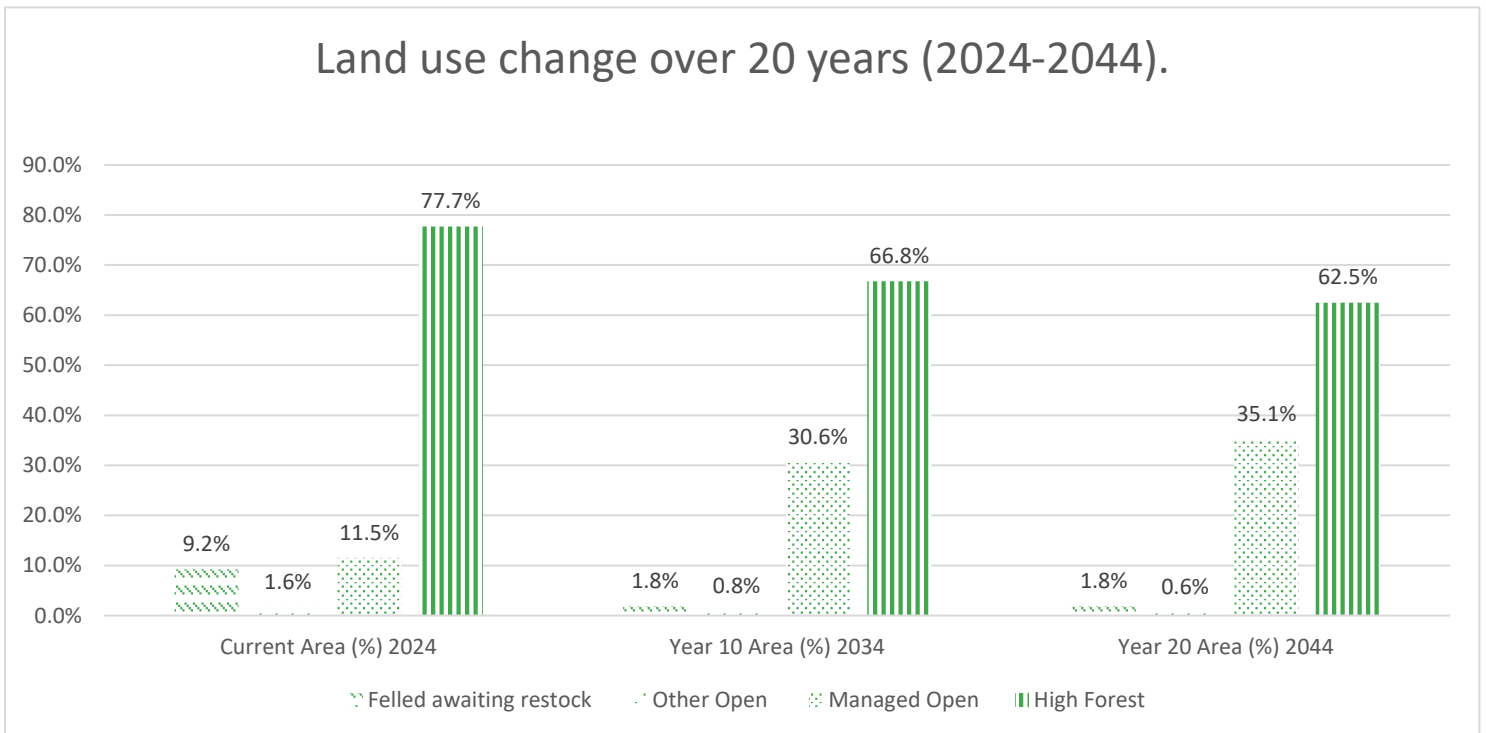


Figure 4: Land use change over 20 years (2024-2045).

## A.8. Plant Health

### A.8.1. Dothistoroma Needle Blight (DNB)

DNB, first found in the UK in 1954, is the major threat and damaging agent for pine species. It causes premature needle defoliation, resulting in loss of timber yield and, in severe cases, tree death. It is also known as red band needle blight because of the colourful symptoms it shows on pine trees. Moisture is required for natural dispersal of the fungus, and long-distance dispersal is thought to occur in moist winds and mists.

### A.8.2. Large Pine Weevil (*Hylobius abietis*)

The Large Pine Weevil (*Hylobius abietis*) can cause extensive feeding damage to young trees used to restock clearfell sites, but damage is often highly variable. This species lays its eggs in deadwood/stumps on clearfell sites and the emerging adults feed on the bark of young trees, often with devastating effect on newly planted conifer crops.

The Hylobius Management Support System (HMSS) is based on a simple monitoring protocol using billet traps to measure Hylobius numbers on individual clearfell sites. The numbers recorded are used, with other information entered into the HMSS software, to determine the best way to manage clearfell sites for successful, cost effective and environmentally friendly restocking. This Support System will be used along with past results and experience to determine the optimal time to restock while minimising the use of chemicals.

Restocking has traditionally taken place within two years of sites being felled. However, many seedlings were damaged or killed by the *H. abietis*. To reduce the use of insecticides where feasible restocking is planned to take place at the end of year two. Restocking may take place up to four years following felling if monitoring, using MSS shows that it is expected that there will be an elevated level of *H. abietis*.

### A.8.3. Ash Dieback

Ash dieback is an aggressive fungal disease and is caused by *Hymenoscyphus fraxineus* (previously *Chalara fraxinea*). The disease causes leaf loss and crown dieback in affected trees, and usually leads to tree death. There will be no planting of ash trees as there is currently a moratorium on its planting within FLS woodlands to try and help slow the spread of the disease. However, as this disease is endemic to the wider environment no action will be taken regarding mature established trees that contract the disease beyond felling for safety reasons in areas with high recreation use.

