



Forestry and  
Land Scotland  
Coilltearachd agus  
Fearann Alba

# North Sannox Land Management Plan 2024 - 2034

V1.0

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

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



The mark of  
responsible forestry



Applicant's details	
Applicant:	Forestry and Land Scotland
Address:	Straiton Office, Dalmellington Road, Straiton, South Ayrshire, KA19 7NG
Agent's name:	Catriona Hawthorn
Agent's position:	Forest Planner
Agent's contact number:	07887 308129
Agent's email:	catriona.hawthorn@forestryandland.gov.scot

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	South	SF Conservancy	
Date	24/09/2024	Date of Approval	
		Date Approval Ends	
		Plan Ref. No.	

## A. Description of Woodlands

### A.1 Property Details

Property (LMP) Name:	<b>North Sannox</b>
Grid Reference (main entrance):	NS 0147 4668
Nearest town or locality:	Sannox, Isle of Arran
Local Authority:	North Ayrshire

### A.2 Location and Background

The North Sannox Land Management Unit is located 2km north of the village of Sannox on the island of Arran. Covering an area of 127.5 ha, the area comprises a mix of woodland, predominantly native broadleaves, and open ground. The eastern half of the block formerly had semi-natural ancient woodland as can be seen in the 1<sup>st</sup> edition OS map (1869), however in the 1960s the site was planted with non-native conifers for timber production, which have subsequently been harvested. Continued restoration of this PAWS area will be a feature of this plan revision.

North Sannox forest block lies within the North Arran National Scenic Area and is of interest for its distinctive headland features, biological potential and geological features.

See **Map 1**.

### A.3 Existing Schemes and Permissions

Type: Felling Permissions

Ref. No: FDP 44

Details: Land Management Plan 2014 – 2024. Expired 31<sup>st</sup> March 2024

### 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. Designated sites (Sections: **A.6.9, B.1**)

2. Historic environment (Sections: **A.6.8, C.2.10, Appendix II**)
3. Private Water Supplies (**Section C.2.15**)
4. Water quality (**Section A.6.4**)
5. Invasive species (Section **A.6.10, C2.13**)

## A.5 Long Term Vision and Management Objectives

### Vision

North Sannox will develop into a resilient and diverse native woodland which will provide a mosaic of habitats, including open habitats, fringe woodland habitats and varied canopy coverage within wooded areas. With healthy herb and shrub layers within a naturally regenerating native broadleaf woodland, this site will be eventually revert to temperate rainforest habitat

### Management Objectives

**Objective 1:** Continue with PAWS restoration and expansion of native broadleaf woodlands

**Indicator of objective being met:** Increase in native broadleaf distribution across the block from 28% to over 45% over the plan period.

**Objective 2:** Target removal of non-native conifer species, and any Invasive Non-Native Species (INNS), in buffer area around the Special Protection Area, and in PAWS zone.

**Indicator of objective being met:** Through regular monitoring and targeted intervention, the site should remain free of non-native conifers and any INNS within SPA area and buffer, and presence of non-native tree species should be <15% in other areas.

**Objective 3:** Manage open hillside habitats as per the agreed Arran Moors SSSI / SA Management Plan

**Indicator of objective being met:** Maintenance of open ground buffer

## A.6 General Site Description

### A.6.1 Topography and Landscape

The North Sannox forest block rises from sea-level in the east of the block to 230m elevation in the NW corner with gentle gradients in some areas, and steep slopes and crags in others.

The southern and western areas of the forest block can be seen from the A841 road as drivers head north from Sannox, while the coastal side of the forest block can be seen from the island of Bute.

The northern half of the island of Arran, in which the North Sannox forest block lies, is designated as both a National Scenic Area and a Local Landscape Area.

Landscape Character Types:

82% of the land within the forest block is LCA type 62: Coastal Headlands. Coastal Headlands typically have a distinctive headland, consisting of hills with almost craggy summits, flanked seawards by raised beaches.

The remaining 23ha in the south of the block are LCA type 59: Raised Beach Coast & Cliffs where the raised beach can be seen as a level shelf of land backed by steep, sometimes craggy escarpments.

### A.6.2 Geology and Soils

The underlying geology is late Devonian sandstone with basaltic intrusions.

The soils are a gradation from surface water gleys on the lower slopes rising through upland brown earths and peaty gleys to deep peats on the upper edges. The plan area is on a dome, rising from the west to a flat peat top before dropping steeply to a raised beach cliff in the east.

