

## Project Proposal

Business Reference Number:		FGS Case Number: (if known)	
Application name:	Forestry and Land Scotland: Tannylaggie Land Management Plan amendment - Kilquhockadale New Woodland Creation		

## Introduction

The Woodland Creation Operational Plan allows you to show that you have carefully considered all of the relevant impacts and effects that the work you are proposing might have on the environment, and where appropriate the measures you intend to take to mitigate any adverse effects.

The Operational Plan, including the issues log at Annex 2, can be used to record any pre-application work completed ahead of submitting your woodland creation application (e.g. discussions with stakeholders, site assessment results, etc.).

The Woodland Officer will take account of the details you have given in this Plan when they assess your application and it will also help them to decide on a score for your application.

## General Details

You must complete this Woodland Creation Operational Plan and submit it with your Forestry Grant Scheme Woodland Creation application.

The amount of supporting information you give will depend on the scale, location and nature of your application. You should give sufficient detail so that we can properly assess the work you propose. Your local Scottish Forestry (SF) [Conservancy office](#) will be able to provide you with further advice about this.

Please note that the Woodland Officer who will assess your application may request further information or clarification about the details you give in this Operational Plan, especially those that may have an environmental impact on the site.

***When you have completed your Woodland Creation Operational Plan, save the document to your computer and then upload to your on-line application.***

## Business Details

What type of entity is the business that is applying for grant?

To assist us monitor who is benefitting from our grant schemes, we would ask that you select one of the following business types that best describes your business entity:

- Farm Business – Owner
- Farm Business – Tenant
- Crofter – including Crofting/Grazing Committees
- Forestry Business
- Investor – including Private/Trusts/Pension Funds
- Mixed Rural Estate
- Small-scale Forestry Owner (your woodland ownership is less than 20ha)
- Conservation Company/Charity/NGO/Carbon Investor
- Developer
- Temporary Owner

Please select your most appropriate Business Type from the dropdown list:  
Forestry Business

## General Assessment

The information in your Operational Plan should be based on a thorough assessment of the site. Please complete the following:

Describe the management objectives for the site.

- To afforest Kilquhockadale with broadleaves to enhance diversity within the Tannylaggie Land Management Plan
- To protect and enhance areas of bog and priority habitats
- To sequester carbon through woodland creation and retention of peatland.
- To provide opportunities to enhance wildlife management to the wider block area.

See **Appendix 1** for the Management Plan Brief and **Map 1** Analysis and Concept.

Supporting document submitted with this plan:

Appendix 1 – Management Plan Brief

Appendix 2 – External Scoping Table

Appendix 3 – Private Water Supplies [SENSITIVE]

Appendix 4 – Priority Habitats, Species and Breeding Bird Survey

Appendix 5 – Soils Survey

Appendix 6 – Acidified Catchments

Appendix 7 – Archaeological Report

Appendix 8 – Prospect Visualisations

Appendix 9 – FLS LTA Excerpt comments from RPID

Appendix 10 - EIA Screening Opinion

Map 1 - Analysis and Concept

Map 2 – Location Map

Map 3 – Soils

Map 4 – Peat depths

Map 5 – Ground Preparation Map

Map 6 – Key Feature, Issues and Challenges

Map 7 – Future Species and Habitats

Provide a description of the planting site.

Kilquhockadale Woodland Creation is located between Tannylaggie and Penninghame forest blocks managed by Forestry and Land Scotland (**see Map 2**). The area covers 97.2 ha and is located around 11 km to the north west of Newton Stewart, South Scotland. This Woodland Creation scheme will be incorporated into the adjacent Tannylaggie Land Management Plan (LMP) area once approved.

Kilquhockadale comprises of agricultural grazing fields and is set within a medium scale landscape characterised by extensive deep peat areas interspersed with wetland areas and occasional hilly outcrops and drumlins.