### A.8.4. Fungal plant pathogen *Phytophthora ramorum*

*Phytophthora ramorum* is a fungus-like plant pathogen which attacks a wide range of tree and shrub species. European and Hybrid Larch are particularly susceptible to *P. ramorum*, but current evidence indicates that the impact of the disease is greatest on Japanese Larch, which can die within one to two seasons, with consequential economic, environmental and amenity impacts. Therefore, there is currently a moratorium on the planting of Larch within FLS woodlands, to try and help slow the spread of the disease. We will try to retain existing Larch stands where practical to maintain the species diversity within Elchies.

## Section B. Analysis of Information

### B.1. Constrains and Opportunities Analysis

See Key Features and Concept Map.

Table 5 details the objectives identified, the opportunities and constraints that these present and the concepts detailing how they will be addressed. Zone Boundary, the LMP area has been split into two zones, environmental (to the north) and timber production (to the south). This allows us to align our operations to our objectives. The zone boundary is highlighted in the concept, management and restock maps.

Table 5: objectives, opportunities, constraints, and the resulting concept that addresses these.

Objective (what we want to achieve)	Opportunity	Constraint	Concept (how we are going to do it)	Zone
Restore deep peat and priority habitats.	<ul style="list-style-type: none"> <li>Contribute to Scottish Government's Climate Change Plan (250,000 hectares of peatland restored by 2030).</li> <li>Large areas of deep peat, some on priority habitats to be restored.</li> <li>Some of the areas due to be restored have already been felled.</li> <li>Enhance and increase connectivity of watercourses and the wider catchment.</li> </ul>	<ul style="list-style-type: none"> <li>Prioritisation of restoration.</li> <li>Phasing of peatland restoration across the plan period (10 years) and beyond.</li> <li>Integrating planned wind turbine locations with peatland restoration hydrological units and avoiding fragmentation of habitats and forest.</li> </ul>	<ul style="list-style-type: none"> <li>Phased delivery of 372 ha of peatland restoration, over the 10-year plan period.</li> <li>Restoration will be coordinated with wind farm developer to facilitate phasing of works.</li> <li>Riparian restoration to be co-ordinated with peatland restoration.</li> <li>Restored hydrological units will have a 60 m native broadleaf buffer.</li> </ul>	Environmental



Objective (what we want to achieve)	Opportunity	Constraint	Concept (how we are going to do it)	Zone
<p>Production of high-quality timber within targeted location based on site conditions with no additional input.</p>	<ul style="list-style-type: none"> <li>• Up-to-date detailed soil surveys will inform tree species selection.</li> <li>• Establishment of a resilient crop.</li> <li>• Engagement with the local community and local authority.</li> <li>• Sitka Spruce regeneration in felled areas reduces planting costs.</li> </ul>	<ul style="list-style-type: none"> <li>• Poor and variable soil quality for growing high quality timber.</li> <li>• Second and subsequent rotation crops will not be subject to the same inputs (e.g. fertiliser) as previous rotations.</li> <li>• Crop production is without artificial enhancement e.g. drains and ploughing.</li> <li>• Managing a commercial forest near a settlement.</li> <li>• Newly established crops are vulnerable to browsing by deer.</li> <li>• Managing Sitka Spruce re-generation where other management prescriptions have been applied.</li> </ul>	<ul style="list-style-type: none"> <li>• Select the most appropriate management system for each coupe to maximise timber potential.</li> <li>• Plan management interventions to create flexibility for future silvicultural decision making.</li> <li>• Use natural re-generation where species are appropriate.</li> <li>• Where site conditions are not suitable for commercial forestry, look for alternative environmental benefits.</li> </ul>	<p>Timber</p>

Objective (what we want to achieve)	Opportunity	Constraint	Concept (how we are going to do it)	Zone
<p>Management to enhance plant health and to minimise the impact of existing DNB via targeted thinning and monitoring of potential <i>Phytophthora ramorum</i> vulnerable crops on timber production.</p>	<ul style="list-style-type: none"> <li>Active management to limit and mitigate the impact of infections within the forest.</li> <li>Small amounts of Larch within the forest and easy to access due to good roading.</li> </ul>	<ul style="list-style-type: none"> <li>Presence of DNB within the forest.</li> <li>Larch crops may be impacted by <i>Phytophthora ramorum</i>.</li> </ul>	<ul style="list-style-type: none"> <li>Programme of thinning on selected DNB crops.</li> <li>Larch coupes are identified, and access is in place. But no plans for pre-emptive felling.</li> </ul>	<p>Timber</p>
<p>Enhance the riparian network with high density native broadleaf planting, protect private and commercial water supply points and pipelines.</p>	<ul style="list-style-type: none"> <li>Water courses, pipelines and supply points are mapped.</li> <li>Extensive areas of riparian corridor have been previously felled of non-native conifers.</li> <li>Establishment of native broadleaves and conifers along riparian corridors.</li> <li>Presence of Atlantic Salmon, Trout, Eel, and potential habitat for Freshwater Pearl Mussel in the Ballintomb Burn (south of the LMP area). Elchies forms part of the</li> </ul>	<ul style="list-style-type: none"> <li>Many of the riparian corridors felled are now filling in with non-native conifer regeneration.</li> <li>Protection of native broadleaves from browsing herbivores and competition from non-native conifer species.</li> </ul>	<ul style="list-style-type: none"> <li>Prioritise Ballintomb Burn up-stream from the River Spey (SSSI and SAC) for riparian planting (high density planting of native broadleaves to help regulate water temperature) and non-native conifer clearance.</li> <li>Ensure opportunities are created for Wildlife Managers to access riparian areas for herbivore management.</li> <li>Ensure active water infrastructure buffered as per UK Forestry Standard.</li> </ul>	<p>Environmental</p>

Objective (what we want to achieve)	Opportunity	Constraint	Concept (how we are going to do it)	Zone
	catchment for the River Spey. <ul style="list-style-type: none"> <li>Partnership opportunities with local industry that sources its water from Elchies.</li> </ul>			

## Section C. Management Proposals

### C.1. Silvicultural Practices

This plan has been designed in accordance with sound silvicultural and environmental principles within the framework outlined by the UK Forestry Standard and the UK Woodland Assurance Scheme.