### A.6.3 Climate

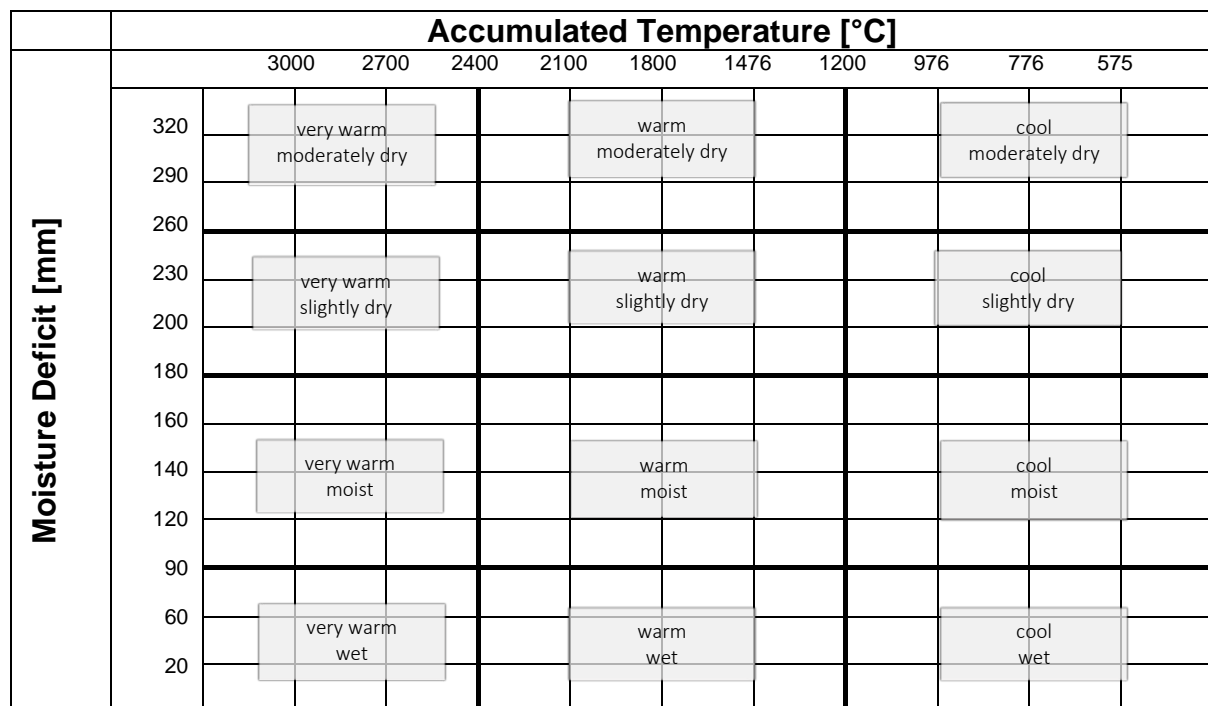
The island of Arran has a predominantly mild windy oceanic climate heavily influenced by the gulf stream. North Sannox, being on the island's east side, is relatively sheltered from the prevailing southwest wind. Average rainfall is around 1800mm p.a.. Climate change predictions indicate that the area may become warmer over the decades, with average temperatures similar to those currently experienced in the south of England or Brittany in France. Average rainfall is not expected to change significantly.

Current climatic conditions are:

Accumulated temperature (day-degrees above 5°C)

Min: 1496, Max 1827, Mean: 1715

Moisture Deficit (mm):  
 Min: 63, Max: 97, Mean: 68.5



#### A.6.4 Hydrology

There are no significant watercourses within North Sannox block.

North Sannox Burn (also known as North Glen Sannox watercourse, SEPA ID 10177) runs along the southern boundary of the forest block for 65m before it reaches the sea. SEPA list the water quality of the burn as 'Bad' due to acidification from atmospheric deposition however the pressures have been addressed and the long-term forecast for the burn is 'Good'. The catchment for the burn is 1520 ha in size and 1.2% of this catchment is within our forest block. Due to the location of the forest block, and the small area which lies within the catchment, our operations are unlikely to have any effect on the overall water quality status of North Sannox Burn.

See Map 3.