The woodland creation area can be characterised into gently undulating, rough grazing fields in the south and areas of rocky knolls to the north.

Open habitats include UK Biodiversity Action Plan (UKBAP) areas of M15 - *Scirpus cespitosus* - *Erica tetralix* wet heath , M23a - *Juncus effusus/acutiflorus*-*Galium palustre*, M23 - *Juncus effusus/acutiflorus* - *Galium palustre* rush-pasture and M15 - *Molinia caerulea* - *Potentilla erecta* mire. Approximately half the site is non-HAP acid Grassland. Wetlands and Ground Water Dependent Terrestrial Ecosystems (GWDTE) are present on site. There is one prominent tributary within the area and a few small ponds.

There is an access road to one residential property further into the Tannylaggie Forest block, north of the WC site, in conjunction with a Scottish Power overhead powerline (11KV) traversing the same route.

FLS National Archaeologist completed a heritage survey of the site that revealed some historic sites within the former farm area; these include 2 ruined farmsteads, walled enclosures, drystone dykes and a cup-marked rock. Many of these are not well preserved with 3 historic environment sites attributed with local significance. All will be protected with a minimum 5 m buffer and retained within a managed open area to be

conserved in accordance with the FLS Regional Historic Asset Management Plan.

Provide details of discussions with neighbours, local communities and consultees. For Community Councils and neighbours please evidence who was contacted, date and method of contact used (e.g. meeting, leaflet drop, letter etc.) Where reasonable, you may just identify street names (e.g. larger urban areas).

A consultation email was sent out to all relevant stakeholders, and their responses are detailed in the attached table (**Appendix 2**). The residents at the two nearby properties were visited by the Planning Forester. Visits to check Private Water Supply infrastructure (see **Appendix 3**) and to explain final planting proposals, were also completed with positive response from neighbours. In summary, there are no issues rising from stakeholders that require any amendments to the proposed planting.

You must carry out a site-based assessment of soil and vegetation to match species choice with the particular site. Refer to ([ESC-DSS](#)) during this process.

List the site surveys undertaken to inform tree species selection. For example: soil survey, soil depth survey, vegetation survey.

Forest Research Ecological Site Classification was reviewed to establish suitable species for the site conditions present.

A soil survey and soil depth survey of the proposed planting site was carried out in March 2022. Pockets of deep peat soils (9b flushed molinia bog, 9d flushed molinia/eriphorum/calluna, 10b unflushed upland raised bog and 8b/c juncus) are present on the site with the remainder mostly, upland brown earths, surface water/peaty gleys and rankers/rocks. A map detailing the soils is appended (see **Map 3**). No deep peat (peat >50 cm depth) will be planted in this woodland creation.

An open habitats survey was completed by independent habitat ecologists in spring/summer 2022 which is appended to this document (**Appendix 4**). There are some important habitat considerations within the site that include five areas of priority habitats of M15 - Scirpus cespitosus - Erica tetralix wet heath. M23a - Juncus effusus/acutiflorus-Galium palustre rush-pasture sub-community was also found to be in a very small area in the south-eastern corner, which will be left as open. These habitats will be protected or enhanced throughout this woodland creation proposal.

M23 - Juncus effusus/acutiflorus - Galium palustre rush-pastur and M15 - Molinia caerulea - Potentilla erecta mire cover large areas of the site, however these areas were not deemed botanically rich GWDTE and will be planted as per Scottish Forestry guidance.

Planting will be low density broadleaved species with some Scots Pine on knolls to blend the woodland creation into the wider setting of the coniferous landscape

character attribute.

Please indicate the climatic suitability of the site for the tree species you have chosen. Use the [Scottish Forestry Map Viewer](#) - see the 'FGS Climatic Site Suitability' data.

