



DRAFT Environmental Impact Assessment Screening Opinion Request Form

Please complete this form to find out if you need consent from Scottish Forestry, under the **Forestry (Environmental Impact Assessment) (Scotland) Regulations 2017**, to carry out your proposed forestry project.

For more information on EIA Screening, refer to Scottish Forestry’s ‘Environmental Impact Assessments for Forestry Projects’ (2021) guidance document and ‘Schedule 2: Selection Criteria for Screening Forestry Projects’ under the “Applying for an opinion” section for more detail on the information you should provide in this form. If you are not sure about what information to include on this form, please contact your local Conservancy office.

Project Details

Provide details of the gross project area and composition i.e. the project boundary to include all unplanted ground and sensitive areas retained in open ground within the boundary. You must also provide a map which defines the gross area boundary.

Designed Open Ground (DOG) is plantable land left unplanted for design reasons or to avoid or prevent significant negative impacts. Other Land (OL) is unplanted land e.g. scree, extensive deep peat, lochs and other waterbodies, existing woodland.

The definition of ‘native’ and ‘nonnative’ refers to Scotland as a whole, not to specific areas of Scotland and irrespective of management objectives.

Proposed* Work	Gross Project Area (ha)	Non-Native CON (ha)	Native CON (ha)	Non-Native BL (ha)	NBL (ha)	DOG (ha)	OL (ha)
Afforestation	3,413	0	124 (net planting area) 12 (natural regeneration)	0	769 (net planting) 300 (natural regeneration)	1294	914
		0 %	14 % of planting area	0 %	86 % of planting area	%	%

			4% of site		31% of site		
Deforestation	n/a						
		%	%	%	%	%	%
Forest Roads	n/a						
Forest Quarry	n/a						

*SF Use Only:

For recording afforestation species figures in Casebook Pre-App case type:

Conifer = Non-Native CON + Native CON figures as shown in above table

Broadleaves = Non-Native BL + NBL+ DOG + OL figures as shown in above table

Description of Forestry Project and Location

Provide details of the forestry project (size, design, use of natural resources such as soil, and the cumulative effect if relevant).

Please attach map(s) showing the boundary of the proposed work and other known details.

Location: see Appendix 8 Maps and Plans

Glen Prosen is a proposed significant new woodland creation project located in the Angus Glens area in the southeast corner of the Cairngorms National Park. The project covers the 3,413ha of open ground acquired by FLS in 2022. Glen Prosen, DD8 4SD, lies 15 miles north of Kirriemuir, Angus.

Forestry and Land Scotland's aims for land management in Glen Prosen:

- **Nature:** manage the forest and land to increase biodiversity, enhance protected features, and facilitate landscape scale ecological recovery by enabling natural processes.
- **People:** provide opportunities for education, learning, health and well-being through recreational and working use of the site for the benefit of communities near and far.
- **Climate:** manage the forest and land to help with flood risk reduction, fire resilience, carbon sequestration and storage; and sustainable timber production.

Concept: see Appendix 8 Maps and Plans

A key objective in our land management plan, spanning the next 10-20 years, is the creation of new native woodland in Glen Prosen as part of the overall habitat recovery across the site.

This will comprise 1,800ha new native woodland, with a net planting area of 900ha, this takes into account integral areas of open space and a naturalistic planting method that leaves

space for natural processes to facilitate regeneration (approx. 300ha) which we expect to increase once more seed source is established. To achieve this, we are proposing to enclose 2,525ha in two large, fenced enclosures (containing some smaller enclosures/exclosures for riparian planting from NRF project, which will be removed when appropriate) to minimise herbivore impact to aid woodland establishment and habitat recovery.

Over the next 5 to 50 years we are anticipating the site to develop gradually, starting with the initial tree planting, drain block and peatland restoration which will provide the basis for further habitat recovery through natural processes. We aim to achieve 900ha of tree planting in the next 10 years which will form the basis of further woodland expansion as a seed source is established. The reduction in herbivore pressure will further aid natural regeneration and over the next 25-50 years we hope to see an increase in woodland cover to around 1800-2000ha across the site, varying from dense groves of 'birch belt' and Scots pine to scattered trees and woodland scrub cover in the higher reaches of the site.

Achieving the above will contribute to Scottish Government's priorities and national and local targets for woodland, climate change and communities, such as:

- [Scotland's Forestry Strategy 2019-2029](#).
- [Scottish Biodiversity Strategy to 2045](#).
- [Climate Ready Scotland](#).
- [Cairngorms National Park Partnership Plan 2022-27](#).
- [Angus Forestry and Woodland Strategy 2024-34](#)
- [River South Esk Catchment Management Plan 2025-30](#)

The woodland creation concept contributes to the above objectives and complies with the requirements of the UK Forestry Standard (UKFS) and UK Woodland Assurance Scheme version 5 (UKWAS 5). We have used information gathered in extensive soil, water, vegetation/habitat, species and archaeology [surveys](#), as well as public, stakeholder and community consultation to inform our plans.

Site and proposed woodland creation

The land within the site boundary lies within the head of Glen Prosen, including the summits of two munros reaching 939m above sea level. Prosen Water flows through the main U-shaped valley, with smaller tributaries such as Burn of Kilbo and Burn of Louie running through steeper V-shaped valleys to the north and east of the site. The southern area of Cormuir is its own miniature glen centred around the Burn of Cormuir and the system of flushes, mires and peatland. At the northern end of the site, the ground rises steeply up away at the head of the glen into rocky crags containing a distinctive mix of montane flora.

A host of ecological and environmental surveys across the land holding ([see **Surveys Summary**](#)) have enabled us to develop a baseline understanding of the site, showing a

mosaic of habitats with different upland heaths, fens and flushes, varying areas of peatland and blanket bog. The new native woodland will form part of the wider habitat restoration in Glen Prosen, which will create a mosaic of open and wooded habitats, using natural processes where possible, and encouraging recovery of a functioning ecosystem. This will happen alongside peatland and wetland restoration and management of open habitats for conservation and to enhance biodiversity. The primary functions of the new woodland are to improve biodiversity, mitigate climate change, create opportunities for education, recreation and wellbeing of people, and therefore we are not planting trees at a commercial stocking density.

The woodland creation consists of four different wooded habitats: denser 'valley side woodland,' riparian woodland to create dappled shade, open wooded habitat (including wood pasture), and montane woodland:

- **Valley-side woodland:** variable density (1,200-1,600 stems/ha) creating groves of trees with integral open space to allow for rocky outcrops and to leave space for natural regeneration. Native species such as birch, Scots pine, rowan, aspen, sessile oak, and hazel will be planted in clusters/groups using minimal ground preparation (e.g. vegetation removal, screefing/scarifying, with invert-mounding only where necessary). **Riparian woodland:** denser planting (1,600 stems/ha) of native species such as alder, various willows, bird cherry, aspen, downy birch, rowan, and bird cherry, along water courses in clusters/ groups as close to the channel as possible. Ground preparation will be by screefing only, where required.
- **Open wooded habitat:** variable lower density (400 - 800 stems/ha) with large amounts of integral open space to enable existing open habitats such as heath to thrive as woodland understorey, and for a graduated transition from open habitats to tree cover (e.g. around shallow peaty pockets/ bog and fen fringe), and to leave space for natural regeneration. Native species of trees and shrubs such as hawthorn, gorse, wild roses, willows, downy birch, juniper and bird cherry.
- **Wood pasture:** open grown trees such as Scots pine, oak, and rowan, alongside thorny shrubs with individual tree protection by cactus guards to allow for cattle grazing during establishment.
- **Montane woodland:** high elevation, low density (400-600 stems/ha) trees and shrubs such as dwarf birch, downy birch, rowan, downy willow, least/dwarf willow, woolly willow (base-rich soils), eared willow, Scots pine, goat and grey willows, tea-leaved willow and dark-leaved willow.

Woodland creation within unplanted areas of the existing Glen Prosen plantation will help to better integrate the productive plantation into the surrounding landscape by blending the treeline higher up the hill, and protecting vulnerable water courses.

More dense areas of valley side woodland are located at lower elevations on freer draining soils, while open wooded habitat areas will provide buffers for peatland and fens/flushes and help to blend the woodland into the landscape by providing an ecotone between tree canopy cover and open habitats. This will support a mosaic of habitats that mirrors the underlying soils (**see Appendix 3: Soils**) The soil survey carried out shows a complex mosaic of soils that range from upland brown earth, podzols and iron pans to gleys, peaty soils and blanket bog.

Peaty gleys are common on mid-low slopes across the glen and deep peat is also found more sporadically through the flood plain of the main glen and higher up in areas of blanket bog, and these have been identified and will be excluded from planting. As part of the wider habitat restoration, we will be blocking man-made drain (and/ or erosion features) across the site which will make some areas wetter and therefore tree species and density will take this into account.