#### A.6.5 Windthrow

Given its location on the east side of Arran, North Sannox is relatively sheltered from the prevailing wind. The lower-lying areas of the block (by the coast) see DAMS of 9 or 10, rising to 13 or 14 in the hillier areas of the site. Only the ridge in the NW corner experiences high winds of DAMS 16+. Windblow risk is low to moderate in the afforested areas.

#### A.6.6 Adjacent Land Use

The adjacent land is mostly open moorland or rough grazing lands which are part of the Arran Moors SSSI (492.5 ha in size) and the Arran Moors SPA (9468 ha). 9.2ha of the North Sannox block lies within both the SSSI and the SPA. This designated area is a hilltop ridge in the NW corner of the forest block.

North Sannox farm (location NS 0096 4661) borders the forest block to the west. The forest block is separated from the land belonging to North Sannox farm by a stock fence, maintained by the neighbouring landowner, but there still remains a risk of deer ingress from the farmland.

#### A.6.7 Access

Public may access the site by road or by foot. There is a carpark managed by North Ayrshire council at NS 0144 4660. From there a forest road runs along the shoreline for 2km. Core path AR04 follows this forest road, and this walking route is also part of the Arran Coastal Way. A network of informal walking trails through the forest block can also be accessed from the carpark.

See **Map 3**

#### A.6.8 Historic Environment

See **Map 6** and **Appendix II**

There are a number of recorded features detailed in Appendix II including one Scheduled Monument (SM) and these will be conserved using the principles in the Forestry and Archaeology Guidelines. It should be noted that there are no further mechanised harvesting or ground prep operations planned within the block which has removed most of the risks associated with forestry in or around heritage features.

The SM is managed in accordance with the Monument Management Plan agreed with Historic Scotland.

#### A.6.9 Biodiversity

**Designated Sites:** Around 9 hectares of open hillside at the north-west corner of North Sannox block are within the Arran Moors Special Protection Area (SPA) and the Arran Moors Site of Special Scientific Interest (SSSI). The SPA and SSSI are both designated for their nationally and internationally important breeding population of Hen harriers. The SSSI also has a nationally important upland habitat assemblage.

**Ancient woodlands / PAWS:** 25 ha of Ancient Woodland (of semi-natural origin) / PAWS as can be seen on the 1<sup>st</sup> edition OS map from 1869.

**Priority habitats:** The Upland Habitat Assemblage within the SSSI where the management plan dictates that invasive species must be controlled (especially bracken) and appropriate grazing pressure maintained.

**Priority Species:** Breeding population of Hen harriers plus other breeding birds in the SPA/SSSI at the NW part of the forest block. Evidence of otters and badgers have been recorded on site, plus some temperate rainforest floral species including Killarney Ferns and Turnbridge & Wilson's Filmy Ferns.

See **Map 3**.

#### A.6.10 Invasive Species

There are no FLS records of invasive species within North Sannox. FLS staff will continue to monitor the site periodically for signs of INNS.



## A.7 Woodland Description

See **Map 2** which shows the current tree species composition and pattern.

North Sannox was formerly managed as a productive coniferous plantation. The 1960s crop of Sitka Spruce was felled in 2015/16 leaving much of the site fallow, other than some areas of broadleaf species in the south and the east of the block. In the following years a decision was made to accept about 38ha of Sitka Spruce regen as a future crop. More recently the objectives of the site were revised and the decision taken that North Sannox should be managed for conservation and environmental objectives. Under FLS' partnership approach with the Alliance for Scotland's Rainforests, a significant project of removal of the Sitka regen was commenced during 2023/24. The remaining SS regen on site will be targeted for removal during 2024/25.

At the present time North Sannox has poor age structure due to the large area clearfelled in 2016, and the area covered by native broadleaf species is still lower than the target for this site however, given time and some assistance when required (e.g. enrichment planting or removal of further regen), it is hoped that species diversity and structural diversity will increase over time through mostly natural processes.