The plan area has been divided into a system of coupes to reflect the varying management strategies being applied. The precise system of management for each coupe will be tailored to suit the current and subsequent species in the rotation. Details of proposed woodland management prescriptions detailed below.

Table 6: proposed management operations 2025-2034.

Proposed Operations	Area (ha)	Area (%) of Elchies
Felling	438.2	29.2
Thinning	168.6	11.2
Restocking	164.7	11.0
Deforestation	411.5	27.4
New woodland creation	0	0.0
New Road Construction	0	0.0

### C.2. Prescriptions

#### C.2.1. Felling

See Management Map (Felling)

Between 2025 and 2034, 438.2 ha are scheduled for felling, and are identified as Phase 1 and Phase 2 management coupes.

80% of the coupes to be felled are to enable the restoration of UK BAP habitat, Blanket Bog. Additional felling will facilitate:

- the construction of the Rothes III windfarm.
- timber production.
- quarry expansion, and the
- opening of the Cairn Cattoch viewpoint.

Felling coupes for peatland restoration contain areas already felled (131.2 ha), these areas were felled in the first phase of the previous plan and due to underlying soil conditions were not restocked and did not regenerate sufficiently. They are identified in the current felling coupes due to their inclusion in the hydrological unit. These felled areas are to be restored to peatland or planted with native mixed broadleaves in Phase 1 of this plan.

Stands adjoining felled areas will be retained until the restocking of the first coupe has reached a minimum height of 2 m. For any future clearfell coupes where compliance with guidance on 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.

### C.2.1.1. Felling of Trees 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 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 75 cubic metres per LMP per calendar year. A record of the volume felled in this way will be maintained and will be considered during the five-year LMP review.

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.

Table 7: felling by phase and year (summary).

Felling Phase and Year	Area (ha)	Area (%)
Area out with of the 20-year plan period	696.8	50.8
Phase 1 (2024-2029)	295.4	21.6
Phase 2 (2030-2034)	142.8	10.4
Phase 3 (2035-2039)	170.0	12.4
Phase 4 (2040-2044)	65.4	4.8
<b>Total</b>	<b>1,501.6</b>	<b>100%</b>

Table 8: detailed felling for Phase 1 and 2.

Felling Phase	Felling Year	Coupe Reference	Birch (ha)	Larch (ha)	Norway Spruce (ha)	Scots Pine (ha)	Sitka Spruce (ha)	Lodgepole Pine (ha)	Total (ha)
<b>Phase 1</b>	24/25	10027	2.7	-	-	-	8.9	7.1	<b>18.7</b>
<b>Phase 1</b>	24/25	10035	-	-	-	-	1.2	-	<b>1.2</b>
<b>Phase 1</b>	24/25	10062	-	-	-	-	18.6	18.8	<b>37.4</b>
<b>Phase 1</b>	25/26	10023	0.1	0.8	-	3.2	3.5	4.6	<b>12.2</b>
<b>Phase 1</b>	25/26	10042	-	0.3	-	-	10.8	0.1	<b>11.2</b>
<b>Phase 1</b>	25/26	10065	0.1	1.1	0.1	11.7	15.3	8.1	<b>36.4</b>
<b>Phase 1</b>	25/26	10807	-	3.1	-	6.6	3.9	5.4	<b>19.2</b>
<b>Phase 1</b>	26/27	10018	2.8	4.3	1.1	17.1	79.4	41.7	<b>146.4</b>
<b>Phase 1</b>	26/27	10020	2.9	-	0.3	-	7.3	2.4	<b>12.9</b>
<b>Phase 2</b>	28/29	10009	-	0.7	-	5.1	10.5	10.2	<b>26.5</b>
<b>Phase 2</b>	29/30	10007	-	6.4	1.7	0.3	54.2	34.6	<b>97.2</b>
<b>Phase 2</b>	31/32	10019	-	-	-	-	1.8	0.4	<b>2.2</b>
<b>Phase 2</b>	32/33	10021	-	0.1	-	0.9	11.4	4.5	<b>16.9</b>
<b>Total</b>			<b>8.6</b>	<b>16.8</b>	<b>3.2</b>	<b>44.9</b>	<b>226.8</b>	<b>137.9</b>	<b>438.2</b>

## C.2.2. Thinning

See Thinning Map.

We will maximise the area managed through thinning in the plan area. FLS policy assumes that all productive conifer crops will be thinned except 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.

All thinning decisions will be guided by Operational guidance Booklet No 9 ‘Managing thinning.’ 168 ha of the crop will be thinned between 2024 and 2033.

Thinning will normally be conducted 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 conducted and operations will be monitored by checking pre and post thinning basal areas for the key crop components.

Table 9: thinning in the plan period, by species.

Tree Species	Phase 1 (2024-2029) ha	Phase 1 (2024-2029) %	Phase 2 (2030-2034) ha	Phase 2 (2030-2034) %
Larch	12.9	7.7%	13.8	8.2%
Lodgepole Pine	14.4	8.6%	10.0	5.9%
Sitka Spruce	13.1	7.8%	7.1	4.2%
Scots Pine	54.2	32.2%	43.2	25.6%
<b>Total</b>	94.6	56.1%	74.0	43.9%

## C.2.3. Low Impact Silvicultural Systems

See Management Map (Felling).

Currently 73 ha (13%) of Elchies areas is managed with LISS prescriptions. There is less scope to develop Low Impact Silvicultural Systems (LISS) in upland environments. Given the current crops and site conditions there will be no emphasis on trying to introduce new areas of LISS. However, where crop and site conditions allow, areas currently with a LISS designation will continue to be managed in that way. Any opportunities to increase the area managed under LISS will be taken as the crops and site conditions allow.

LISS prescriptions will be appropriate for the species present, utilizing group selection systems for light demanding species and uniform shelterwood for shade tolerant species.