With reference to the FGS Climatic Site Suitability data, soils survey and expert opinion from ecology experts and local FM foresters the proposed planting indicates the following species suitability:

Very suited: Native Upland Birch W4

Very suited: Native Broadleaves W9

Suitable: Diverse Conifer - Scots Pine

The soil survey (**Appendix 5**) commented that the soil conditions on the slopes of Mulloch Park could support areas of Scots Pine and Oak to create a more diverse woodland.

Woodland Strategy: Describe how your proposal fits with the Local Authority woodland strategy.

The Dumfries and Galloway Local Authority Forest and Woodland Strategy comments on specific constraints and opportunities relating to new planting within local areas where river catchments and local Landscape Character Types have been grouped in order to show areas with potentially similar local issues. Kilquhockadale comes under the Cree and Bladnoch Local area.

Priorities for new woodland creation in this area include planting of mixed woodlands, opportunities to increase native woodland areas to soften the existing extensive conifer in the area with lower lying open habitats, and increase in riparian woodlands to improve water quality.

The design of this plan responds to these priorities by providing increased native woodland created with a mosaic of open habitats which gently blend into the surrounding conifer with the minor provision of Scots Pine within the species selection. Opportunities for linking existing riparian zones on the boundary of the site and increasing these buffers have also been achieved through the design protecting waterbodies within the area.

In areas where wildfire is a risk to the woodland describe how you will address the risks and how this has been considered in the woodland design. Refer to [Building wildfire resilience into forest management planning](#) for information.

Broadleaved woodlands are low risk habitats for susceptibility for wildfires, this coupled with the remaining areas on site being left as open as ground water terrestrial

ecosystems will result the site considered low risk to wildfires once planted.

There are two properties which border the woodland creation area, both of which have fire breaks located between the properties and the site in form of forest roads and a water course.

Infrastructure, in terms of access across the site, will be improved as a result of the forest operations.

If applying for the productive conifer options please use the Timber Transport Forum – [Agreed Routes Map](#) and confirm the sites timber route classification i.e. agreed, consultation, severely restricted, excluded or no classification.

Kilquhockadale is cited within the Dumfries and Galloway Timber Transport Group area. The public road to the south of the site is number C3W and designated as a consultation route. However this application will not be applying for any productive conifer options.

A parking area will be required at the south of the site on to the minor C3W road, to allow access for machines, tree deliveries and forest workers to the site. Further forest roads will not be required.

Existing ATV tracks will be retained where possible, but careful consideration will be given to their absolute need and location. Though none are currently planned, where required, they will be maintained and constructed by removing topsoil and levelling the surface with a drain on the top side and will be a maximum of 2m wide. No trees will be planted within 5m of the track centre and riparian zones will be avoided. Prior notification will be obtained from the local authority where required.

If applying for the Native Woodland options please use the 'Native Woodland Habitat Network' map in the 'FGS Target and Eligibility' folder on the [Scottish Forestry Map Viewer](#) and describe the habitat network zones your application is within i.e. primary, secondary or out with the habitat network.

N/A

## Sensitive Areas & Potential Impacts

### **Sensitive Areas:**

- National Nature Reserve or Site of Special Scientific Interest (SSSI)
- National Park
- World Heritage Site
- Scheduled Ancient Monument
- National Scenic Area
- Natura sites – Special Area of Conservation (SAC) or Special Area of Conservation (SPA)
- Land on which there is a Nature Conservation Order
- Deep peat soil

### **Potential Impacts:**

- Population & Human Health
- Biodiversity
- Land, Soil, Water, Air, Climate
- Material Assets, Cultural Heritage, Landscape

List any **Sensitive Areas** and any **Potential Significant Impacts** relating to your site, including appropriate mitigation (**refer to Annex 1**). Detail any surveys completed to inform this assessment.