The woodland creation and habitat restoration area lies within 2,525ha of enclosures, made up of 18.5 km of upland deer fencing and 7.8km of electric stock fencing. Consequently, approximately three quarters of the site will be enclosed, which will enable habitat recovery and woodland establishment due to reduced herbivore pressure.

Tree species have been identified which are native and site appropriate, considering climate, exposure, soils and elevation. Drainage will not be used to facilitate planting, rather we will be seeking to block artificial drains where we can and will plant species with higher tolerance of water logging in wetter areas. Fertiliser/mycorrhizal application may be considered in areas of the site where the soil is particularly thin/nutrient poor to help establishment.

FLS is committed to sourcing local provenance seeds and plants to fulfil the demand for tree planting in this project. We are currently identifying sites for seed collection in and around the Angus Glens, from which we intend to work in collaboration with the local nurseries to produce trees for the site. We will also create our own small clone banks on site for future seed collections – this will be particularly helpful for some of the rare/minority species in Table 1 below. In the case of the most prevalent species, we are looking at sourcing plants from seed zones 201/202 (or for Scots pine zones 3 or 4), and particularly those adapted to higher elevation (>350m).

Table 1: Species proposed.

Species (common names)	Area (ha)	Percentage of total planting (%)
Downy birch	198	22
Scots pine	134	14
Rowan	116	13
Aspen	84	9
Eared willow	54	6
Creeping willow	50	6
Alder	48	5
Dwarf birch	45	5
Hawthorn	27	3
Sessile oak	26	3
Grey willow	19	2
Goat willow	16	2
Bird cherry	15	2
Silver birch	14	2
Holly	14	2
Dark-leaved willow	11	1
Downy willow	7	1
Blackthorn	3	0.3
Tea-leaved willow	2	0.2
Wild apple	1	0.1
Guelder rose	<1	0.1
Wych Elm	<1	0.1

Table 1 sets out the proposal to create a diverse and resilient woodland using site suitable species in a naturalistic and intimate planting mix. Where integral open space enables natural processes to take place and trees to establish where they are best adapted through natural regeneration. **See Appendix 8: Maps and Plans: Woodland Creation Concept.**

Provide details on the existing land use and the environmental sensitivity of the area that is likely to be affected by the forestry project.

Existing Land Use and Land Use Potential

Most of the site had until recently been managed for grouse shooting by rotational heather burning and with rough grazing for sheep. This, along with high deer populations, resulted in a largely treeless landscape. Heather burning stopped and sheep grazing largely ceased when FLS acquired the land (Nov 2022), except for several of the in-bye fields which are grazed by a local farmer to manage vegetation levels. Cattle were introduced in 2024/25 for the purpose of 'conservation grazing'. The open hill is grazed by deer, though grazing pressure has been reduced since 2022, when FLS took on deer management, culling c.1000 deer up to March 2025.

The proposed woodland creation areas are classified by the James Hutton Institute (JHI) Capability for Agriculture index as partially 5.3 'Land capable of use as improved grassland' which deteriorates and merges into mainly 6.1 'Land capable of only rough grazing.'

JHI Land Classification for Forestry shows the woodland creation areas as being predominantly 'F5 Land with limited flexibility for the growth and management of tree crops' and 'F6 Land with very limited flexibility for the growth and management of tree crops' meaning that there is little scope for commercially viable areas of productive forestry, particularly when priority open habitats are taken into consideration.

Three areas of woodland creation are proposed on old, clear-felled plantations, that were cleared between 10 and 25 years ago, one of which has a restock liability (Craig Tillelet) and this clear fell will be restocked at more commercial density using Scots pine with some broadleaf.

Habitats and vegetation – see appendix 2 for habitats map

A habitat survey has been undertaken of the newly acquired open ground to inform the most suitable areas for woodland creation. Approximate proportion (%) of the site survey area, not including bare rock and water (3407ha) in each habitat type (Priority Habitats in block capitals) is as follows:

Table 2: NVC Habitat Areas

Habitat Type	Percentage of Survey Area (%)
UPLAND HEATHLAND	41.1
Acid grassland	23.7
BLANKET BOG	15.4
UPLAND FLUSH, FEN & SWAMP	7.5
MONTANE HEATH	7.5
Neutral grassland	3.3
PURPLE MOOR-GRASS & RUSH PASTURE	0.5
Broadleaved, mixed & yew woodland	0.3
FEN, MARSH & SWAMP	0.2
NATIVE PINE WOODLAND	0.2
UPLAND BIRCHWOOD	0.1
WET WOODLAND	0.1
DWARF SHRUB HEATH	0.1
Coniferous woodland	0.0

Based on the habitat survey the following considerations have informed the woodland creation proposals:

The proposed woodland creation considers habitats that could benefit from continued low intensity grazing and/or being managed as open habitats, for example species rich flushes.

Habitats not generally suited to trees, such as blanket bog, flushes/fens and species rich grassland have been buffered with 'open wooded habitat' to provide a gradation from areas of 'valley side woodland' and those areas that are managed as open habitats. The 'open wooded habitat' comprises areas of low-density broadleaf planting and regeneration of site suitable species such as willows and thorny shrubs. Other wet areas have potential to become 'wet woodland' as extensions and enhancements of riparian planting in and around the food plain, working with the small remnant of wet woodland remaining at Runtaleave by Prosen Water.

The head of the glen has areas of species rich calcareous montane heath which could be enhanced and expanded through the planting of willow species that are appropriate for more neutral soils and high elevation, such as downy willow.

The habitats survey and subsequent peatland carbon code survey has shown the complex mosaic of habitats across the site, and while areas of deep peat have been excluded from tree planting, other peaty soils and areas where peat and gleys form a complex mosaic may form part of a very low density open wooded habitat/montane scrub habitat.

During August 2025, 695.6 hectares of peatland habitat were mapped, of which 680 hectares of blanket bog and 15.6 ha of fen were identified. In total 884 peatland condition and peat depth point samples were completed, with an additional 286 peat depth samples taken at 50 metres spacing to refine the boundary of extensive deep peats. 221ha of peatland were identified as being eligible for restoration, approximately half as modified/drained bog and half as actively eroding hagsgs and gullies. 53% of the peat depths recorded were greater than 30cm and 27% of the depths recorded were greater than 50cm, giving an approximate area of 187ha of 'deep peat' and in total 368ha of peatland over 30cm that will be excluded from tree planting.

Areas of the site are designated for their plant assemblages and habitat features – the Caenlochan Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC) cover approximately 305ha at the northern extent of the site, which forms 6% of the Caenlochan designated area. **The Caenlochan SSSI** is an extensive upland mountainous site renowned for its alpine plants and designated for a range of habitats and species assemblages, from montane habitat and vascular plant assemblages through to invertebrate and breeding bird assemblages. **The Caenlochan SAC** is an extensive upland mountainous site designated for multiple habitat types ranging through base-rich fens and base-rich scree through to acidic scree and montane acid grasslands. Several of the qualifying interest habitats can be found in Glen Prosen, including Alpine and subalpine heaths, dry heaths, blanket bog, montane acid grassland. Qualifying interests not found on the designated FLS land include mountain willow scrub (although this is found in FLS Glen Prosen outside the designated site as NVC W20 *Salix lapponum* – *Luzula sylvatica* scrub).

Across the whole site, 76% of the habitats are classed as Priority Open habitats – upland heath, montane heath, purple moor grass and rush pasture, blanket bog, wet woodland, upland birch wood and upland fen marsh and swamp. As per UKWAS 5 this priority open habitat should not be ‘converted through loss or degradation unless the removal or addition of trees is justified to protect, maintain or enhance their features or function.’ Therefore, the addition of trees through planting and/or natural regeneration will not be appropriate on some of these habitats such as blanket bog and flushes, as discussed above. But, on some areas of priority open habitat, e.g. upland heath, the addition of trees can enhance the habitat, and the heath will still exist as an understory of the woodland creation, because the species choice (birch, Scots pine) will be planted/managed at such a density to avoid shading out the heather.

Groundwater Dependent Terrestrial Ecosystems

Ground-water dependent terrestrial ecosystems (GWDTE) are wetlands which are critically dependent on the flow and chemistry of ground water. They are distinct from blanket bogs, which are irrigated only by rainwater.

In Glen Prosen, some GWDTE are structurally and botanically rich (275ha), and support flora and associated fauna listed on the IUCN and UK red list as species of conservation concern. Amongst these are GWDTE of exceptionally high conservation value, forming the qualifying features for Caenlochan Special Area of Conservation. Some GWDTE occurring in Glen Prosen may be derived from botanically rich and/or structurally complex ecosystems which have been impoverished by a history of drainage, burning and intensive grazing. There may be opportunities to restore these impoverished ecosystems through management intervention, which could include the restoration of species-rich wet woodland by planting or natural regeneration.