## C.2.4. Long Term Retentions, Minimum Interventions, Natural Reserves

See Management Map (Felling)

3.6 % of Elchies is managed as Long-term Retention. This is where individual, stable stands and clumps of trees are retained for environmental benefit significantly beyond the age or size adopted by the woodland enterprise.

5.1 % is managed as Minimum Intervention (MI), this is where there is no systematic felling or planting of trees to develop semi-natural habitats that could transition into Natural Reserves over time. Over the plan period the area of MI will increase once the planned felling and restock of riparian corridors is conducted.

There are no areas currently suitable for Natural Reserves, this is where biodiversity is the primary objective, and we are prepared to commit the area of land in question to minimum intervention management in perpetuity.

## C.2.5. Restocking Proposals and Natural Regeneration

See Future Habitats and Species (Restock)

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

Conifer restocking will be established at 2,700 stems per ha to achieve 2,500 stems per ha once established.

Broadleaf restocking will be achieved through the following stocking densities, and will be protected by exclosures and planting tubes where appropriate:

- Commercial broadleaf replanting, or natural regeneration, will be managed to achieve, 1,600 stems per ha, in the fully stocked areas.
- Riparian habitats will be restocked with a mixture of suitable native broadleaved species planted at a high density, 2,000 stems per ha, and allowed to regenerate naturally from seed, providing the necessary levels of dappled shade and woody debris to support healthy watercourses.
- Environmental broadleaf planting will be restocked with a mixture of suitable native broadleaved species planted at a low density, 50/50 mix of open ground and native mixed broadleaves at 1,600 stems per ha, to allow for open space that will re-generate naturally providing age and habitat diversity.

There will be a preference for natural regeneration of native woodland areas. Any non-productive broadleaf planting will be native to the area and will complement existing naturally growing scrub and woodland to give the most ecological value.

All areas identified for restocking by natural regeneration will be recorded and programmed for inspection at year four. At inspection, an assessment will be made to establish if the natural regeneration is, or is likely, to achieve the objectives for the site. If it is decided that the objectives are not being met, then replanting with an appropriate species will be undertaken. If natural regeneration is occurring but not yet at the required density, then the option to review the site in a further five years may be taken with permission from Scottish Forestry. Enrichment



planting will be used to ensure the target stocking density is reached if there is insufficient natural regeneration.

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

The choice of ground preparation for each site will be decided at the operation planning stage by the relevant establishment forester. Ground preparation techniques can vary, 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 Information Note ODW 10.01 Forest Ground Preparation will be referenced where necessary to help aid in the specific choice applied across any restock sites. Table 10 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 Surface-water Gleys or on the edges of deep peat, so a mixture of scarifying and shallow hinge or inverted mounding will be the most likely ground preparation techniques applied.

Table 10: ground preparation technique by soil type.

Soil Type	Objective	Best Practice	Acceptable Alternative
Brown earths	To create a weed free planting site, to avoid activating the soil seed bank, to provide frost protection especially on flat inland sites with grassy sward and to impose a discipline on the site.	Shallow scarification Shallow mounding	Shallow agricultural ploughing for improved grassland  Weed control only on freely draining sites
Podzols	To achieve a light surface mixing of soil and humus, to break up the compacted horizon or hardpan and provide weed suppression.	Spaced tine ploughing	Deep scarification  Shallow agricultural ploughing for lowland podzols

Soil Type	Objective	Best Practice	Acceptable Alternative
Ironpan soils	To aerate and mix the organic horizon and to extensively disrupt the compacted horizon and Ironpan.	Mounding and ripping Spaced tine ploughing Deep scarification (if Ironpan is weak or discontinuous)	Scarification for restock sites.  Mounding or scarification (restock sites that have previously been subsoiled only)
Gley soils (including surface water gleys and peaty gleys)	To provide a raised planting position and lower water table if possible, creating conditions for symmetrical rooting. Weed suppression and frost protection are also important.	Mounding/moling for relatively stone free soils with a loamy texture. Mounding/subsoiling for other soils.	Mounding alone is acceptable if slope < 3° or if a restock site.  Note: An open drainage system is usually required on these soils.
Deep peats	To provide a raised planting position and lower the water table if possible	Shallow spaced ploughing  Mounding (restock sites only)	Drain mounding.  Note: An open drainage system is usually required on these soils.

Of the 576.1 ha of ground awaiting a restock decision in Elchies, 358.5 ha is forest-to-bog peatland restoration, 53.1 ha comprises water infrastructure non-operational buffers, the Cairn Cattoch viewpoint, and the quarry expansion. The remaining 164.7 ha will be restocked.

Table 11: detailed restock for Phase 1 and 2.

Felling Phase	Felling Year	Coupe Reference	Restock Description	Birch (ha)	Scots Pine (ha)	Sitka Spruce (ha)	Lodgepole Pine (ha)	Native Mixed Broadleaves (ha)	Open (ha)	Peatland restoration: presumption to restore (ha)	Peatland restoration: assessed (ha)	Total (ha)
Felled Awaiting Restock	15/16	10058	Commercial.	0.2	0.9	-	-	-	-	-	-	1.2
Felled Awaiting Restock	17/18	10008	Commercial.	0.2	0.9	-	-	-	-	-	-	1.1
Felled Awaiting Restock	22/23	10680	Commercial.	-	-	1.7	1.7	0.1	0.4	-	-	4.0
Phase 1	24/25	10027	Commercial, riparian, managed open.	-	0.9	1.7	1.7	3.8	-	10.5	-	18.7
Phase 1	24/25	10035	Commercial, managed open.	-	-	-	-	-	1.2	-	-	1.2
Phase 1	24/25	10062	Riparian managed open.	-	0.2	-	-	1.0	-	49.3	-	50.5