*For complex cases the Issues Log (**Annex 2**) can be used to record this instead.*

*(Scotland's Environment Web Land Information Search*

*<https://www.environment.gov.scot/maps/land-information-search/> is a useful resource which may help you identify some of the constraints within your site).*

The Kilquhockadale plan area is in the catchment of the River Bladnoch. The River Bladnoch is designated Special Area of Conservation (SAC) for Atlantic salmon and brown trout habitat but historically the catchment has been quite heavily forested which may have contributed to issues such as watercourse over shading, surface water acidification, siltation risks, drainage and lack of riparian management of particular concern.

Acidified catchment assessments have been carried out for the River Bladnoch (u/s Black Burn) and the Black Burn catchments and can be found in **Appendix 6**.

Nature Scot support the design of the woodland creation with its potential significant benefits to the River Bladnoch SAC catchment commenting this would also "ultimately improve conditions on neighbouring downstream and overlapping Protected Areas of Ring Moss SSSI and Cree Estuary SSSI." Please see Issues Log below (**Annex 2**)

The same ecologist also completed a species survey in conjunction with the habitats survey which is appended to this document (**Appendix 4**). The survey identified the presents of badger and adder a UKBAP species, likely to be using the drystone dykes

which will be protected in accordance with the FLS Regional Historic Asset Management Plan.

There are 5 areas of deep peat on the site (see **Appendix 4, 5** and **Map 3**) which will be retained as open, with conifer regeneration removed as required. As the site is near to the River Bladnoch SAC, water drains from site and into the designated area further down stream. This management proposal is part of a catchment wide approach to peatland restoration in this area already approved under the current Tannylaggie LMP which would have further positive effects on the neighbouring designations.

The low density native woodland proposed in this acquisition will only serve to enhance the protection of water quality of the nearby watercourses and their related catchments. With the resultant ecosystem likely to have much higher biodiversity value due to the increased percentage of native tree species within the area while creating a long-term future carbon store.

All forestry operations will comply with UK Forestry and Water regulations and forestry best practice.

***Please ensure that any maps or survey reports that have been produced to support your application are uploaded to the online application system.***



## Management Operations

### **All Applications**

Having assessed the site please provide information about how you are going to establish the new woodland.

**Ground Preparation:** Describe the method that you will use, including dimensions. Where you propose multiple ground preparation techniques then you must identify these on a map.

Ground preparation will comply with the Forestry Commission Guidelines 'Cultivation of Soils for Forestry' (Bulletin 119).

The aim is to provide suitable planting locations for tree establishment and growth while minimising visual and hydrological impacts.

All areas will have individual (discontinuous) mounding where machine access is possible (**see Map 4**). Manual planting will be utilised in any areas unsuitable to machine access such as riparian native woodland, wet woodland areas and within the private water supply catchments (**Appendix 3**).

**Drainage:** Identify any existing drains/watercourses and provide information relating to new drains.

Existing watercourses are detailed on the Key Features map (**Map 5**). One burn runs west-east then north-south though the site with a few unmapped smaller channels feeding into it, possibly only seasonally active, these will all be protected from cultivation operations as per UKFS Forest & Water and Forestry & Water Scotland guidelines.

Given the dominant soil types, it is anticipated some drainage will be required, though will be kept to a minimum. Where new drains are required, these will be installed to no greater than 3.5% slope and run across the slope to the head of the valley. No drains will be installed within the hydrological unit of the blanket bog areas, to ensure their continued function. No drains shall discharge directly into watercourses as per UKFS Forest & Water guidelines.

**Protection:** Describe how the site will be protected. For example: fencing, tree guards/shelters and pest management.

Append a deer management plan if required. You should refer to the [Deer Management Best Practice Guide](#) and the [Joint Agency statement on deer fencing](#). You may be asked to submit a checklist from the Joint Agency guidance (May 2010).

Rabbit, Roe and Red deer are potential browsing pests in the locale. Deer numbers will be controlled through the FLS regional deer management plan. The current population of deer in this area is high.