Table 1: Area by species

Plan area by species						
Species	Current		Year 10		Year 20	
	Area (ha)	%	Area (ha)	%	Area (ha)	%
Sitka spruce	22.6	17.7	7.1	5.5	6.8	5.3
Other conifers	1.7	1.3	2.3	1.8	2.6	2.0
Native broadleaves	35.3	27.7	66.3	52	77.6	60.9
Open ground	69.6	54.6	51.8	40.6	40.5	31.8
<b>Total</b>	<b>127.5</b>	<b>100</b>	<b>127.5</b>	<b>100</b>	<b>127.5</b>	<b>100</b>

Chart 1: Area by species

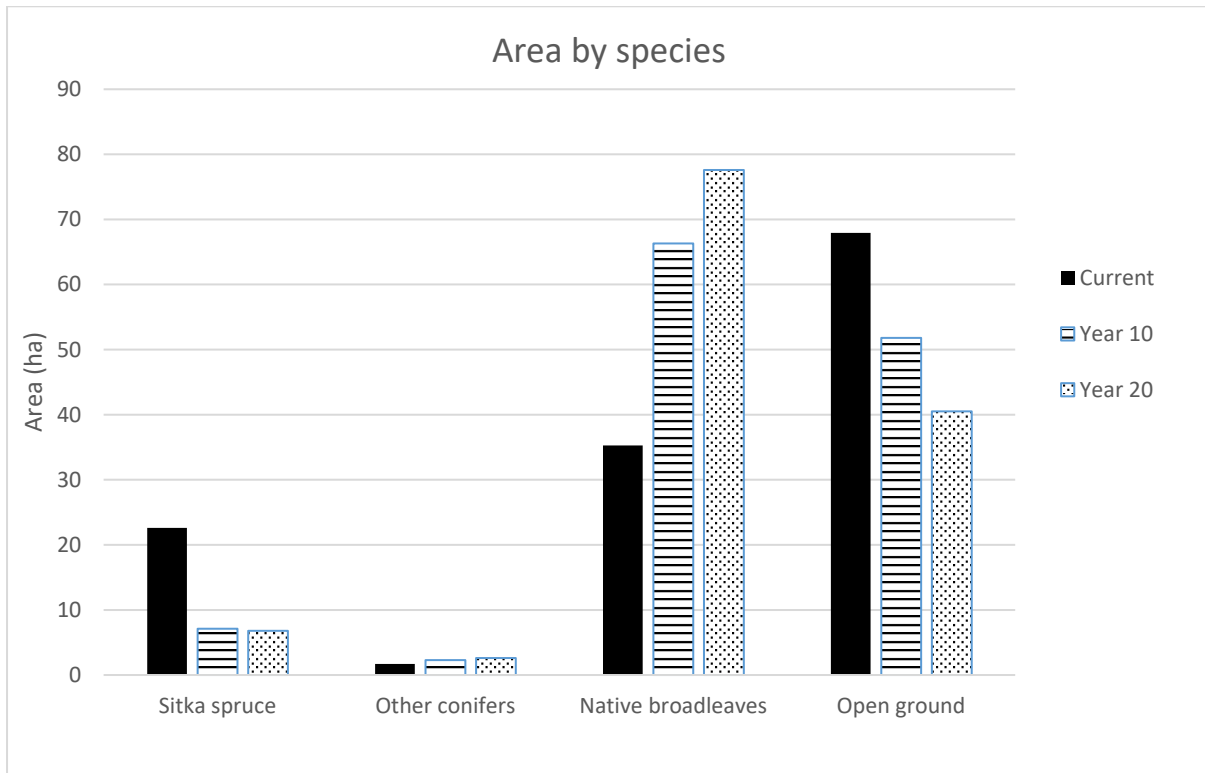
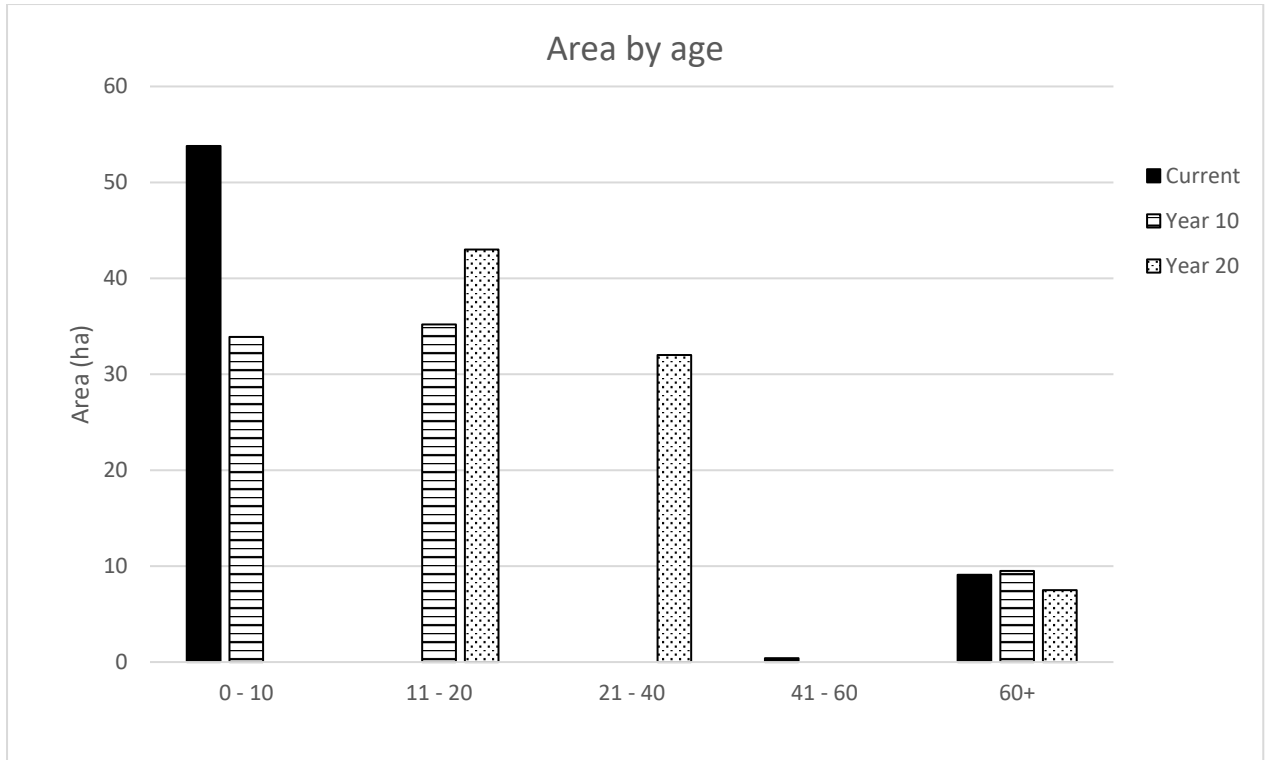