The survey area was provided by Forestry and Land Scotland, following a desk top analysis to identify areas where GWDTE may be present, and where forest operations are planned. The total extent of the area surveyed was 710 hectares (Map 1, Appendix II).

There are several plant communities on site that are potentially dependent on ground water, and tree planting in/around these habitats will be guided by more detailed surveying prior to planting, in line with industry guidance for forestry operations around Ground Water Dependent Terrestrial Ecosystems (GWDTEs) recommending no excavations deeper than 50cm.

Birds: see Appendix 1 Birds and Survey Summary spreadsheet

Several surveys have been completed including breeding bird surveys, raptor vantage points, black grouse lek surveys, RSPB bird and wader research surveys and high elevation Dotterel and Ptarmigan surveys.

These surveys have helped to inform areas that need to be managed as open habitats for the purpose of ground nesting birds and grouse leks, which can be seen on the **Concept Map**. Other areas of open space will be included within the open-wooded habitats to provide hunting space for raptors and Short-eared Owls.

Alongside the creation of variable density native woodland, other land management such as cattle grazing, scrub creation and drain blocking will help to improve habitat availability and food source for a variety of birds, which may move across the site. **See statement from RSPB in Appendix 1.**

Surveying for breeding birds and protected species will also be carried out immediately prior to commencing operations for any ground preparation, fencing and planting once a woodland creation scheme is approved. If found, operational timing and locations may be amended so that they are not disturbed.

The Caenlochan SPA covers an extensive area of montane plateau, corries and glens. The area covers a varied geology and topography over both acidic and calcareous ground creating a diverse range of upland and montane habitats. The SPA is designated for internationally important populations of breeding dotterel and golden eagle, supporting 47 pairs and 6 active territories, 5 and 1% of Great Britain's breeding populations respectively. The SPA lies completely within the larger Cairngorms Massif SPA, which is also designated for breeding Golden Eagle. Approximately 305ha (or 5.12%) of the SPA is within the site in the northwestern end of Glen Prosen.

NatureScot Site Condition Monitoring (SCM) and extensive FLS breeding bird surveys (BBS) confirm that neither of the qualifying interest species (dotterel and golden eagle) breed within the SPA on the site. FLS BBS also confirm that neither qualifying interest species breed within the wider Angus Glens LMP area. The nearest breeding dotterel identified by the last SCM in 2011 was 7 km from the SNFL and the nearest golden eagle territory in the SPA is a little over 3.5 km from the SNFL. Therefore, management on the SNFL in the Angus Glens LMP area does not have any potential for disturbing breeding dotterel or golden eagle within this SPA. FLS acknowledges that its plans and operations do have the potential to reduce the prey availability and hunting habitat of the qualifying interest, golden eagle. However, given the current spread of territories, the impact will not be significant for birds breeding within this SPA. Any impacts on golden eagle outside the SPA may still affect the golden eagle population within the SPA if recruitment to the local population is adversely affected.

NatureScot list 'overgrazing by deer' and 'recreational disturbance' as negative pressure for golden eagle in the SPA, both of which are potential pressures on the SNFL. No negative pressures are listed for dotterel. The generic conservation objectives for the SPA state "To avoid deterioration of the habitats or the qualifying species...or significant disturbance to the

qualifying species, thus ensuring that the integrity if the site is maintained...", and more specifically include ensuring the population and distribution of the species remain a viable component of the SPA and that there is no significant disturbance of the qualifying species.

Invertebrates:

A total of 246 species were recorded in spring/summer 2024, including one Near Threatened species, two Nationally Rare species, 12 Nationally Scarce species, one Scottish Biodiversity List species, four species on the spider Amber list, 13 very local species, and 71 local species. Many species (144) were associated with open habitats, while 45 species were wetland-associated, and 28 species were tree-associated. The highest number of species with conservation statuses were recorded at Driesh summit, reflecting the highly specialist niches present in this montane plateau habitat. Analysis of species associations identified a relatively small number of plant associated species (46) from all sample locations. This is likely to reflect overall low plant diversity and poor habitat structure at the sample locations at the time of the survey.

Some of the notable species identified are reliant on specific habitat conditions that risk being lost without targeted management to maintain them. Therefore, future management will aim to maintain as wide a range of habitat types as possible, including some good examples of current open habitat types to allow existing invertebrate communities to persist. Multiple notable species are likely to benefit from drain blocking, rewetting and restoration of wetland habitats, including peatland areas. A reduction in herbivore impacts and the planting of trees and shrubs is expected to result in an increase in overall invertebrate species diversity.

Mammals: see Appendix 4: Herbivore Management: Hare Survey Report

A walkover survey for mountain hare, conducted along transect lines, used thermal imagery binoculars/scopes, stopping ever 70m to scan for mountain hares. A trial of a thermal drone to scan for hares over a larger area was used too. This information was supplemented with observations from the ranger team during the period of Aug - Dec 2024. Two mountain hares were sighted during walkover and the drone did not have any confirmed sightings.

This data is a snapshot in time at present and we estimate the hare population density to be 0.012 hares/km².

During the various habitat, bird and other ecological surveys conducted on site in 2023 and 2024, observations of mammal activity were recorded. These included:

- **Wildcats** are known to be present locally in the Glen Prosen forest plantation, here we use camera traps to monitor activity before forest operations. It is likely that these cats may range into the open ground, therefore a survey and cameras will be used prior to any operations taking place. The woodland creation proposals will create more suitable habitat for wildcats so their range and population may increase here in the future.

- **Red squirrels** are present in the Glen Prosen plantation forest, and it is likely that the woodland creation, featuring Scots pine and hazel will extend the amount of habitat in the long term.

Other wildlife: see Survey summary report

Surveys in and around the water courses for freshwater pearl mussels, fish and invertebrates found no signs of otters or water voles using the site at present. Similarly, no signs of badgers and very few reptiles in the open ground were identified either.

Deer management: see Appendix 4: Herbivore Management

To create a diverse woodland at scale in Glen Prosen, the planted woodland creation areas, and the wider habitat restoration will need to be protected by deer fencing until they are well established. The plan to enclose 2,525ha of open ground means that the land can recover from decades of over grazing by sheep and deer. The restoration of wetland and peatland habitats will also benefit from the reduction in herbivore pressure.

A helicopter count of deer by NatureScot in March 2025 counted 7,019 deer in the South Grampian Deer Management Group area (46,790ha) and 5,127 deer in the Caenlochan Section 7 area (33,448ha). This gives an average deer population density of 15 deer/km². The DMG Section 7 target is to reduce to 10/km². For woodland establishment, deer densities below 2/ km² are needed. and There is also considerable movement of deer during certain times of the year and in certain weather conditions which means the deer population, particularly within Glen Prosen, can vary enormously (numbers of deer on the ground can range between none and over 1000) this variance can be seen on the map of the Nature Scot deer count, showing that on a given day some areas contained large groups of deer while others had none, This preference for deer to form larger herds, with 72% of the population moving in groups of 100+, means that the risk of a significant impact on woodland establishment is high and difficult to predict or mitigate without fencing.

Culling alone will therefore, not provide the level of protection and assurance needed to when investing in tree planting and habitat restoration. Enclosing the site with a combination of upland deer fencing and electric offset stock fencing will reduce the risk greatly. After a period of establishment and recovery these fences will be removed to allow deer through the landscape again.

This will mean that compensatory culling is required to compensate for the loss of deer range, due to the construction of fenced enclosures, to avoid a negative impact on deer welfare. Consultation with NatureScot has confirmed that the 976 deer culled in 2023 and 2024 meets the required compensation. FLS will continue to cull deer across the site until the enclosures are in place and then focus a targeted cull on the 907ha of open ground at the northern end of the glen to keep deer off that ground and protect habitat restoration.

The proposed new fencing largely builds on and upgrades the existing fencing infrastructure (see **Appendix 4: Existing Fences Map**). Much of the march boundary is or has recently been stock fenced from when sheep were grazed across the hill.