Felling Phase	Felling Year	Coupe Reference	Restock Description	Birch (ha)	Scots Pine (ha)	Sitka Spruce (ha)	Lodgepole Pine (ha)	Native Mixed Broadleaves (ha)	Open (ha)	Peatland restoration: presumption to restore (ha)	Peatland restoration: assessed (ha)	Total (ha)
Phase 1	25/26	10023	Commercial, riparian, environmental, managed open.	0.9	3.8	-	-	8.7	1.6	-	-	15.0
Phase 1	25/26	10042	Riparian, managed open.	-	1.3	-	-	5.4	0.6	-	8.1	15.4
Phase 1	25/26	10065	Commercial, riparian, managed open.	0.3	1.3	-	-	0.5	38.8	-	-	40.9
Phase 1	25/26	10807	Commercial, riparian, managed open.	-	0.3	8.1	8.1	1.4	1.4	-	-	19.2
Phase 1	26/27	10018	Commercial, riparian, managed open.	-	7.4	-	-	29.7	1.4	182.1	-	220.5
Phase 1	26/27	10020	Riparian	-	2.9	-	-	11.6	-	-	-	14.5

Felling Phase	Felling Year	Coupe Reference	Restock Description	Birch (ha)	Scots Pine (ha)	Sitka Spruce (ha)	Lodgepole Pine (ha)	Native Mixed Broadleaves (ha)	Open (ha)	Peatland restoration: presumption to restore (ha)	Peatland restoration: assessed (ha)	Total (ha)
Phase 2	28/29	10009	Riparian, managed open.	-	0.8	-	-	3.8	2.5	28.0	-	35.1
Phase 2	29/30	10007	Riparian, managed open.	-	6.2	-	-	25.7	3.9	-	80.6	116.3
Phase 2	31/32	10019	Environmental, Managed open.	-	0.3	-	-	1.3	0.8	-	-	2.4
Phase 2	32/33	10021	Riparian, managed open.	-	3.9	-	-	15.8	0.4	-	-	20.1
<b>Total</b>				<b>1.7</b>	<b>31.2</b>	<b>11.6</b>	<b>11.6</b>	<b>108.6</b>	<b>53.1</b>	<b>269.8</b>	<b>88.7</b>	<b>576.1</b>

## C.2.6. Protection

Wild deer on the SNFL are managed in accordance with the Scottish Government’s strategy “Scotland’s Wild Deer a National Approach” and under the auspices of the Code of Practice on Deer Management.

The strategy and Code of Practice takes recognition of the fact that Wild deer are an asset, an integral part of Scotland’s biodiversity and provide healthy food and recreational opportunities. The challenge of managing wild deer originates in a need to balance the environmental, economic and deer welfare objectives of the Scottish nation with the objectives of private landowners for forestry, agriculture, sporting, and other forms of land use.

The principal legislation governing the management of deer in Scotland and hence on the SNFL is the Deer (Scotland) Act 1996.

It is therefore FLS deer policy to:

- Prevent adverse deer impacts on commercial tree crops and the wider habitat. In doing so to carry out deer culling in an exemplary and humane way.
- Work closely with relevant organisations and neighbours to make sure that there are integrated deer management plans which seek to recognise the interests of all parties.
- Take opportunities to optimise income from venison from sporting where this does not conflict with our primary objective of maintaining deer impacts at an acceptable level, in line with Quality Meat Scotland accreditation in the form of The Scottish Quality Wild Venison (SQWV) Assurance Scheme
- Take all practicable steps to slow down the expansion of deer species into areas where they are not currently present.

All deer management will be conducted in accordance with OGB 5 - Deer management. The aim is to manage deer density safely and humanely at a level which is consistent with acceptable impacts on forests and other habitats. This is likely to be at a density level of 5 deer per 100 hectares or per km<sup>2</sup>.

Deer cull plans are prepared for each Deer Management Unit and are the responsibility of the Wildlife Ranger Manager (WRM). Cull figures fluctuate but predicted culls are based on Estimated Deer Utilisation (EDU) conducted by an FLS Wildlife Ranger. The EDU number for Elchies is currently at 7-9 deer per km<sup>2</sup>. This would be considered, low-medium density.

Table 12: woodland deer density indicators.

Evidence	Low Density (0-6 deer per km <sup>2</sup> )	Medium Density (6-12 deer per km <sup>2</sup> )	High Density (12+ deer per km <sup>2</sup> )
<b>Tracks</b>	Difficult to find deer slot marks or defined paths.	Defined paths: slot marks easy to find in areas of soft ground.	Many well-defined tracks and paths often black with constant use.
<b>Dung</b>	Difficult to find with just the odd isolated pellet group.	Pellet groups relatively easy to find, particularly on woodland edges and good feeding areas.	Pellet groups very easy to find. Highly concentrated on favoured feed areas.
<b>Browsing of Vegetation</b>	Natural regeneration of broad-leaved trees taking place with no or little	Broad-leaved saplings present but	No seedlings growing above dominant vegetation height. Often well-defined browse

Evidence	Low Density (0-6 deer per km <sup>2</sup> )	Medium Density (6-12 deer per km <sup>2</sup> )	High Density (12+ deer per km <sup>2</sup> )
	damage to current year's incremental growth	showing significant damage.	lines on established shrubs and plants.

### C.2.7. Fence Erection/Removal

Within Elchies it is expected that for the establishment of conifer species and restoration of peatland, deer will be managed via culling. However, for the coupes to be planted/regenerated with broadleaves fencing may be required. This decision will be made jointly by the WRM and the delivery forester. If deemed necessary, this will be maintained for the period required to achieve successful establishment and subsequently removed.

Any fence erection will not impinge on access, and gates will be installed to facilitate this if required.

### C.2.8. Road Operations

See Timber haulage Map.

No new roads are required in Elchies. A program of maintenance will be undertaken to ensure existing roads are suitable for forest operations.

Agreed timber haulage routes are used without restriction as regulated by the Road Traffic Act 1988.

Moss Street (U140E) is identified as a consultation route. Consultation Routes are recognised as being key to timber extraction but are not up to Agreed Route standard. Consultation with the Local Authority will be conducted, and it may be necessary to agree limits of timing and allowable tonnage before the route can be used. An estimated 9,000 m<sup>3</sup> (volume) or 6,200 tons of timber will be extracted using this route.