Table 2: Area by age

Plan area by Age						
Age Class (years)	Current		Year 10		Year 20	
	Area (ha)	%	Area (ha)	%	Area (ha)	%
0 – 10	53.8		33.9			
11 – 20			35.2		43	
21 – 40					32	
41 – 60	0.4					
60+	9.1		9.5		7.5	
<b>Total</b>	<b>63.3</b>	<b>100</b>	<b>77.6</b>	<b>100</b>	<b>82.5</b>	<b>100</b>

Chart 2: Area by age



## A.8 Plant Health

North Sannox LMP area lies within the West of Scotland Pest Free Area and there are no known pests or diseases within the area. There are no larch species on site and only one Juniper plant on site. The Juniper will be monitored for signs of *Phytophthora* infections.

## B. Analysis of Information

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

Constraints and Opportunities		
Factor	Constraints	Opportunities
Designated sites	<p>Arran Moors SPA Arran Moors SSSI</p> <ul style="list-style-type: none"> <li>- designated for their breeding-birds (especially Hen harrier) and upland habitat assemblage.</li> </ul>	<p>Manage the SPA and SSSI as per Designated Site Management Plans.</p>
Biodiversity	<ul style="list-style-type: none"> <li>• Sitka regen will be a continued threat to the planned open ground and broadleaf areas</li> <li>• Diverse floral species including filmy ferns and Juniper could be at risk from competition or changing environmental conditions</li> <li>• Breeding birds (inc. Schedule 1 species) and mammals (inc. EPS) have been recorded in or near site</li> <li>• Lack of diversity of age &amp; structure within block</li> </ul>	<ul style="list-style-type: none"> <li>• A large project for SS regen removal is programmed for the coming year. In subsequent years the site should be monitored regularly and non-native regen tackled whilst young.</li> <li>• Monitor site for invasive species, non-native regen and excess herbivory. Aim to maintain varied mosaic of habitats and conditions.</li> <li>• Minimise disturbance of sensitive wildlife species.</li> <li>• As most of the site was clearfelled in 2016, and non-native regen is now also being cleared, most stock is young at present. A small area of SS will be retained to increase age structure and species diversity.</li> </ul>
Historic Environment	<p>North Sannox block contains one scheduled monument and many other heritage features</p>	<p>Keep SM and buffer clear of excess vegetation. As there are no mechanical operations planned on</p>

		site, the risk to heritage features is minimal.
Visitor experience	Key viewpoints from the site could be lost due to the 'Minimum Intervention' approach on site	Variety of species and structures on site, including many areas of open spaces, will enhance visitor experience and aid biodiversity targets. Maintain key viewpoints and consider enrichment planting if necessary.