Appendix 4: Proposed Fences Map shows the scale of the fencing described below:

- Around Cormuir and the western march with Scottish Water (Section A) - We are proposing to follow the line of the existing fencing and upgrade to a full upland deer fence with rabbit netting. This deer fence will then tie onto the existing recently fenced enclosure at Craigie Thieves. Heading north along the march with Glen Cally Estate from Craigie Thieves, the line of the old stock fence will be used to site a line-wire stock fence with an electric offset wire and rabbit netting along the bottom, up to the top of the Mayar Burn (Section B).
- Glen Prosen plantation is already enclosed in deer fencing and we are proposing to extend the deer fence on the eastern march of the plantation with Balnaboth Estate by 675m up to northeastern corner of the land holding and the march with Clova Estate (Section C). From there a line-wire stock fence with rabbit netting and an electric offset wire will upgrade the existing stock fence, sited along the northern march with Clova, to the Sneck of Farchal (Section D).
- From the Sneck of Farchal a new upland deer fence will bisect the site internally, running below Little Driesh and King's seat down to the bottom of the existing enclosure at Kilbo Bothy (Section E). This new fence line is planned to reduce visual impact from high ground above, hugging tightly into the hillside below Driesh and Little Driesh and coming down through the burn of Kilbo.
- The next new section of deer fence (section F) will tie onto the existing Nature Restoration Fund project fencing from Kilbo down to the Burn of Louie, this will separate the whole fenced area into two managed compartments to enable us to better manage any breaches by deer.
- The final section of new fence required to secure the lower glen woodland creation is Section G (approx. 100m) which runs from the southeast tip of the plantation deer fence, across Cramie farm down to the water's edge at Prosen Water, possibly with a water gate across Prosen water if this is unsuccessful. The fence will continue the other side of water course to tie onto the riparian deer fence at Cormuir.

As part of the rationalisation of fencing across the site, we have started and will be removing some of the existing stock fencing – see **Existing Fences Map in appendix 4** – to tidy up the site and remove redundant fencing that would become waste. It is our aim to remove approx. 12km of stock fencing over the next 5 years and responsibly dispose of the materials or recycle them if possible.

Water

Glen Prosen forms part of the River South Esk catchment and Prosen Water and its tributaries designated under the River South Esk SAC. The River South Esk SAC is an extensive riparian SAC stretching over 168km along various tributaries and the main River South Esk from the uplands of the Angus Glens down to the Montrose Basin. The SAC is designated for both freshwater pearl mussel *Margaritifera margaritifera* and Atlantic salmon *Salmo salar*, the SAC is considered one of the best areas in the UK for both species.

There are no freshwater pearl mussel populations found within the site. FLS recently surveyed all potentially suitable habitat in Glen Prosen and found that the in-stream habitat is not suitable for this species due to large sized and mobile riverbed substrates.

Atlantic salmon migrate, spawn and are present during all its freshwater lifecycle stages. Recent electrofishing surveys in Glen Prosen show the species present as fry and parr throughout the Prosen Water, Cramie Burn, and the Burns of Farchal and Luie at moderate densities. FLS has the potential to significantly improve habitat through riparian woodland creation which will help to reduce water temperature through shading, increase the amount of nutrients in the water through leaf litter, woody debris and increase food sources by boosting the invertebrate populations.

Flood risk reduction. There is potential for woodland creation to improve water quality and to reduce the impacts of downstream flooding. Glen Prosen woodland creation area accounts for 5.5% of the South Esk catchment area (61,384ha). The addition of trees to a largely treeless landscape in Glen Prosen, alongside other actions such as drain blocking and peatland restoration, will mean that more rainfall is intercepted and held on the land, slowing down the flow to the water courses. This slower rate of run off and interception also helps to improve water quality and reduce soil erosion and diffuse pollution in the water.

Community and visitor access

Glen Prosen has a community dispersed through the glen, centred around Glen Prosen village 2km south of FLS Glen Prosen which lies at the head of the glen at the end of the single-track public road. Residents, and visitors from further afield, come to Glen Prosen mainly for walking, biking and some horse riding. A core path and a right of way (Kilbo Path) run through the site, as well as the network of estate tracks which are used by walkers and cyclists. Some people prefer to walk off the tracks and as such we expect there to be open access across the whole of the site under Scottish Outdoor Access Code (SOAC), particularly concentrated around the routes to the summits of the two Munros, Mayar and Driesh. The network of estate and forestry tracks provides access through the glen and up onto the open hills, with the two munros, Driesh and Mayar easily accessible. Some additional access for forestry vehicles is required to facilitate the woodland creation, such as a bridge over Prosen Water near to Old Craig lodge in the middle of the glen – this will enhance public access opportunities too.

We have consulted closely with Cairngorms National Park Authority (CNPA), Local Access Forums, the community and the public about the access needs regarding new fencing, as a result, the fenced enclosures will have provision for public access through self-closing gates and stiles. All additional access infrastructure for woodland creation will be subject to Prior Notification procedures and any formal planning applications as required.

Archaeology

A full archaeological desk-based assessment (DBA) and prospective walkover survey have been undertaken to create a baseline historic environment dataset for the area, identifying and recording significant heritage features that could be impacted by the proposed planting. The archaeological potential of the area for previously undiscovered significant archaeological features was generally considered to be low and there are no designated historic assets present.

The DBA identified 60 non-designated features within the boundary of the new acquisition site, mostly consisting of farmsteads, areas of rig and furrow, sheiling huts, sheep folds, summit and boundary stones. The study identified targeted areas covering 36 known sites for prospective walkover survey along the Prosen Water and Cramie Burn. The walkover survey confirmed the sites expected from the desk study, recorded their location as point data, photographed, measured, described and assigned a condition score which ranged from good to very poor.

Buffer areas around significant heritage features will ensure they are managed in a suitable sustainable way for their protection and compliance with UKFS Forests and Historic Environment. Significant features of 'regional' and 'local' importance have been recorded on the FLS Forester Web Heritage Data GIS layer. The woodland creation plans allow for open space to incorporate buffers of significant heritage features, so that they are avoided and left in situ. The locations of these assets and their buffer zones are available as a GIS dataset.

Landscape: see Appendix 5: Landscape

A Landscape Character Assessment has been carried out by a Chartered Landscape Architect and considers the impact of the varied native woodland creation and associated fencing, within the context of its location in the Cairngorms National Park. Consultation with CNPA has helped to inform the design of fencing and the overall woodland creation proposal so that it fits into the landform and enhances the landscape character of the glen. We have captured visual effects of the habitat change over time using illustrations and photo-realistic technology to show how the landscape will look at 0, 10 and 50 years and combined this with a viewshed analysis to understand the potential extent of visibility.

Similarly, in the wider landscape, woodland creation will gradually transform the open glen and sites of former commercial forestry to provide a diverse landscape supporting a variety of different habitat types ranging from open land, semi-open land, wooded clumps, individual trees and scrubby woodland. It is expected that native woodland would be dense and quickly establish along riparian corridors and lower slopes of the glens. On higher land where there's thinner soils and higher wind exposure, growth is likely to be stunted and irregular thus forming a 'naturalistic' transition between the floor of the glens and the open hills. The woodland creation planting density and methodology are outlined in Mid Upland Glen LCA.

Description of Likely Significant Effects

Provide details on any likely significant effects that the project will have on the environment (resulting from the project itself or the use of natural resources) and the extent of the information available to assist you with this assessment.

Biodiversity

Birds

Surveys identified a range of bird species for which protection measures will need to be enacted during the operational phase of woodland creation, especially during the breeding season. In the medium to long term the change from open habitat to variable woodland cover as part of a habitat mosaic across the site will not have a significant impact on the availability of suitable habitat to those open land species locally or nationally. The increase in woodland habitat will have a beneficial impact for a wide range of bird species, both currently present on this land or present in the wider area, that utilise low-density woodland, woodland edge and established woodland areas both for food source and for shelter/cover. Species specific considerations are detailed below:

- **The site is adjacent to the Cairngorm Massif Golden Eagle SPA: no impact**

The olden Eagle Territory (GET) model shows that the site is all potentially suitable for golden eagle territories, though there are no breeding pairs currently within the woodland creation area.

Enclosing areas of land and removing mountain hares may affect prey availability, although the low hare population at present means that eagles in the area are finding other sources of prey and range across an area much larger than the proposed enclosures.

The woodland creation will incorporate large areas of open space for hunting (>20 ha and over 300 m wide) particularly on upper hill slopes, as per 'Golden Eagles and New Native Woodland' guidance note from Forestry Commission 2005. Prey availability will be monitored through bird and hare surveys. Overtime, the development of a more diverse habitat mosaic will support more abundance of prey (grouse, hare) and the rabbit netted

fencing will be removed to allow hares free range once more. Creating wide ecotones of low-density planting <40% canopy cover, will help to create more suitable habitat for both eagles and their prey. The incorporation of Scots pine as an open grown species in some areas is also a valuable addition for eagles as a perch/nesting tree. The crags at the northern end of the site will not be obscured by tree planting but rather the current woody vegetation comprising willow scrub and arctic alpine plants will be expanded at an appropriate density.

Deer fencing in this area has been sited to avoid cutting across downward slopes and will be marked using wooden pails or bamboo canes. In higher elevation parts of the site, electric offset stock fencing will be used which is not as high as deer fencing, presenting a lower risk.

Information available: bird surveys, Golden Eagle Territory model, mountain hare survey.

- **Black grouse are likely to be present within the site: positive impact**

Black grouse are present, as shown by our bird surveys and lek surveys. We have recorded areas used for lekking and we are factoring these into the woodland creation by maintaining appropriate open space for these, as shown on the concept plan. Black grouse are likely to benefit from low density scrub/wooded areas and drain blocking through an expected increase in invertebrates and vegetation diversity that will provide shelter and food source for adults and chicks.