The existing stock fence located around the boundary of this site will be upgraded to deer fencing as specified in the 'Forestry Commission Fencing – Technical Guide' due to the palatable species being planted. Culling will continue in the wider FLS area (see **Map 6**). It is anticipated that the fence will be removed once the site becomes established and is not as vulnerable to deer damage.

Tree guards will not be used.

### Planting; please provide the following:

- Species to be planted and percentage of each. (Please use the components area table to record hectares planted).
- Describe the nursery stock and planting method to be used.
- Confirm if you will be planting vegetatively propagated Sitka spruce.
- For native woodland creation specify the [Seed Source Zone](#).

This woodland creation proposal will **not** be subject to grant application and therefore the category under which these fall for the purposes of grant receipt is not included.

Species percentages:

Species	Area	
	Ha	%
Native Mixed Broadleaf	46.2	48
Scots Pine	8.8	9
Managed Open	15.1	16
Successional Open	25.7	26
Unplantable (component)	1.3	1
<b>Total Area</b>	<b>97.0</b>	<b>100</b>

Planting specifications

- Native broadleaved plants will have provenance of a suitable region. In this instance this will be 108, 107, 109, 301.

- Where a native broadleaf compartment runs contiguous to a conifer area, there will be a buffer of 6-8m to ensure that they are not overshadowed by the surrounding

## conifer

- Broadleaf stock will generally be transplanted or undercut stock of 45-60cm tall
- Conifer stock will generally be 2-3 year old transplanted or undercut stock 20-40cm tall
- Planting will be at 2.5 m x 2.5 m spacing to give a density of 1600 stems per hectare.

**Mixed broadleaf/Scots Pine plantation (56.3 ha)** will compliment the existing native woodland and woodland type in intimate mixes as identified by the National Vegetation Classification (NVC). NVC types include W9 and W4 with a minor element of native Scots Pine. Mixed broadleaved species will include Rowan, Downey Birch, Sessile Oak, Alder, Goat Willow, Hazel & Hawthorn. Some areas will be unplantable due to the rocky nature of some of the knolls and have been shown as a component of the planted area. See **Map 6** Future Habitats and Species map.

This area will be mounded (or flat planted where ground conditions are unsuitable for machinery access), at 2.5 m x 2.5 m spacing to give a density of 1600 stems per hectare.

## Open Ground (40.8 ha)

There will also be further areas left:

- To enhance riparian margins by watercourses
- To retain significant flushes and glades
- To allow areas for deer control
- To create accessible rides for future woodland management
- To soften woodland edges
- To create wayleaves for utilities and access tracks to properties (see **Map 5**)

**Maintenance:** Describe the maintenance regime for the site (e.g. monitoring, weeding, beat-up, etc.).

The deer fences will be maintained to a stock proof standard.

Plants will be monitored for signs of disease, nutrient deficiency and damage. Appropriate action will be taken as required for any plant health issues. All plants will be maintained in a wind firm position.

Conifer regeneration will be removed from priority habitats.

The site will have ongoing monitoring, with standard stocking density measurements taken at year one and five as per operational guidance for woodland creation and beat up, conducted as required to meet stocking densities.

**Fertilisation:** Where applicable, describe the proposed fertiliser regime e.g. application rate, timing, etc.

No fertiliser will be used on this site.

**Other:** Please include any other silvicultural detail here.

None

## Small Woodlands Loan Scheme (woodlands up to 50 hectares only)

**Please read this section if you are interested in receiving a loan based on the capital items in your FGS contract. To confirm your interest in receiving a Loan, you must sign the declaration at the foot of this section.**

The Small Woodlands Loan Scheme (SWLS) is designed to assist landowners in implementing woodland creation projects by releasing early capital. The following thresholds apply:

- The maximum Woodland Creation proposal size, approved in your FGS contract, eligible for loan support is 50 hectares and we will pay you a Loan of 50% of the value of the capital items in your FGS contract (not including CSGN supplement values where this is present), rounded up to the nearest £100, up to a maximum value of £40,000 per FGS application.
- To be eligible for a Loan payment, the maximum Woodland Creation proposal grant value, approved in your FGS contract, must be no greater than £250,000.