### Concept

Maintenance of open hillsides and the development of transitional woodland fringe habitat will assist with managing the Arran Moors SPA and SSSI as per the Designated Site Management Plan.

Biodiversity will be improved through the continued expansion of the native broadleaf woodlands and increased diversity of species and structures over the years. Natural regeneration will be the preferred option for this expansion, however enrichment planting may be considered if species diversity or density are suboptimal.

The historical environment will continue to be protected via the maintenance of the scheduled monument and by increasing awareness of the locations and types of historic features on site so that any staff or contractors working in the block can protect all historic features during operations.

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

## C. Management Proposals

### C.1 Silvicultural Practice

North Sannox will be managed predominantly under minimum intervention with enrichment planting if required. Non-native conifer regeneration will be monitored and removed if necessary.

## C.2 Prescriptions

### C.2.1 Felling

There are no sites proposed for clear felling during the plan period.

**Map 4** indicates an area where removal of Sitka Spruce regen will take place in 2024/25. The Sitka regen is currently <10cm dbh and will be removed by low-impact methods (e.g. chainsaws).

### 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

There will be no thinning carried out in North Sannox during the term of this and Management Plan due to the young age of the broadleaf species on site. This will be reviewed during the next revision of the LMP for this site.

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

Areas identified for LISS management are shown on **Map 4**.

Once the Sitka spruce regen has been removed (work planned in 2024 / 25), the site will be managed through a Minimum Intervention approach allowing natural processes to create a woodland of diverse species and structures over time.

The site should, however, be monitored for further regen of non-native species or encroachment of trees into Managed Open spaces and appropriate actions taken to maintain the desired mosaic of Open habitats and native woodlands. Enrichment planting may also need to be considered in future if a lack of species richness or evenness is affecting the value of the habitats on site.

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

There are no Natural Reserves or LTR coupes on site.

### C.2.5 Restocking Proposals / Natural Regeneration

Proposals for the future habitats and tree species over the whole plan area are shown on **Map 5**. See Table 5 for areas, establishment, and mix proportions.

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.

Where natural regeneration is not the desired species or proposed land use (e.g. on managed open ground) it will be considered against the plan objectives and tolerance table and either accepted (with a plan amendment if necessary) or removed. It is anticipated that some open ground and broadleaf areas may fill in with natural regeneration of both conifers

and broadleaves. These sites will be managed to ensure that, where practicable, the natural regeneration does not negatively impact on plan objectives.

In the buffer zone around the SPA, a lower-density fringe habitat woodland may be more desirable due to the mosaic of habitats which are required for nesting and foraging breeding birds.

Table 3: Felling

Scale of Proposed Felling Areas										
Total Plan Area			00 ha							
Felling	Phase 1	%	Phase 2	%	Phase 3	%	Phase 4	%	LTR	%
Area (ha)	0	0	0	0	0	0	0	0	0	0

Table 4: Thinning

Thinning over the first 10 years of the plan	
Total area where thinning may be undertaken during the plan period	0 ha

Table 5: Restocking

Felling Phase	Map Identifier (coupe number)	Species to be planted - or established through natural regeneration (nr)	Area (ha)*
Currently Fallow	37002	Mixed Broadleaf (90%)	16
		Mixed conifers (10%)	1.8
1	37003	Mixed Broadleaf (69%)	25
		Mixed conifers (4%)	1.4
		Open (28%)	10
<b>Total Restocking Area (ha)</b>			<b>54.2</b>

\*net area to be planted excluding designed open ground



### C.2.6 Protection

Management of deer is an underpinning activity essential for the delivery of benefits from Scotland's National Forests and Land. 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.

### C.2.7 Fence erection / removal

No new fencing is planned during the term of this Land Management Plan

### C.2.8 Road Operations

There are no new roads or quarries planned in North Sannox within the term of this LMP.

### 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 absolutely necessary and will keep disruption to a minimum.

### Woodland Management in Visitor Zones

Visitor Zones have been identified in areas where FLS encourage and manage access or where the woodland managed by FLS interacts with popular visitor sites or access routes. Given the small size of North Sannox and the various walking routes on offer, the whole site is designated as a Visitor 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. Areas of historic environment interest will be checked both on FLS's records and also with the Council's 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.