Information available: breeding bird survey, lek surveys and RSPB monitoring,

- **There are a variety of breeding birds on site including breeding waders, songbirds and montane species such as ring ouzel: positive impact**

Our bird surveys have not shown any breeding dotterel or ptarmigan. We do have records of breeding ring ouzel, and wading birds such as curlew and lapwing. Breeding waders need suitable open habitat for ground nesting, designed open ground areas which will be managed as open habitats through conservation grazing will ensure that suitable ground for nesting birds, such as waders, is kept open. In addition to this, the hydrological restoration of the site, through the blocking of man-made drains, peatland restoration, pond and scrape creation, will enhance the overall amount of habitat suitable for wading birds and other ground nesting birds. The addition of wooded areas ranging in density and species composition as part of a site wide habitat mosaic will help to improve biodiversity and particularly the availability of invertebrates as a food source. **See Appendix 1: Ground Nesting Birds Map.**

Information available: breed bird survey, RSPB monitoring results, consultation with RSPB

Reptiles

As for birds, overall habitat change is a net positive with managed open areas suitable for species requiring open land and more scrub type habitat, increasing abundance of invertebrates.

Mammals

As for birds and reptiles will benefit as described above. However, some species such as deer, hare and rabbits may need to be controlled in the short term to ensure successful establishment of woodland. Deer fencing with rabbit netting will be used to areas for woodland creation and once fenced, any potentially damaging animals may need to be culled or driven out of the enclosed area.

To address the potential risk of tree damage from mountain hares, the woodland enclosures will be rabbit netted to prevent an influx of hares from higher ground in the winter. Hares inside the enclosures will be encouraged to exit the woodland creation area via hare ramps, which will be sited on the top slope against the fence to allow hares to get over the fence. These have been trialled with some success by Scottish Woodlands in neighbouring Tulchan Estate.

We routinely survey areas prior to any operation for mammals which may be impacted.

Protected mammal species - wild cats: positive impact

Wild cats are present in the Glen Prosen plantation, and camera traps and surveys in the forest have enabled us to identify cats prior to forestry operations taking place. These cats may spend time in the open ground close to the plantation, however there is little suitable habitat or shelter on the open ground as the distance from the plantation increases, and we have not had any sightings in the last two years in the open area. As stated above, we do routinely survey for mammals before undertaking any operations and this would be the case before starting any fencing, ground prep or planting operations.

Fence lines adjacent to the plantation forest will include wildcat stiles to enable cats to access the woodland creation enclosures, as this will become an increasingly suitable and valuable habitat for them as the new woodland establishes.

There are no known badger sites or otter holts found.

Information available: ranger mammal survey, UHI camera trap survey.

Deer management - there will be a change in deer management and areas used by deer will become excluded through fencing. Deer displacement and welfare will need to be considered: no impact.

Our plans are to enclose 2,525ha of land that has been open to deer. This exclusion of deer from most of the site means changes to deer movements in the landscape and a reduction in range for the transitory population of deer that move across the southern Cairngorms/Angus Glens.

We have been culling red and roe deer and will continue to deliver a cull of deer to avoid a negative impact on deer welfare from the reduction in open ground. The cull for 2025-26 is set at 300 and was 447 in 2023 and 529 in 2024. In total the 1,076 deer culled to date since November 2022 has delivered the compensatory cull required to avoid an impact on deer welfare, as agreed with NatureScot.

Consultation with the South Grampian Deer Management Group and neighbouring landowners has shown that the potential to impact local sporting interests through culling deer on FLS Glen Prosen is a concern and, as such, some neighbouring landowners have advocated for fencing to be used to protect deer in the northwest of the DMG area from being culled in Glen Prosen. The electric fence on the northwest march of the site is intended to address this concern by acting as a deflector for deer moving from northwest to southeast across the landscape - helping to retain a population for sporting interests in the north of the Deer Management Group (DMG). We will use our on-site Wildlife Ranger presence to monitor the effectiveness of this fence, while culling deer in the 907ha that remains open at that northern end of the site. If we find that deer are still coming onto site in large numbers by moving around the fence, then we will need to consider further options such as fencing a different line and or creating smaller enclosures.

Information available: cull figures, fencing plans, deer count, correspondence with Nature Scot.

Habitat/vegetation Change

The woodland creation will result in habitat and vegetation changes over the medium to long term. However, by identifying the important habitat to protect and species rich areas and any specific examples of plants that are rare the woodland creation can complement and enhance the mosaic of habitats across the site and create increased biodiversity and resilience. There are no habitats identified that will have woodland created on them that would produce a significant negative impact on the proportion of that habitat at a local or national level. Further to this, specific rare habitats such as purple moor rush pasture are being conserved and enhanced by the proposed land management for priority open habitats through conservation grazing and removal of non-native species/regeneration. The aims at both local (CNP) and national scale (Scot Gov) for the creation of more woodland, which is scarce particularly in this part of the Cairngorms means that our proposals will be of benefit to achieving this and providing the desired wooded habitats that are beneficial to biodiversity and other ecosystem services.

Priority Habitats: positive impact

There are several priority habitats identified on site through the National Vegetation Classification (NVC) survey: blanket bog, upland heath, upland fen marsh and swamp, wet woodland, upland birch wood, montane heath and purple moor grass and rush pastures - covering 76% of the site. **See Appendix 2: Habitats Map.**

Some of these habitats are excluded entirely from tree planting – notably the blanket bog and purple moor rush grass pasture. Other priority habitats can be incorporated into an open wooded mosaic, with appropriate species, such as willows on the fen and marsh areas, and alder and birch to expand the areas of wet woodland and upland birch wood and, montane willows, Scots pine and dwarf birch on the montane heath. To avoid any negative impact on the habitats, detailed survey data on species richness will guide the decision making in terms of exactly where trees are planted and/or natural regeneration is accepted. For further information on which NVC types will be buffered please see **GWDTE NVC Table in Appendix 2.**

The variety of species richness/importance is recorded by surveyor notes, additional surveys for montane heath and through additional field work by our internal FLS Open Habitats Ecologist. This extra detail will support the final planting plan, to ensure that any particularly sensitive areas are incorporated into integral open space.

In accordance with UKWAS 5 some these habitats (upland heath 41%) will form part of an understory for new native woodland which will retain the important habitat features, as well as additional appropriate trees into the habitat, increasing resilience and biodiversity.

Information available: NVC survey and surveyor notes on important habitat points, montane habitats survey, comment from open habitats ecologist.

In addition to the UKBAP Priority Habitats, a small part of our site also lies within the Caenlochan SAC/SSSI, and we are mindful of the need to avoid any significant negative impacts on the designated site, both within our land holding and further afield.

Designated features of the SAC/SSSI could be affected by the installation of fencing on the western march around the crags up to the top of the Mayar Burn, both in terms of the displacement/changes to deer movement and, also by the operation to install the fence itself.

Reducing herbivore impact through fencing and culling of deer will increase the chances of natural regeneration and therefore the extent and amount of the plant assemblages present. The compensatory reduction cull that we have delivered over the last two years of 1,076 deer, and the continued cull over 2025 and 2026 will help to avoid a negative impact from herbivore pressure on the designated site. Even when fencing is in place and land is enclosed, the

remaining 906 ha of land at the northern end of the site that is open to deer will be closely monitored and will have a Wildlife Ranger presence to manage any deer impacts.

We have sought guidance from Nature Scot regarding the designated features present on site in the area of the proposed electric stock fence at Mayar Burn, and understand that a site visit is needed to fully assess and avoid any negative impacts – this will take place in the summer prior to any operations to installing fencing beginning and the siting of the fence will be aligned with guidance from Nature Scot.

Planting within the SSSI will only proceed in partnership or with prior agreement from NatureScot.

Information available: NVC survey, montane habitats survey, NatureScot survey data, BSBI and MWAG site visit records, observations on deer movements, deer density data and cull data.

Hydrology

The woodland creation site lies within the South Esk catchment, and whilst it is not at risk of flooding itself, lower down in the catchment there have been significant flood events in recent years. Whilst it is recognised that this woodland creation scheme alone will not significantly reduce downstream flood risk, woodland creation will have a positive impact on both increasing interception of rainfall and increasing the infiltration capacity of the soil – overall a beneficial impact on the local hydrology. We are working in collaboration with SEPA and Forest Research to monitor the impact of woodland creation on flow rates and flood risk mitigation as the site develops over time.

The upper part of the River South Esk SAC flows through the site, designated for Atlantic salmon and freshwater pearl mussel, and is fed by multiple watercourses from within the planting area: positive impact

Our plans for habitat restoration across the site, of which tree planting will for a part, will mean many potential positive impacts for the hydrology of the site and the wider catchment. Woodland creation within the landscape will help to intercept rainfall and slow down the flow of surface runoff into streams and rivers, potentially having a beneficial impact on flood events.

