

Carsphairn Community Woodland Ltd

Muirdrochwood Business Plan

Revised in November 2019



Carsphairn Community Woodland Limited is committed to acquiring, developing and managing local woodlands in a sustainable and environmentally sound way for the long-term benefit of the local community.

**Jon Hollingdale, Community Woodlands Association
For Carsphairn Community Woodland Ltd.**
A Company Limited by Guarantee SC591976



Contents

1	Summary	4
2	Benefits of Community Ownership.....	5
2.1	CCW Objectives	5
2.2	Main projects	6
2.3	Key outputs.....	6
3	Muirdrochwood.....	7
3.1	Ownership and Management.....	7
3.2	The Forest.....	10
3.3	Carsphairn.....	14
3.4	Carsphairn Community Woodland Ltd.....	19
4	The CATS process.....	21
4.1	Draft Plan.....	22
4.2	Valuation	22
4.3	Community decisions.....	23
5	Development Plan	24
5.1	Community Acquisition.....	24
5.2	Management and Governance Systems.....	25
5.3	Community Forest Manager and Forest Worker	26
5.4	Forest Management Planning.....	27
5.5	Forest Management Operations.....	28
5.6	Recreation Infrastructure.....	32
5.7	Community Volunteer Development.....	35
5.8	Woodfuel.....	37
5.9	Tourist accommodation	40
6	Development Projects for Future Phases.....	44
6.1	Rural Heritage Skills.....	44
6.2	Affordable housing	44
7	Other potential projects.....	45
7.1	Woodland / green burials and/or memorial woodland	45
7.2	Non-timber forest products	45
7.3	Health initiatives.....	45
8	Assessment of public benefits and justification of discount.....	46
8.1	Recreation	46
8.2	Direct employment	47
8.3	Community volunteering	47

8.4	Other unquantified public benefits and disbenefits.....	48
9	CCW 25 Year Cashflow.....	49
10	Workplan and major milestones.....	50
11	Monitoring and evaluation.....	52
12	Analysis of major risks.....	53
Appendix 1	Galloway and Southern Ayrshire Biosphere Supporters Charter	54
Appendix 2	CCW Open Day at Lagwyne Hall 5 October 2018.....	54
Appendix 3	Director Biographies	57
Appendix 4:	Community Forest Manager Draft Job Description	58
Appendix 5	Carsphairn Household Firewood Survey.....	60
Appendix 6:	Tourism accommodation proposal – additional information	62
Appendix 7:	Galloway Glens Heritage Skills	64

I Summary

Carsphairn Community Woodland Ltd (CCW) is a community organisation which aims to acquire and develop woodland around Carsphairn to create innovative, sustainable facilities that enhance the natural environment, provide opportunities for employment, recreation, education and training for those in the local community and beyond, and contribute to the economic regeneration of the area.

Carsphairn Community Woodland is considering the acquisition of ~48.7ha of Muirdrochwood Forest which is currently managed by Forestry and Land Scotland (FLS) for Scottish Ministers. (See **CCW Muirdrochwood Map I: Revised Acquisition area** supplied separately)

This plan is intended to fulfil several functions:

- It lays out the community's plans for future forest management and other development projects.
- It supports the community's asset transfer request
- It supports CCW's fundraising for the costs of acquisition and subsequent management and development of this section of Muirdrochwood.

This portion of Muirdrochwood has an attractive lochside setting. FLS management to date has focused on timber production objectives with limited local economic benefit or delivery of social and environmental outcomes. CCW wish to acquire the woodland to take forward forest management and development projects which will deliver a range of economic, social and environmental benefits.

The plan describes the woodland and the background to community involvement, details the community's plans and aspirations for the site, provides a 25 year cashflow and detailed income and expenditure projections for forest management and development projects to be taken forward in the first five years of community ownership, as well as outlining a range of potential future developments.

The initial stages of project development were undertaken by Carsphairn Community Trust. As part of the process a new community body, Carsphairn Community Woodland (CCW), eligible to use the asset transfer provisions and seek funding from the Scottish Land Fund was established. After acquisition CCW will finalise forest management proposals and seek approval from Scottish Forestry for a Long Term Forest Plan.