**Map 6** and **Appendix II** provide more information about the historic environment features within the plan area.

#### C.2.11 Biodiversity

UK Forestry Standard guidance is to manage a minimum of 15% of the forest management unit with conservation and the enhancement of biodiversity as a major objective. The figure for this plan is 100%.

#### C.2.12 Tree Health

There are no larch species within the woodland block and therefore *P.ramorum* is not a concern within the woodland. The island of Arran lies within the West of Scotland pest free area and there are therefore no known pests within North Sannox block.

### C.2.13 Invasive Species

FLS endeavour to control any incursions as per Invasive Non-Native Species and Biosecurity policies.

### C.2.14 New Planting

Not applicable

### C.2.15 Other

#### 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.

#### Private Water Supplies

There is a Private Water Supply (PWS) on neighboring land. As there are no large operations planned on site this should not be impacted in any way during the term of this LMP.

If any works are occurring on site:

FLS will continue to work in accordance with the UKFS, UKFS Forest and Water guidelines, Forestry and Water Scotland: Know the Rules 2<sup>nd</sup> ed., the FLS South Region Pollution Control Plan, and its legal obligations to protect private water supplies. All PWS infrastructure will be mapped and included in FLS work plans and an emergency plan will be shared with the end user ahead of operations starting.

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

Table 6 – EIA projects (in Phase 1)

Total area (hectares) for each project type and details by sensitive or non-sensitive area.					
Type of Project	Sensitive Area		Non-sensitive Area		Total
Afforestation	0 %Con	%BL	0 %Con	0 %BL	0 ha
Deforestation	0 %Con	%BL	0 %Con	0 %BL	0 ha
Forest Roads	0 ha		0 ha		0 ha
Quarries	0 ha		0 ha		0 ha
Provide further details on your project if required.					

### C.4 Tolerance Table

See Appendix III.

### Appendices

Map 1 – Location

Map 2 – Current tree species

Map 3 – Concept

Map 4 – Management (Felling)

Map 5 – Future habitats and species (Restock)

Map 6 – Historic environment (Refer to Appendix II for details)

Appendix I – Consultation record

Appendix II – Historic environment records

Appendix III – Tolerance table

## 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 / Aspiration
Designated sites	<ul style="list-style-type: none"> <li>NatureScot</li> </ul>	<p>Recommendation for continued removal of conifer regen in and around SPA, and other species diversification aspirations. Advice re habitat management.</p> <p><b>Refer to A.6.9</b></p>
Historic Environment	<ul style="list-style-type: none"> <li>HES</li> <li>WOSAS</li> </ul>	<p>HES: concern over stability of veteran trees at Scheduled Monument. Control vegetation around SM, monitor, show on all operational maps.</p> <p>WOSAS: Noted that there are 11 heritage features which require protection during ops.</p> <p><b>Refer to A.6.8, C.2.10, Appendix II</b></p>
Private Water Supplies	SEPA	<p>Ensure that any PWS near site have been identified, mapped and are adequately protected.</p> <p><b>Refer to A.6.4</b></p>
Water quality	Member of Public	<p>MOP raised issue of 'Bad' water quality status of the burn (SEPA ID: watercourse 10177, North Glen Sannox burn)</p> <p><b>Refer to A.6.4</b></p>
Invasive species	Member of Public	<p>MOP reported Giant Hogweed on site . FLS staff have not found any to date, but will monitor.</p> <p><b>Refer to A.6.10, C.2.13</b></p>
<p>The following stakeholders responded with no comment or no issues: Scottish Water, NA Council public roads dept, NA council Environmental Health, British Horse Society (standard advice re access &amp; safety provided, no specific advice re N.Sannox), Arran Birding</p>		
<p>The following stakeholders were contacted during scoping but did not respond: Scottish forestry, NA Council Outdoor Access, North Sannox Farm (Pony trekking and neighbouring resident), Ayrshire Rivers Trust, Arran Community Council, Arran Trust, CONFOR, NTS, Scottish Raptor Group, RSPB, SWT, Scottish Badgers, SSE, Butterfly Conservation, Visit Arran, Scottish Cycling, Ramblers Association, Arran Geopark,</p>		