Planting native broadleaf trees along watercourses will help to improve the freshwater habitat by providing more nutrients into the water via leaf litter, help to increase numbers of invertebrates and provide shelter and structure in the river channel with tree roots and woody debris, which is helpful for wildlife and fish such as salmon, one of the designated features of the SAC.

Operations to install fencing, do ground preparation and planting on site will all be managed according to UKFS Forestry and Water Guidelines to avoid a negative impact on the water courses from produce diffuse pollution.

Groundwater Dependent Terrestrial Ecosystems are found to varying extents across 485ha of the site. We will not be undertaking any excavation over 50cm on any of these areas, or indeed on any of the site at all, given that the only proposed operation is ground preparation and tree planting and this will not exceed 50cm – thus we are aligned with [current industry guidance](#) on how to treat GWDTE in forestry operations from Confor.

Furthermore, we have identified specific NVC types that overlap with priority open habitats and will be buffered and/or excluded from planting and/or mechanical ground preparation in order to conserve species richness – **please see the GWDTE NVC Table in appendix 2 for further information on these.**

Information available: consultation with RSECP & ERT, river survey

Land Use Change: positive impact

There will be a change in land use from sporting/grazing to native woodland. Land use for sporting interests was discontinued when FLS took ownership of the land in 2022. From this point forward the land is to be managed as a public asset to benefit our project aims for nature, people and climate. This change will see an increase in woodland cover on the FLS Glen Prosen Estate over the next 50 years of up to 50% (not including the forest plantation). In the local area, as shown in Table 3 below, this increase in woodland cover will be marginal, resulting in a 0.4% change in land use in the Cairngorms National Park. Nationally, this woodland creation project would mean a 0.02% change in land use for Scotland.

Table 3: Land Use Change

Summary Land Use Statistics Cairngorm National Park	HA	% Scotland	% CNP
Scotland Land Area 2023	7,878,900	100	-
Scotland Agricultural Land Area 2018	6,200,000	78.7	-
Scotland Rough Grazing 2018	3,624,000	46	-
Scotland Woodland Area 2022	1,320,000	16.7	-
Cairngorm National Park Total Land Area 2022	452,800	5.7	100
Cairngorm National Park - Land Capability for Agriculture - 5-7 2022	421,104	5.3	93
Cairngorm National Park - Heather Moorland 2022	181,120	2.3	40

A further positive impact of the proposed land use change is the potential for scientific research, learning, and demonstration on the new area of public land at Glen Prosen. There is a strong appetite for research to help understand and evidence the ecological and socio-economic effects of this form of land use change, as demonstrated through engagement FLS and RESAS have had from research and scientific bodies keen to work here. FLS are planning to build on the data collected through baseline surveys with an ongoing monitoring approach to inform adaptive management and underpin scientific research. Survey data will be summarised and published as it becomes available. Key themes proposed for research are nature restoration and recovery; climate change; nature-based solutions; socio-economic drivers; and systems change.

Soils and Carbon Sequestration see Appendix 3: Soils Maps – positive impact

A soil survey has been carried out to identify areas which should be excluded from woodland creation (mainly deeper peat and ground water dependant ecosystems). and to identify areas most suitable for woodland creation, using appropriate native species. For thinner soils at a higher elevation, the expectation for sparse and stunted tree cover as part of a montane mosaic is a key element of the project. There is no requirement for the woodland creation to achieve a commercial stocking density and thus we are not looking to undertake improvement to soil through drainage or use of fertilisers. Testing the inoculation of saplings with mycorrhizal preparations is being considered.

Ground preparation, prior to tree planting, will primarily involve removing surface vegetation, either mechanically or with hand screefing. In some areas where conditions are suitable, invert mounding will be used to create a planting position, this will be the most intrusive part of the operation and used only where necessary to break up/mix the soil horizons. Where possible the preferred preparation will be screefing and flat planting, with minimal soil disturbance. The use of cattle grazing will also help to break up heavy vegetation and provide enough soil disturbance in some areas to encourage natural regeneration from nearby seed sources and increasing seed sources in the future. Enacting the above, using intrusive preparation only where necessary, we will avoid a significant negative impact on soil disturbance and thus carbon release. We will also be blocking artificial drainage across the site, including before tree planting to help restore natural hydrology and improve the overall ecosystem health.

Research has demonstrated that the long-term afforestation of soils, previously under moorland vegetation management, generally leads to an increase in soil carbon, primarily in the thickness of the leaf litter layer (Forest Research – woodland creation and soil carbon and nutrient dynamics) and recent research from Natural England ‘Carbon Storage and Sequestration by Habitat 2021’ shows that mixed native woodland out performs other semi-natural and productive habitats in terms of potential to lock up carbon. Balancing the carbon sequestration potential with minimal soil disturbance and cultivation for woodland establishment will help us to ensure an overall net environmental benefit.

Peatland: see Appendix 3 Peatland Maps – positive impact

As per Scottish Forestry's "Deciding Future Management Options for Afforested Deep Peatland" the NVC habitats survey and soils survey have identified deep peat soils. Some of which fall into Scenario A to be excluded from woodland creation and presumed to be restored where degraded. Those in Scenario B and C are to be assessed for possible addition of low density wooded habitat and/or restoration where degraded. The woodland creation proposals avoid planting on areas of Scenario A soils and deep peat (see map . Where other peaty soils and largest component habitat is peatland, we have taken a precautionary approach to inclusion of low density open wooded habitat, and appropriate species such as willows will be allowed to naturally regenerate and/or be planted as part of an upland heath/peat mosaic. We will use detailed walkover surveys at the time of planting and indicator species to inform the micro siting of group plantings to avoid inappropriate soils/habitats.

Information available: soils survey, drains survey, peatland survey

Archaeology: see Appendix 6 - no impact

Having identified surviving heritage features on site through a desk-based assessment and subsequent prospective archaeological walkover survey, significant heritage features of regional and local importance have been added to the FLS Forester Web Heritage Data GIS layer; these have been spatially mapped using historic maps, aerial photographs and field observation, with buffers applied as 'heritage impact zones' so that they are protected from potential impact during forest operations. These features are primarily located in and around the lower glen in amongst the in-bye field and planned wood pasture, open managed habitats and open wooded habitats. The woodland creation will have ample open space to accommodate these features and keep them in an appropriate setting. The woodland creation proposed will have no significant detrimental impact on the significant heritage features on site. The process of assessment, survey and marking out has helped to improve the historic environment record of this area.

Information available: desktop and full walkover survey, Historic Environment Record Data received from Local Authority for desk-based assessment.

Landscape – see Appendix 5 – positive impact

It is recognised that there are visual impacts, particularly in the early stages of delivery, but these reduce quickly as the woodland creation matures. Deer fencing will have a visual impact when installed, but this impact will diminish over time as the woodland creation establishes and becomes the dominant visual feature. The requirement for fencing will be reviewed as part of a maintenance programme every five years and fences that are no longer needed to protect planting/regeneration/habitat restoration will be removed. In the meantime, we will also be removing redundant stock fencing from across the site, since our conservation grazing will be using the 'NoFence' cattle collars system.

Within the glen itself it will not be possible to see the proposed fencing that lies on higher ground, and the deer fence that bisects the site will only be visible in a few places, as it is designed to fit snugly into the landform below the high ground.

Fences on high ground are more visible from further afield, so our use of line wire stock fencing with electric offset will greatly reduce this, and, for the most part, is only upgrading/repairing existing stock fences. Deer fencing at a high elevation with wooden markings for bird strike mitigation is more visible from further away, but this impact reduces over time as the fencing weathers. This fencing is on the south-western march of the site, furthest away from the Munro tops, the most popular walking routes, and the Wildland Area and, it is a relatively short-term impact as the fence can be removed at the end of its lifespan (eg 20 years) once woodland establishment/habitat recovery is well underway.

The current landscape is homogenous, dominated by patchwork-effect upland heath in a treeless landscape. The scale and type of woodland habitat will create diversity to enhance the 'wild and open' characteristics of the landscape and overall create a net positive impact that retains special landscape characteristic but also introduces more diversity. The establishment of the new woodland will be achieved with minimum impact ground preparation, in terms of a) methods used – invert mounds being the most intrusive and where possible flat planting/hand screening and b) the pattern of planting will be groups and clusters and varying densities, with no straight lines of equally spaced trees. The creation of native woodland in the landscape was supported during all three of the public consultation periods, where we spoke to members of the public about what they would like to see in the glen in terms of the natural environment.