2 Benefits of Community Ownership

CCW wish to acquire the lower parts of the woodland within Muirdrochwood as delineated in Map 1 to take forward forest management and development projects which will deliver a range of economic, social and environmental benefits. Community ownership provides the opportunity to unlock the potential of the site, creating some business and employment opportunities to facilitate rural regeneration and help build a more resilient community.

The economic benefits of timber harvesting and woodfuel sales will be retained and reinvested in the management and development of the forest, delivering community recreation opportunities, tourist accommodation and environmental improvements. Longer term projects such as affordable housing and rural and heritage skills training will continue to increase the value of the forest to the community and the local economy.

Acquiring the woodland will provide an outdoor space for the community and is a long term investment in the future health and well-being of the community: the increased energy and activity will make Carsphairn a more attractive place to live, especially for younger families and will enable the community to be in a position to take advantage of future as-yet-unforeseen opportunities.

Economic

Community ownership and implementation of this plan will:

- directly create 4 part-time jobs, three being funded by earned income;
- support additional employment opportunities by creating new contractor opportunities through forest management projects (paths, buildings, etc) whilst maintaining existing contractor roles in timber harvesting and haulage;
- provide woodfuel and other products for local markets;
- create new tourist accommodation provision, creating an income stream to support forest management and stimulating additional trade for local retail businesses.

Social

Community ownership and implementation of this plan will:

- develop new recreation facilities for the community;
- create opportunities for volunteering, and space for community activities and events;
- increase community cohesion and resilience through the management of the woodland and its resources.

Environmental

Community ownership and implementation of this plan will:

- enhance the environmental (and amenity) value of the woodland through greater use of broadleaves and open space in restocking;
- increase (through education, interpretation etc) public awareness of biodiversity;
- enable more site-sensitive management policies and practices for priority species such as red squirrel and raptors;
- establish a local woodfuel supply allowing substitution of fossil fuels and reducing timber miles for low grade material.

2.1 CCW Objectives

Key objectives are:

- To create local employment opportunities

- To create local economic benefit from the forest
- To improve the amenity and environmental value of the forest
- To deliver products and services to the local community
- To create opportunities for activities that support community cohesion, health and well-being
- To develop a forest-based tourism business to generate jobs and income for the community

2.2 *Main projects*

CCW will deliver the above objectives through a number of projects:

- Forest management: the Larch stands are infected with *Phytophthora ramorum* and are dying; they will be harvested in the the first 5 years, providing significant income during this period. The Sitka spruce stands will be thinned and felled over the next 30 years to provide income from timber sales and material for a woodfuel business. A sensitive and realistic restocking plan will significantly improve the environmental (and amenity) value of the woodland by increasing species diversity, moving from Sitka and Larch monocultures to a mix of productive conifers and broadleaves, with more open spaces.
- Recreation infrastructure: creating facilities to encourage community access and welcome visitors to Muirdrochwood, including a carpark, toilet facilities and new paths around the woodland, giving access to the loch and the river frontage.
- Community involvement: developing facilities and acquiring equipment to provide opportunities for community involvement through volunteering and skills training.
- Woodfuel for local markets. A community woodfuel business will provide employment, income and contribute to tackling climate change.
- Provision of tourist accommodation, creating jobs, income and encouraging an increased number of visitors to stay (and spend) in the area.

Longer term projects include the development of rural skills training and the provision of affordable housing.

2.3 *Key outputs*

Implementation of this plan will deliver a number of key outputs:

- Creation of 4 part time jobs (~2 FTE)
- Creation of over 1400m of new trails around the woodland
- Development of community volunteering infrastructure and delivery of at least 100 volunteer days per annum by year 5
- Sale of 300m³ of woodfuel annually for local markets (equivalent to 151t CO₂ savings annually if substituting for domestic heating oil)

3 Muirdrochwood

3.1 Ownership and Management

Muirdrochwood¹ lies within Forestry and Land Scotland's South Scotland Region. It is part of the Castlemaddy forest design plan area, which consists of four separate blocks totalling 2,876 hectares. The main block (2,144 hectares) is situated to the west of the A713; Carminnows, a small block of 125 hectares, is situated to the east of the A713; Muirdrochwood (324 hectares) is the most easterly part of the design plan area, and the Island block (283 hectares) is situated on the prominent Dundough Hill, which lies to the south between Carminnows and Marscalloch.