The main access/egress point to the public road network, in addition to Moss Street (NJ 2294 4446), Archiestown will be at Blackhillock (NJ 2054 4377) at U144E Cottage Road. Whilst this is an existing junction and considered to have a suitable layout for timber vehicles, there is no surfaced apron to protect the edge of the public road and help minimise detritus drag onto the public road. FLS will have a 3 m width of apron surfaced across the bellmouth of this forest access point, prior to the indicated Phase 1 felling plan. Planning permission will be sought prior to works commencing. An estimated 8,000 m<sup>3</sup> (volume) or 5,500 tons of timber will be extracted using this route.

For both routes, minimum spacing between timber lorry movements will be 30 minutes, with no more than 15 vehicles per day between April and October, and no timber haulage vehicles on the road between 18:00hrs and 08:00hrs. Extraction will be limited between November and March and accordingly the maximum number of timber movements per day would be restricted to 10 during this period, in addition to the aforementioned 30 minute interval.

FLS and Fred Olsen Renewables Limited are in discussion regarding utilizing existing Rothes I and II windfarm roads, for the haulage of timber felled with Elchies, on completion of Rothes III windfarm construction. This could reduce the amount of timber hauled via Archiestown.

The quarry at Elchies will be expanded by 1.2 ha to support the ongoing maintenance of the roads network in Elchies ensuring that road materials are sustainably sourced within the forest. An EIA Screening Opinion Request will be submitted for these works.

Documents relating to the infrastructure development for Rothes III windfarm can be found on [Scottish Government - Energy Consents Unit - Application Details](#).

### C.2.9. Public Access and Recreation

See Management Map (Felling) and Future habitats and species (Restock).

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.

FLS will ensure the integrity of the [Core](#) and [Promoted](#) paths in Elchies (not an FLS initiative), if any paths are damaged as a consequence of FLS forest operations then we have a duty to repair them. Should opportunities arise to improve paths whilst other work is being conducted in the vicinity this will be considered. However, as routes are not promoted/managed directly as a FLS visitor service asset we will not be actively upgrading or improving paths during the plan period.

Cairn Cattoch, forms part of the Archiestown to Carin Cattoch Promoted Paths, the managed open area at the viewpoint, is currently becoming encroached with non—native conifer re-generation. This re-generation will be removed and part of the coupe south of the viewpoint will be felled and restocked with low growing mixed native broadleaves to sustain the viewpoint over the longer term.

### C.2.10. Historic Environment

Our key priorities for archaeology and the historic environment are to undertake conservation management, condition monitoring and archaeological recording at our significant historic assets; and to seek opportunities to work in partnership to help to deliver Our Place in Time: the Historic Environment Strategy for Scotland and Scotland's Archaeology Strategy. Significant historic environment features will be protected and managed following the UK Forestry Standard (2017). Harvesting coupes, access roads and fence lines will be surveyed prior to any work being undertaken to ensure that upstanding historic environment features can be marked and avoided, with a 20 m buffer applied. 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 those designated historic assets in Scotland's national forests. Details of all known historic environment features are held within the Forester Web Heritage Data (built using national and regional historic environment records) and included within specific operational Work Plans to ensure damage is avoided. Significant historic environment features will be depicted on all relevant operational maps (Table 13). No scheduled sites or features of regional importance are



present within the plan area. This is cross-referenced with the Archeologist/Historic Environment Officer for Aberdeenshire, Moray, Angus & Aberdeen City Councils.

Table 13: heritage features within Elchies.

Grid Reference	Feature Description	Website Link
NJ 1896 4454	Farmstead	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ14SE0088 - NEWLANDS OF KNOCKANDO</a>
NJ 1924 4425	19th-20th Century Smallholdings	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ14SE0090 - LOANHEAD OF KNOCKANDO</a>
NJ 1945 4451	Croft	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ14SE0082 - MANNOCH</a>
NJ 1957 4417	Farmstead	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ14SE0091 - DRUMPARK</a>
NJ 1964 4385	19th-20th Century Smallholdings	
NJ 1971 4453	Croft	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ14SE0083 - HILLHEAD</a>
NJ 1987 4486	Hollow-way	
NJ 1988 4405	Greenbog Well	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ14SE0089 - GREENBOG WELL</a>
NJ 1989 4416	Lade	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ14SE0092 - UPPER BRUNTLANDS</a>

Grid Reference	Feature Description	Website Link
NJ 1989 4441	Peat Head	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ14SE0086 - HILLHEAD</a>
NJ 1989 4441	Farmstead	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ14SE0086 - HILLHEAD</a>
NJ 1997 4448	Peat Cuttings	
NJ 2014 4462	Peat Extraction	
NJ 2032 4454	Well	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24SW0052 - HILLHEAD</a>
NJ 2032 4958	Marnoch Road	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ25NW0047 - MARNOCH ROAD</a>
NJ 2045 4458	Presney Well	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24SW0053 - PRESNAY WELL</a>
NJ 2045 4734	Quarry	
NJ 2066 4402	Farmstead	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24SW0030 - BLACKHILLOCK</a>
NJ 2077 4620	Enclosures	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24NW0031 - CACH NA VATTIE</a>

Grid Reference	Feature Description	Website Link
NJ 2094 4581	Farmstead	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24NW0025 - CORSHELLOCH</a>
NJ 2112 4482	Hollow-way; Plantation boundary	
NJ 2119 4583	Platform	
NJ 2159 4592	Building	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24NW0035 - BURN LOISHKEAN</a>
NJ 2171 4505	Building	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24NW0034 - BALLINTOMB BURN</a>
NJ 2182 4485	Lade	
NJ 2230 4751	Boundary Stones	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24NW0003 - HILL OF STOBB</a>
NJ 2244 4731	Bishops Stones	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24NW0026 - BISHOP'S STONES</a>
NJ 2256 4447	Rottonmoss Well	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24SW0056 - ROTTONMOSS WELL</a>
NJ 2295 4463	Gravel Pit	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24SW0057 - ARCHIESTOWN</a>