Information available: LCA report and maps by FLS Landscape Architect, woodland creation visualisations, public consultation feedback

Access: positive impact

There is already a good network of access infrastructure present on the site which will facilitate woodland creation, as well as providing access for public and visitors. In addition to this we may construct a baily bridge across Prosen Water at Old Craig to avoid potential negative impact of using the fording point there during planting operations, this would be subject to consent from SEPA.

Deer and electric stock fencing can be a physical barrier to public accessing the open hill in accordance with SOAC. The provision of self-closing gates, through consultation with local access forums and public/community, that link to existing tracks, core paths and the open hill, will ensure that the impact of fencing on public access is minimised and will be short term for the first 10-15 years. Responses to public and community consultation has helped us to understand recreational use and to engage with user groups such as horse riders, to better

understand needs. For sections of electric fencing, this will be very clearly signed and gates with the electrical wire buried underground will enable safe passage for a range of users, including those on horseback. We are also exploring how best to provide information to potential visitors both on site and prior to arrival, via signage and interpretation boards, and web-based information so that visitors are aware of the fencing that is in place and where they can access gates/stiles – **Map 16. Access**

We will also seek to improve low level access options within the woodland creation in the lower part of the glen by maintaining informal walking trails in the woodland creation areas so that visitors can experience the newly forming habitats. This is particularly important to realise our aims of promoting and facilitating research and education on the site too. Overall the development of the site over time will increase access options for visitors, provide better information and even though fences add an additional factor to consider for visitors to the site in the short term, overall, the project will have a positive impact for visitors and the public in the long term.

There are several paths and routes through the Glen, including informal access from various user groups (walkers, cyclists, climbers, horse riders)

Information available: length of core paths/rights of way, consultation responses

Fire Risk: see Appendix 9 Fire – no impact

The changing land use on site means that the volume of vegetation will change over time, e.g. as muirburn is no longer undertaken. It has been raised during consultation that this may result in an increased fuel load, creating a wildfire risk. We will continue to undertake vegetation management to reduce volume through cattle grazing and as part of the preparation for woodland creation. There will however be a time lag before the new habitat restoration works (such as woodland creation, drain blocking, peatland restoration) can begin to make the landscape more resilient to wildfire. To address the risk of fire, we have created a **Wildfire Risk Assessment and Wildfire Plan (Appendix 9)** which has helped us to identify the risks and mitigations. This includes visitor signage to help reduce the risk of ignition from recreational access, identifying assets and area that require protection and, importantly, creating a programme of regular mechanical vegetation control alongside existing access tracks and fences across the site to create and maintain approx. 60km of 30m wide fire breaks. In addition to this we will also be target grazing areas and undertaking vegetation control for tree planting. In the event of a fire, we have a Wildfire Plan which provides information on site staff, neighbouring properties, rendezvous points and access roads, locked gates and water supplies - we are consulting on this with neighbours.

Private water supplies – no impact

There are five private water supply extraction points and associated pipelines for FLS buildings and tenants within the project area **see Map 18**. These water supplies have

catchment maps and appropriate buffers will be applied as per UKFS Forestry and Water Guidance during operations such as fencing, ground preparation and planting. We have also sunk a new borehole (to 40m) to supply an alternative to the private water supply for the onsite whisky distillery.

Information available: PWS map

Climate change: positive impact

See above section on soils and carbon sequestration and land use change.

Mitigation: The creation of (1800ha) of new native woodland will, over time, sequester carbon. However, there will be a carbon cost to the infrastructure and products needed to establish the woodland. This is captured in the registration of the woodland creation in the Woodland Carbon Code, where we identify all carbon outputs such as fencing, tree supply, manufactured products such as vole guards and cactus guards. These items will be essential for the woodland establishment and as such their carbon value will be deducted from the overall carbon capture of the project. NB Peatland restoration which is part of the Land Management Plan, will also contribute to avoided carbon loss and gradual sequestration. This is captured within the Peatland Carbon Code registration.

Adaptation: The new woodland will form a habitat connection between the glens north, south, east and west. This will facilitate the movement of wooded habitat mosaic species where climate change is impacting them. Arctic alpine plants and associated species (e.g. invertebrates and birds) will particularly benefit as they are currently confined to areas where browsing is low enough for them to survive (ie cliffs and rocky ledges). Bolstering their populations and enabling them to spread will help to increase their resilience. Riverside woodland and trees will provide shade to reduce water temperature in summer reducing climate stress on fish, and tree roots and large woody debris in the river will stabilise riverbanks making them more resilient to high rainfall and flash flood events, which will support species like freshwater pearl mussel and breeding fish. At a catchment scale the increase in woodland cover at Glen Prosen and neighbouring land, along with drain blocking, will act to reduce the speed which water enters the river during peak rainfall events, potentially reducing downstream flood risk. Forest Research are installing a weather station on site so we can track weather events and relate to onsite impacts overtime.

Include details of any consultees or stakeholders that you have contacted to make this assessment. Please include any relevant correspondence you have received from them.

See Appendix 7: Consultation Records

Number of public consultation periods = 3

Number of engagement events = 17
 Number of attendees = 410
 Number of written responses = 284
 Number of stakeholder meetings = 43

Avoidance and Prevention of Likely Significant Effects

If you believe there are likely significant effects that the project will have on the environment, provide information on the opportunities you have taken to avoid and prevent significant negative impacts.

Table 4 below is a summary of the planned and operational buffers that are applied to features of importance preventing likely significant effects across a range of issues.

Feature	0-50m planting buffer	50-150m planting buffer	Operational buffer	Additional considerations
Spring/flush	No planting within 10m of water point/channel.	Planting of appropriate broadleaf species at low density i.e. willows, birch	No operations within 10m. only broadleaf planting within 50m.	UKFS forestry and water guidance
GWDTE	Planting of appropriate broadleaf species at low density	Planting of appropriate broadleaf species at low density	UKFS forestry and water guidance re watercourses/spring/flushes	No ground prep deeper than 50cm, no drainage.
Priority Open Habitats	See separate table	-	-	
Grouse Lek	No planting, natural regeneration only	Planting of low density scrub species	1000m exclusion zone during breeding season	
Wader zones	No planting, natural regeneration only	Planting of low density scrub species	50m-500m exclusion zone during breeding season depending on species	
Heritage	Low density planting only	No buffer	Regionally important features - 10m buffer for all operations Locally important feature - 5m buffer	
Private Water Supply	No planting within 5m of abstraction point and pipelines. Only planting of native broadleaves/shrubs	No buffer	No operations within 10m of abstraction point and pipelines.	Comply with XXX guidance
Schedule 1 species/nesting raptors	No planting	Low density native broadleaves	Refer to guidance note 32 re distances??/NatureScot guidance for specific species buffers during breeding season.	
EPS/schedule 5 mammals	N/A	N/A	Refer to guidance note xx re species disturbance buffers and timings	

Biodiversity

1. The site is adjacent to the Cairngorm Massif Golden Eagle SPA

- No breeding pairs on site at present, though GET model shows entire site is suitable eagle territory and birds survey show that it is used by local pairs.
- All fences marked to reduce risk of bird strike and sited to avoid crossing convex slopes. Minimised amount of fencing by design large enclosures rather than numerous small ones.
- Prey surveys (hare/grouse) show low populations and therefore proposals to exclude hare from woodland creation should not have a significant impact on eagles nearby.
- Woodland creation includes large areas of integral open space on upper slopes particularly and wide ecotones of less than 40% canopy cover to produce landscape scale mosaic which will over time benefit prey species and thus eagles.

2. The site lies partially within the Caenlochan SAC/SSSI

- Any planting on the designated site will only take place in collaboration with/by consent of Nature Scot.
- Any planting adjacent to the designated site, in the montane heath habitats will use carefully sourced trees/plants or trees that we have been grown on using seed collections from the site or neighbouring sites, to preserve genetic diversity.
- We will take a 'wait and see' approach at first and review how the habitats respond to reducing herbivore pressure before making planting plans to enrich/increase the area of montane will scrub/heath.
- The fencing planned that goes into the SSSI and SAC will be micro-sited to avoid the most sensitive areas of habitat, using our own montane survey data and data from NatureScot, this has been groundtruthed on a site visit with NatureScot's Open Habitats Ecologist and advice taken on specific actions to avoid a negative impact.
- Erection of the fence will use materials delivered by helicopter and stone access tracks on the neighbouring estate to limit the amount of access traffic impact and we will work closely with the contractors to ensure the work is completed at the right time of year and as sensitively as possible.

3. The upper part of the River South Esk SAC flows through the site and is fed by multiple watercourses from within the planting area.

- Tree planting in the riparian zone will be done by hand, with minimal ground preparation. Hand screefing the planting location will mean that we do not require machinery next to the water course which, mitigates the potential effects of any diffuse pollution caused by planting.
- When installing fences there will be some light machinery on site (post-chapper for instance), when operating around the water courses we will follow the best practice guide 'Managing forest operations to protect the water environment,' for example: by adhering to relevant buffer zones, avoiding working during periods of wet weather, and securely storing fuel and waste.