The loan is recovered by deducting the value from your FGS capital claim.

If both your FGS and Loan applications are successful you will be provided with a loan offer that will detail the value of the loan and set out the terms of the loan. You will be required to sign and return the loan agreement with your FGS contract to accept the loan offer. By signing here you are expressing an interest in receiving a loan however funding is not guaranteed. Funding will be committed at FGS contract approval and is dependent on available budget at that time.

If you wish to be considered for a loan, please first read the SWLS guidance on our [website](#) and then sign the following declaration:

- I/we are applying for a Small Woodlands Loan on the capital items contained in the FGS application associated with this Operational Plan
- I/we confirm that our woodland creation proposal is less than 50 hectares
- I/we confirm that we have no Small Woodlands Loan Scheme agreements active at this time
- I/we confirm that should I/we be successful in obtaining a Loan, then I/we will only make one claim for our FGS capital works which, in accordance with FGS terms and conditions, will be once all the capital works, as laid out in the FGS contract's schedule of works, have been completed.
- I/we understand that by signing this declaration, I/we am/are only stating that I/we am/are interested in receiving a loan and, as such, meet all the eligibility criteria required as laid out in our guidance and our Loans terms and conditions.
- I/we understand that by signing this declaration, I/we acknowledge that my/our success in receiving a loan is subject to the funds available in any given year and should there be no dedicated funding available for the SWLS, I/we will continue with the FGS application and will fund the capital works of that application under the terms and conditions of the FGS.
- I/we have the necessary consents/permissions to sign this loan application declaration as evidenced on the administrative system, RP&S, to which this Operation Plan and associated FGS application relates.

# Woodland Creation Operational Plan

- I/we have read, understand and hereby acknowledge that Scottish Ministers may use any of my personal data contained in or relating to this loan application in accordance with the terms of [Scottish Forestry's privacy notice](#) and the [Rural Payments and Services Privacy Policy](#).
- I/we, on behalf of the business applying for both a FGS application and a Small Woodland Loan, hereby sign this declaration:

<b>Signed:</b>		
<b>Print:</b>		
<b>Date:</b>		
Would the project have gone ahead without a loan? Please delete as appropriate. (this will not affect your application for loan)		<b>YES / NO</b>

Please do not sign this declaration if you do not wish to apply for the SWLS, but please continue to complete the other sections as these are required for your FGS application. Currently all correspondence relating to the SWLS will be via email. Please ensure the email address held in RP&S is correct prior to submitting your application.

**Ends section on SWLS**

## Annex 1

### **Assessment of Potential Impact**

Please use the following guidance to assist with describing any potential significant impacts and any mitigation which is proposed:

- **Population & Human Health:** Detail any discussions which you have had with neighbours, local communities or other stakeholders and explain how this has influenced your proposal. Explain what public access is currently undertaken on the site and what provisions you plan to make to continue or improve this in adherence with the [Scottish Outdoor Access Code](#).
- **Cultural Heritage:** Indicate what survey work has been undertaken and describe how archaeology will be protected.
- **Soil:** Provide an accurate assessment of the soil on site and describe how you will manage the quality of the soil including any effects from erosion and compaction.
- **Water:** Detail the nature of the likely impacts on water bodies or water supplies from your activities and how you will mitigate these impacts.
- **Air:** Detail the nature of the likely impacts on air quality or the impacts on light provision.
- **Biodiversity:** Detail the nature and extent of high value habitats such as those listed on the [Scottish Biodiversity List](#) and describe how you will protect these habitats. Detail the nature of the likely impacts on wildlife from your activities and how you will mitigate these impacts. Refer to [European Protected Species](#) for guidance.
- **Landscape:** Provide details of how the impact on the landscape has been assessed and how the application has been designed to minimise any impact.
- **Climate:** Provide details on the vulnerability of the project to climate change and how this impact was mitigated.
- **Land:** Does your application have an impact or an effect on prime agricultural land (defined as land use classes 1, 2 and 3.1), or the local land use balance with agriculture? Detail the nature of the likely impacts on agriculture from your activities and how you will mitigate these impacts and integrate with forestry. You should refer to the [Guidance About Woodland Creation on Agricultural Land](#), located in the further information and technical guidance section of the [FGS woodland creation](#) web page.
- **Material Assets:** Identify and describe all built and natural assets that are relevant to the site and which could be adversely impacted by the proposal e.g. utilities, minerals. Describe any mitigation proposed for these features.