Grid Reference	Feature Description	Website Link
NJ 2302 4625	Peat Cuttings	
NJ 2304 4535	Peat Extraction	
NJ 2321 4666	Farmstead	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24NW0038 - HUNT HILL</a>
NJ 2337 4472	18th Century-Present Rectilinear Fields and Farms	
NJ 2339 4577	Well of Whiterashes	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24NW0029 - WELL OF WHITERASHES</a>
NJ 2365 4668	Hunt Hill Trig Point	
NJ 2398 4577	Roy's Well	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24NW0028 - ROY'S WELL</a>
NJ 2412 4502	Well	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24NW0030 - BURNHEAD</a>
NJ 2422 4513	Lade	
NJ 2434 4496	Well	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24SW0055 - RED HILLOCK</a>

Grid Reference	Feature Description	Website Link
NJ 2436 4479	19th-20th Century Smallholdings	
NJ 1968 4449	Black Well	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ14SE0084 - BLACK WELL</a>
NJ 1948 4453	Standing Structure	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ14SE0123 - HILLHEAD</a>
NJ 2159 4593	Building	<a href="#">Aberdeenshire Council Historic Environment Record - Moray - NJ24NW0035 - BURN LOISHKEAN</a>

## C.2.11. Biodiversity

See Future habitats and species (Restock) Map.

Areas not considered for commercial management will include permanent woodland, riparian areas, viewpoints, and managed open habitats which include the proposed restoration of currently degraded UK BAP Blanket Bog Habitat. These areas will be restored, enhanced, and managed, with monitoring to ensure they deliver the required objectives. Non-desirable species, such as non-native conifer regeneration, will be removed if it threatens to prevent the objective of the area being met.

Areas designed as permanent open space are chosen to help diversify the woodland edges; to enhance riparian areas and complement areas of broadleaves or where there are other biodiversity benefits. They will also require regular management to maintain their integrity and value.

The Spey Catchment Initiative Steering Group has published the [River Spey Catchment Management Plan \(2023-2030\)](#). Working with the Spey Catchment Initiative, and other partners we are supporting the priority themes and objectives outlined in the plan. FLS's Long Term Vision and Management Objectives (A.5) supports the objectives detailed in the catchment plan through:

- Restoration of deep peat and priority habitats.
- Enhancement the riparian network with high density native broadleaf planting.

There is one small body of standing water in Elchies, a result of stone quarrying within the forest. Non-native conifers around the pond will be selectively felled to enhance biodiversity within the pond.

The Scottish Biodiversity List is a list of animals, plants, and habitats that Scottish Ministers consider to be of principal importance for biodiversity conservation in Scotland. Scottish Biodiversity List species and FLS Key Species are recorded in Elchies, these include:

- Afforested bog, that shows evidence of previously being active Blanket Bog is present throughout Elchies and forms part of extensive peatland restoration proposals detailed in Appendix D.3.
- Both Capercaillie and Black Grouse have been recorded in Elchies, however there have been no active leks since 2018 (Capercaillie) and Black Grouse (2011) within the forest. A Management Objective of the LMP is the enhancement of historic Capercaillie and Black Grouse leks in the forest. This will be achieved via the establishment of a mosaic of different habitat to support the return of Black Grouse and Capercaillie. Peatland restoration, riparian restoration and the retention of older Scots Pine providing suitable habitat for nesting, feeding, lekking, chick rearing and shelter.
- Red Squirrel is present in the woods in and around Elchies, operational practice will be undertaken to benefit red squirrels. This will include planning forest operations to minimise damage to red squirrel dreys and populations, including survey work to locate dreys prior to felling operations and the planning of the forest structure and composition specifically to suit red squirrels. LISS will be utilised where appropriate to enhance the habitat for red squirrels.

## C.2.12. Plant Health

### C.2.12.1. Dothistroma needle blight (DNB)

It is up to the forest manager to make the final management prescriptions at the forest block and management coupe level through the workplan process prior to management operations. This particularly includes thinning of stands of pine trees in accordance with good silvicultural practice to promote air circulation in the tree crowns. This will help to reduce humidity levels in the crowns, thereby making conditions less conducive to fungus development. Although this will not prevent infection, it can help to reduce the impact. No-thin regimes and delayed first thinning have been shown in public forests to lead to significant numbers of tree deaths.

### C.2.12.2. Large Pine Weevil (*Hylobius abietis*)

The large pine weevil (*Hylobius abietis*) is likely to be the only major tree health issue encountered in this plan. The *Hylobius* Management Support System (HMSS) will be used to determine the best way to manage clearfell sites for successful, cost effective and environmentally friendly restocking. This system will be used along with past results and experience to determine the optimal time to restock while minimising the use of chemicals. Restocking will take place as soon after felling as possible with two years being the usual period, but this could be delayed up to five years.

## C.2.13. Invasive species

There are no records of invasive species within Elchies. FLS staff are vigilant to the presence of invasive species, and should they be identified a management strategy for control and eradication will be developed.

## C.2.14. New Planting

There are no areas of new or proposed woodland creation in Elchies.

## C.2.15. Other

### C.2.15.1. 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. Wildfire management plans do not form part of this LMP as they are co-ordinated at a regional scale across multiple forest blocks.

### C.2.15.2. Soils

Brash mats (or alternative measures) will be used to protect sensitive soils. There will be minimal soil disturbance and machine movement on sites with clay 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. Where required, the choice of ground cultivation technique will consider the short-term benefits for establishment against any long-term side effects on tree stability, access for future forest operations and the environment. There will be a preference for the least intensive technique.



### C.2.15.3. Rothes III Windfarm

See Management Map

FLS is working with Fred Olsen Renewables to facilitate the felling of standing crop for the installation tracks and turbines.

### C.2.15.4. Water Supply Infrastructure

As part of consultation with Scottish Water it was confirmed that public water supply infrastructure directly north of Archiestown, within Elchies Forest, is no longer operational and can be considered abandoned. Therefore, FLS is not required to adhere to operational buffers in these instances.