- Increasing the amount of riparian tree cover will have a positive impact on the freshwater habitat and increase food, shading and shelter for a range of species, including Atlantic salmon, a designated feature.

4. Black grouse are present within the site.

- All fences will be marked to reduce the risk of bird strikes.
- Lek sites are mapped and open space planned with low density buffers of appropriate shrub/native species.
- Black grouse are known to benefit from lower density scrub and woodland.

5. High potential for breeding birds on site including breeding waders, possible montane species (dotterel, ptarmigan, ring ouzel)

- Breeding areas for waders are mapped and will be maintained as open space through cattle grazing, with low density scrub buffers planned to separate them from denser valley side woodland.
- We will continue to monitor the wader population through annual breeding bird surveys, and we are also exploring how best to monitor productivity and recruitment.
- Other habitat restoration on site, such as drain blocking, peatland restoration, pond and scrape creation in wet areas will help to extend the amount of habitat suitable for waders.

6. Priority Habitats

- The priority habitats on site are varied in terms of species richness and condition.
- We will use further detailed survey information from target notes and pre-planting microsite surveys to apply a decision-making process to identify at a detailed scale which particularly rare and rich habitats/species and sub-types will be excluded from tree planting, and which can be incorporated into a variable density planting area.
- Those priority habitats to which trees are added will still maintain the primary features of the habitat – for instance a heather moorland will still be a heather moorland albeit as an understorey of a native pine/birch wood which is at a suitable density (non-productive) so as not to shade out the ground flora below.
- These habitats will be conserved and enhanced as part of a mosaic, which will include native woodland.

7. Protected mammal species, including wild cats

- No record of protected mammal species in the woodland creation area at present.
- We routinely survey areas prior to any operation for mammals which may be impacted.
- The type of woodland creation we are proposing would benefit mammals such as otter (riparian restoration) and wildcats.
- Use of wildcat stiles will enable cats to access deer fenced enclosures to extend their range into the open ground as the habitats develop.

8 & 9. Deer management - there will be a change in deer management and areas used by deer will become excluded through fencing. Deer displacement and welfare will need to be considered.

- The deer cull carried out from 2023-2025 (c. 1000 deer) has met the requirements for a compensatory cull to reduce the deer population prior to enclosing land for woodland creation.
- Deer fencing will be reviewed annually as part of a maintenance program, and sections will be identified for removal once woodland has been established. Some of the deer fencing may need to remain in place longer though.
- A 'deflector' fence along the northwestern march will act as a barrier to deer moving northwest to southeast and help to retain a population for sporting interests in the north of the DMG. We will use our on-site Wildlife Ranger presence to monitor the effectiveness of this fence, while culling deer in the 907ha that remain open at that northern end of the site. If we find that deer are still coming onto site in large number by moving around the fence, then we will need to consider further options such as fencing a different line and or creating smaller enclosures.

Land

10. There will be a change in land use from sporting/grazing to native woodland.

- Following consultation with Scot Gov regarding agriculture and employment on site we are exploring ways to support an element of livestock farming as part of the holistic land management.
- We are working closely with a local farmer to maintain an agricultural element to the land use, which is economically beneficial to their business as well as aligning with the aims of habitat restoration of the project and helping to manage open habitats and vegetation cover on site.
- This involves an agreement for grazing cattle throughout the year across the site, utilising electric collars to allow for movement between grazing areas between and around woodland creation.
- We are also exploring the possibility of enabling learning of new land management skills through mentoring and apprenticeships.

Soil

11. Mapping of soil types and deep peat

- We have identified areas of peatland/peaty soils which we are surveying for restoration and collating peat depths. These form two categories – those which are being assessed for restoration potential and those which are presumed to be restored. This will inform the final areas to be excluded from woodland creation and those which may include low density woodland/scrub creation with appropriate species.

- Except for the main flood plain of Prosen Water, most of the peat areas are at a higher elevation where we are planning modest planting/natural regeneration to create a habitat mosaic which includes some low-density wooded habitat/scrub, containing species which would be appropriate for a bog fringe habitat.

12. Soil cultivation and ground preparation

- Vegetation cover on site means that many planting areas will need some vegetation removal and screefing to create suitable planting positions.
- Some soils on site (podzols/iron pan) will benefit from disturbance and mixing before tree planting and we propose that where possible and appropriate we will use a mechanically produced invert mounding technique to aid tree planting. This will follow a naturalistic planting design, creating groups of mounds and planting positions in clusters, rather than as linear features across the land.
- On particularly sensitive/fragile soils hand planting will be used to ensure low impact.

Population & Human Well-being

13. There are several paths and routes through the Glen, including informal access from various user groups (walkers, cyclists, climbers, horse riders)

- All fences are planned with gates/stiles to allow for access through at regular intervals on the open hill and on key paths/tracks.
- Electric fences will be signed as being electrified and have access points every 500m.
- We have spoken with representatives of the British Horse Society about specific needs for horse riders regarding gates and particularly those crossing electric fences, and plan to include gates with a buried section of wire to ensure safety.
- We have consulted with the Local Access Forum about ways to provide information to users not only at the point of access to the site but also online too, so that people know where to expect fences and gates.
- The woodland creation itself will have integral open spaces which we intend to use to create informal low-level access through areas of planting in the future to allow visitors to experience the habitat restoration.
- As part of the project, we will create more parking on site close to the office buildings and deer larder, and are in discussion with local interests about sustainable transport to and from the site.

14. Risk of wildfire

- Landscape scale habitat restoration across the site will over time make it more resilient to wildfire risk.
- We have produced a risk assessment and identified mitigations in the form of planning and preparedness for an emergency and for vegetation control across the site to help us mitigate the risk of wildfire.

- This will include mechanically controlling vegetation alongside existing access tracks to create fire breaks.

15. Cultural Heritage

Unscheduled archaeology is present on site

- Features recorded through the DBA and walkover surveys have been mapped and buffered.
- Most features lie in areas planned to become wood pasture and/or open wooded habitat and so will not be impacted by woodland cover. Features within the ‘valley side woodland’ will be incorporated into areas of integral open space, buffered from planting according to UKFS guidelines.

16. Landscape

16. Most of the site falls within the Cairngorms National Park

- As well as using existing fence lines where possible, we have designed the only brand-new fence line to have minimum visual impact on the landscape by siting it at natural breaks in slope and following the contours to avoid straight lines up/down or across the valley sides. Using stock fencing with electric offset where possible instead of full deer fence means that these sections of fences are much less visible.
- The woodland creation is planned to be naturalistic, using the landform to create variable density native woodland as part of a mosaic of habitats that will enhance the landscape.
- Ground preparation will be low impact in terms of a) methods used – flat planting/hand screefing where feasible, and with invert mounds being the most intrusive form of ground prep b) the pattern of planting will be groups and clusters of varying densities, rather than straight lines of equally spaced trees across large areas.
- We developed illustrated visualisations (now, 10, and 50 years hence) to help people understand how the landscape could change over time with the establishment of native woodland as part of a habitat mosaic - public consultation showed support for woodland creation mosaic. [add link to visualisation doc]

17. Climate

Manufactured products - tree guards and fencing

- Manufactured products such as tree and vole guards will be taken away and disposed of appropriately at the end of their use.
- Deer fencing will be reviewed annually as part of a maintenance program, and sections will be identified for removal once woodland has been established. Some of the deer fencing may need to remain in place longer though.
- All waste (items no longer serving a purpose) will be removed from site and disposed of responsibly or recycled where possible.

Water

18. Private water supplies

- Locations of private water drinking supplies have been mapped and buffered and will be managed according to current UKFS guidance during operations.

Sensitive Areas

Please indicate if any of the proposed forestry project is within a sensitive area. Choose the sensitive area from the drop down below and give the area of the proposal within it.

Sensitive Area	Area (ha)
Special Area of Conservation (SAC)	305
Special Protection Area (SPA)	305
Site of Special Scientific Interest (SSSI)	305
National Park	2,906
Choose an item.	

DRAFT

Property Details			
Property Name:	FLS Glen Prosen		
Business Reference Number:		Main Location Code:	
Grid Reference: (e.g. NH 234 567)	NO 2893 6804	Nearest town or locality:	Kirriemuir
Local Authority:	Angus Council		

Owner's Details			
Title:		Forename:	
Surname:			
Organisation:		Position:	
Primary Contact Number:		Alternative Contact Number:	
Email:			
Address:			
Postcode:		Country:	
Is this the correspondence address?	Choose an item.		

Agent's Details			
Title:		Forename:	
Surname:			
Organisation:		Position:	
Primary Contact Number:		Alternative Contact Number:	
Email:			
Address:			
Postcode:		Country:	
Is this the correspondence address?	Choose an item.		