### Annex 2 Issues Log

Issue (include date and raised by)	Applicant's Comments	Scottish Forestry Comments	Agreed Mitigation	Status (Open, Closed)	Significance of Impact (High, Medium, Low)
<i>e.g. Archaeology – Scheduled Monument at NS123456. HES, 23/10/16.</i>	<i>e.g. Scheme design includes OG to buffer Scheduled Monument as per UKFS. John Smith, 25/10/16</i>	<i>e.g. Applicant has taken on board HES feedback and designed the scheme in accordance with best practise. Susan Jones, 27/10/17.</i>	<i>e.g. 20 metre OG buffer around SAM.</i>	<i>e.g. Closed</i>	<i>e.g. Low</i>
<b>Population &amp; Human Health</b>	<p>There is no current or active recreational access across the site outside of the provisions within the Scottish Outdoor Access Code.</p> <p>Notification and consultation with all neighbouring landowners or land managers has taken place. No objections have been raised by any neighbouring landowners/managers from our external consultation process, see <b>Appendix 4</b>. Kilquhockadale External Consultation</p>				
<b>Cultural Heritage</b>	<p>An Historic Environment Assessment and Survey was carried out by Matt Ritchie FLS Archaeologist. All identified archaeological features have been mapped and incorporated into our conservation layers and will be buffered according to UKFS to protect the historic environment, see <b>Map 5</b> and <b>Appendix 7</b>. Historical Environmental Assessment and Survey.</p>				
<b>Soil</b>	<p>A soil survey was undertaken by an independent surveyor following standard forestry soils surveying methodology in March 2022. Soils are mostly; upland brown earths, surface water/peaty gleys and rankers/rocks and areas of deep peat.</p> <p>Identified deep peat soils have been incorporated into FLS conservation layers. Areas of deep peat will not be planted and protected from forestry operations in line with the UK Forestry Standard (UKFS).</p> <p>Please see map, <b>Map 2</b>.</p>				
<b>Biodiversity</b>	<p>Open habitats survey completed by an independent open habitats ecologist August</p>				