Private water supplies (PWS) are located within the forest. They are a combination of Type A or Type B supply; each being governed by separate legislation.

- Type A supplies – serving more than 5 people or used as part of a commercial or public activity (e.g. holiday accommodation). Such supplies are subject to wider reaching statutory controls and must be risk assessed by the local authority every 12 months.
- Type B supplies – All other private water supplies being the large majority of those on land managed by FLS. These supplies are subject to different Regulations and whilst they must be registered with the local authority, it is not a statutory requirement for them to be risk assessed.

Duty of care extends to all PWS including those not registered.

The beneficiaries of a PWS owe a duty of care to themselves to safeguard the PWS through adequate and effective maintenance, repair, and renewal. However, where a registered PWS is on land managed by FLS we share a duty of care to protect the original water source and the supply network (pipes, tanks, lades etc.) to safeguard the quality and quantity of water.

FLS is required to comply with good practice water and PWS management standards set out in the following:

- [UK Forestry Standard \(UKFS\)](#)
- Confor: [Forest and Water Scotland Initiative](#) and [Know the Rules 2<sup>nd</sup> Edition](#).

As per [Managing Forest Operations to Protect The Water Environment](#), all PWS will be protected by a 50 m and water pipelines by a 20 m (10 m either side) operational buffer, managed as open with an allowance of 20% native mixed broadleaves. PWS that is either surface fed or shallow (spring fed) will have a catchment identified, machine trafficking and brash heaps will be minimised within the catchment boundary.

Of the trees to be felled during the plan period, within the catchments of PWS and the Ballintomb Burn, the majority are less than 2 m tall, and therefore will have a limited impact on transpiration (the uptake of water by trees). Guidance provided by Dr Nadeem Shah, Forest Research. Phase 1 and Phase 2 management coupes have also been phased to reduce impacts on both PWS and the Ballintomb Burn Catchment. Together, this is the equivalent to limiting any felling to less than 20% of any PWS catchment within any three-year period.

Out with of Elchies, PWS were identified within 1.5 km of the forest, the supply type was confirmed using Moray Council data and a 50 m non-operational buffer applied. All the PWS that could be impacted by forest operations are ground water supplies, and the 50 m buffer does not cross into our land holding.

### C.2.15.5. Electricity Lines

FLS will ensure that should any felling be completed within 2 tree lengths of the network, then SSEN will be informed prior to operations.

## C.3. Environmental Impact Assessment and Permitted Development Notifications

### C.3.1. Environmental Impact Assessment

An Environmental Impact Assessment Screening Opinion Request (SOR) will be submitted for the following for Phase 1 (2025-2029):

- Deforestation for peatland restoration
- Quarries

Table 14: Total area (hectares) for each project type and details by sensitive or non-sensitive area.

Type of Project	Sensitive Area		Non-sensitive Area		Total (ha)
Afforestation	-	-	-	-	-
Deforestation	98.2% Conifers	1.8% Broadleaves	-	-	304.9
Forest Roads	-	ha	-	ha	-
Quarries	-	ha	1.2	ha	1.2

Another EIA SOR will be submitted at the LMP mid-term review for the proposed peatland restoration in Phase 2 (2030-2034) of the plan.

### C.3.2. Permitted Development Notifications

Roads and tracks formed for forestry purposes have been subject to Prior Notification (PN) since 2014. These access routes already have permitted development rights, but the process of PN allows the Planning Authority to ensure that the proposed roads really are for forestry purposes and gives them the opportunity to comment on their alignment or method of construction. PN applies to roads and tracks that are new or being altered when the proposal is to 'form' or 'construct' the road or associated drainage. It does not apply to the maintenance of existing tracks and roads.

## C.4. Tolerance Tables

Table 15: sets out the standard limits for key work activities within the plan.

	Adjustment to felling period	Adjustment to felling coupe boundaries	Timing of restocking	Change to species	Changes to road lines	Designed open space	Windblow clearance
<b>SF approval not normally required</b>	Fell date can be moved within 5-year period and between phase 1 and phase 2 felling periods where separation or other constraints are met.	Up to 10 % of coupe area.	Normally up to 2 planting seasons after felling. Where <i>Hylobius</i> levels are high, up to four planting seasons after felling subject to the wider forest and habitat structure not being significantly compromised.	Change within species group e.g. conifers, broadleaves.	NA	Increase by up to 5% of coupe area	NA
<b>SF approval by exchange of letters and map</b>	NA	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 60 m in either direction from centre line of road.	Increase by up to 10%. Any reduction in open ground within coupe area.	Up to 5 ha of plan area.
<b>SF approval by formal plan amendment may be required</b>	Advanced felling (phase 3 or beyond) into current or 2nd 5-year period.	More than 15% of coupe area.	More than 5 planting seasons after felling subject to the wider forest and habitat structure not being significantly compromised.	Change from specified native species. Change between species group.	As above depending on sensitivity.	More than 10% of coupe area. Colonisation of open areas agreed as critical.	More than 5 ha of plan area.

## Section D. Appendices

### D.1. Visualisations

See Visualisations Map and separate appendix.

A visibility assessment has been undertaken of Elchies, which found, that due to its location near the top of the gentle rounded upland views of Elchies forest are foreshortened from the valley below. It forms a dark horizontal band along the horizon, of varying width with the tree shapes sometimes cutting the horizon. It is not prominent. Its southern edge abutting the upland pasture is most visible in the landscape, particularly at times of year when there is a dramatic difference in colour between the forest and the open areas.

The visualisations show how the proposed operations in the plan period will impact the landscape.

### D.2. Stakeholder Engagement

See separate appendix summarising the issues and FLS response.

### D.3. Peatland Restoration Plan

See separate appendix and Peatlands and Habitats, Presumption to Restore, Assessed and Restock Maps.

### D.4. Private Water Supplies

See separate confidential appendix and map.