## Appendix II: Historic Environment records

### Refer to Map 6

Map ref	Designation	Name / Feature ID	Feature Description	Grid Reference	Importance
1	Scheduled Monument	<b>SM3492.</b> Cairn 420m E of North Sannox Canmore ID: 40206	Burial Cairn (Bronze age)	NS 014 465	National Importance
2		Leac Gharbh Canmore ID: 299100	2 x Navigation Beacons. Measured Mile Markers (20 <sup>th</sup> century)	NS 011 475	Local Importance
3		Leac Gharbh Canmore ID: 299099	Navigation Beacon. Measured Mile Marker (20 <sup>th</sup> century)	NS 008 473	Local Importance
4		Canmore ID: 357985	Enclosure(s)(Post Medieval), Lazy Bed(s)(Post Medieval)	NS 012 474	Uncategorised
5		Lag Nan Susunnach Canmore ID: 40208	Battle site (Period unknown)(Possible), Burial(s)(Period unknown)	NS 012 465	Uncategorised
6		Canmore ID: 138230	Chambered Cairn (Neolithic)	NS 011 467	Uncategorised
7		Canmore ID: 40215	Cist containing human remains (removed)	NS 015 465	Uncategorised
8		Canmore ID: 138231	Cairn (Prehistoric)(Possible), Hut (Post medieval)	NS 013 466	Local Importance
9		Canmore ID: 358891	Hut Circle (Prehistoric) (Possible)	NS 002 476	Uncategorised
10		Canmore ID: 357821	Dun (prehistoric)	NS 011 467	Uncategorised
11		Lag Nan Sussunnach Canmore ID: 362194	Clearance Cairn (Modern)(Possible)	NS 012 467	Uncategorised

Map ref	Designation	Name / Feature ID	Feature Description	Grid Reference	Importance
A		Not on Canmore: (recorded by FLS staff)	System of dykes and enclosures	NS 011 469	Local Importance
B		„	Cairn. Stones in a rough circle. Probable field clearance cairn	NS 010 469	Local Importance
C		„	Cairn / circle of stones (maybe natural, maybe archaeological)	NS 011 468	Local Importance
D		„	Remains of a building.	NS 005 477	National Importance
E		„	Sheepfold. Circular stone-built structure	NS 011 472	National Importance
F		„	Cairn(s) Possible natural or archaeological feature	NS 008 471	Regional Importance
G		„	Remains of dry stane dyke	NS 011 475	Local Importance
H		„	Low lying earth dyke	NS 011 467	Local Importance
J		„	Dry Stane Dyke	NS 009 466	Uncategorised
		„	Sheiling Huts	NS 011 466, NS 013 471, NS 009 472, NS 009 470	Local Importance

## Appendix III: Tolerance table

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

### NOTES:

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

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

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

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



## Larch Tolerance Table

	<b>Adjustment to Felling period</b>	<b>Timing of Restocking and species component</b>	<b>Felling of larch within a mixed coupe</b>	<b>Changes to Road Lines</b>
<b>FC Approval normally not required</b>	Fell date for phase 2 can be moved forward where larch comprises 50% or more of the coupe species component.	changes to restocking proposal that exclude larch and closely related species in the same genus, eg Sitka and Norway Spruce.  Up to 3 planting seasons after felling		
<b>Approval normally by exchange of letters and map</b>	Felling moved between phases 1 and 2 where larch comprises less than 50% of the coupe species component	Changes to restocking proposals that include larch or closely related species in the same genus, eg Sitka and Norway Spruce.  Between 3 and 5 planting seasons after felling	Areas of pure larch up to 20% of coupe area within phase 1 and 2 can be felled to remove the sporulating host, with restocking deferred until the rest of the crop is felled. Where the Larch constitutes more than 20% of the coupe component, then the whole coupe must be felled and restocked together.	New road lines (subject to EIA screening opinion) or tracks within existing approved plans necessary to allow the extraction of Larch material.  Where necessary Prior Approval should be dealt with directly with the relevant Regional Council
<b>Approval by formal plan amendment is required</b>	Advance felling into current or 2 <sup>nd</sup> phase for pre-emptive larch removal			Where a new public highway entrance or exist is required. Where necessary Prior Approval should be dealt with directly with the relevant Regional Council

Larch felled in the autumn and winter, when the presence of P ram cannot be assessed visually must be treated as infected and will therefore require a movement licence. When carrying out operations where the clearance has not been on the Public Register or through the consultation procedure it is important that due diligence is undertaken to identify sites that will require to be protected.