	<p>2022 which identified priority habitats (see <b>Appendix 4</b>).</p> <p>M15 – <i>Scirpus cespitosus</i> – <i>Erica tetralix</i> wet heath 12.58 ha left as open</p> <p>M23 – <i>Juncus effusus/acutiflorus</i> – <i>Galium palustre</i> rush-pasture 34.47 ha. Design mapped to leave the more prominent flushes and GWDTEs open.</p> <p>M23a - <i>Juncus effusus/acutiflorus</i> – <i>Galium palustre</i> rush-pasture sub-community was identified totalling 0.05 ha will remain open ground.</p> <p>The remaining ground is non-HAP grassland that has been grazed by sheep. This area will be planted.</p> <p>A breeding bird survey (BBS) was carried out following standard methodology for 4 site visits spread evenly over the season from early May to July 2022 (see <b>Appendix 4</b>). All bird species were recorded with particular emphasis on moorland species.</p> <p>The BBS reported no evidence of Schedule 1 species within the site.</p> <p>2 red listed bird species are also UK and Scottish BAP species, all showed evidence of breeding.</p> <p>2 BoCC amber listed species recorded.</p> <p>A field survey for protected species was carried out on 3rd August 2022, principally focussed on badger <i>Meles meles</i>, otter <i>Lutra lutra</i>, red squirrel <i>Sciurus vulgaris</i> and reptiles (see <b>Appendix 4</b>). Although a watching brief for evidence of other mammal species was conducted throughout the survey.</p> <p>No signs of badger <i>Meles meles</i>, otter <i>Lutra lutra</i>, red squirrel <i>Sciurus vulgaris</i>, water vole <i>Arvicola amphibius</i> or Pine marten <i>Martes martes</i> were found during the survey</p> <p>2 ponds on site were surveyed for their potential to accommodate Great Crested Newts <i>Triturus cristatus</i>, however both were deemed to be of poor habitat suitability and</p>				
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	<p>unlikely to contain the species.</p> <p>Whilst no reptiles were noted at part of the protected species survey, a European Adder <i>Vipera berus</i>, schedule 5 UKBAP species, was seen during the breeding bird survey along with an adder skin, showing these are currently present in the area. The dry stone walls across the site will be retained apart from necessary crossing points for machine access, though the majority of the walls will continue to act as basking and hibernaculum sites for reptiles. Any work to the walls will be done carefully by hand. The retention of peatland areas and tree planting design should, in the long term provide shelter and increase habitat for species which adder predate on enhancing foraging potential.</p> <p>Identified priority habitats and species have been imported to the FLS GIS Conservation Layer.</p> <p>The increased cover of native broadleaved woodland habitat proposed in the current planting scheme is considered likely to promote the ecological integrity of the Galloway and Southern Ayrshire Biosphere Reserve and the proposed Dumfries and Galloway Woodland Strategy in the long-term by providing habitat linkages with surrounding woodlands.</p>				
<b>Landscape</b>					
	<p>The main forest views are from the minor public road looking north into the wider Tannylaggie forest block. Though this area is not widely over looked by settlements and is quite isolated.</p> <p>The matrix of open space, broadleaves and minor Scots Pine component should improve the current view of dark topped rolling hills of conifer, adding a diverse interest whilst still blending into the existing conifer and riparian zones around the boundary of the scheme. (See <b>Appendix 8</b> for visualisation images)</p>				
<b>Material Assets</b>					
	<p>Please see <b>Map 2</b> Features, Issues and Challenges that outlines the position of utilities and infrastructure across the site. Unplanted wayleaves will be incorporated in the design plan during operations to ensure</p>				

	<p>adequate buffers compliant with UKFS are included.</p> <p>Wayleaves include: 11 kV Electricity wayleave.</p> <p>Forestry access road to local property</p>				
<b>Water</b>					
	<p>Watercourses to be protected to UKFS recommended buffer distances.</p> <p>Removal of grazing and planting/enhancement of native woodland, including wet woodland types around riparian zones should enhance habitat.</p> <p>Impacts of the planting on acidified water catchments which cover the scheme have been reviewed and have found to be null. <b>(see Appendix 6)</b></p> <p>There is a single Private Water Supply whose catchment minimally covers an area of broadleaved planting which will be flat planted. <b>(see Appendix 3)</b></p>				
<b>Air</b>					
	No comment				
<b>Climate</b>					
	<p>New planting will provide carbon sequestration toward reduction in atmospheric CO<sub>2</sub>. Moreover, retention and protection of blanket bog will preserve the stored carbon in the deep peat soils.</p> <p>The increase in broadleaves will diversify the species within the area creating a more resilient and adaptable forest to any future climate threats or changes.</p>				
<b>Land</b>					
	A review by Higher Agricultural Officer, Rural Payment and Inspections Division RPID was carried out as part of the original "Land Transaction Appraisal" (LTA) at time of land acquisition by FLS (See <b>Appendix 9</b> )				