The Castlemaddy Forest Design Plan was produced in 2012 and covers the period 2013-2022. The Muirdrochwood block was identified for disposal as part of what is now known as the New Woodland Investment Programme²; the local community (and other stakeholders) were formally notified of the intention to dispose of the property in October 2016.

The main block of Muirdrochwood is bordered to the south-east and south by the B729 (and a small area of private land around Marscalloch Cottage), to the north-west and north by open grazing land, and to the east by private woodland (much of which has been recently clearfelled) and farmland. There are three smaller blocks, two of 20ha and 16ha which are bisected by the B7000, lie to the south of the B729 and are bordered to the south by the Kendoon Loch and the Water of Ken; and a small isolated block of ~3.6ha to the east.

As the Scottish Land Fund were unable to support purchase of the whole forest, CCW are seeking to acquire a smaller area, totalling 48.7ha, comprising the smaller blocks south of the B729 and an 8ha block on the north side of the B729 and to the east of the main forest access road.

3.1.1 Geology, soils & landform

The Forest Design Plan records the following information on geology and soils:

The design plan area lies to the east of Loch Doon granite intrusion with the boundary running along the metamorphic hills forming the Rhinns of Kells. The majority of the area comprises dark blue-grey shales or coarse sandstones of Ordovician period. Analysis of recent Ecological Site Classification (ESC) maps shows that Peaty gleys and surface water gleys cover 54% of the design plan area and are by far the most prominent soil types. Brown earths cover 17%, flushed and unflushed peat bogs 13%, and Iron pan and skeletal soils make up the remaining area of 16%. The Macaulay land capability for forestry classification for this area is a mixture of F5 (limited flexibility for growth & management of tree crops) on the valley floor and lower slope rising to F6 (land with very limited flexibility for growth and management of tree crops) on the higher slopes. A small area of F4 (land with moderate flexibility for growth & management of tree crops) exists along the lower slopes of Marscalloch.

This information is reflected in the greatly differing growth rates apparent across the forest, with higher yield classes found on lower, moderately sloped ground. Smaller, peaty areas with poor drainage and growth are found throughout the wood. Future restocking plans will concentrate commercially productive species on the most appropriate sites.

The area which is the subject of this plan is bounded to the south-west by the Kendoon Loch (although for the most part there is a small buffer zone between the FLS woodland and the loch)

¹ FLS refer to the wood as Marscalloch

² <https://forestryandland.gov.scot/business-and-services/buy-land-or-buildings/new-woodland-investment-programme>

and to the south-east by the Water of Ken. Ensuring that forest and other operations contribute positively to water quality will be a significant consideration for future management.

Topographically, it rises from ~155m above sea level on the shores of Kendoon Loch to 200m at the northern point of the block to the north of the B729 and includes a mix of well drained areas interspersed with wet peaty areas. There are steep slopes above the Water of Ken, elsewhere they are generally shallow.

3.1.2 Climate

South West Scotland has a predominately mild windy oceanic climate influenced by the Gulf Stream. Precipitation for the area ranges from 1400mm in the relatively sheltered Glenkens to 2000mm on hill summits³.

The expected impact of climate change is that the climate will remain wet and mild, but with an increased frequency of extreme weather events. This is unlikely to affect species choice, however more frequent gales may constrain silvicultural options and the creation and maintenance of habitat networks will be important to help mitigate climate change impacts on other species.

3.1.3 Fauna

Red squirrels are present in the wood, and Castlemaddy was identified as a refuge area by the “Red Squirrels in South Scotland” project in their 2005 report. Future management of the forest will seek to enhance internal habitats for red squirrels through increasing the area of Norway spruce, Scots pine and small seeded broadleaves.

The forest design plan records that both red and roe deer are present in the Castlemaddy FDP area. The Forest District reports that the roe deer cull for the whole of Muirdrochwood is set for around 10 animals, but that recent annual roe deer culls have been 3 (2016-7) and 5 (2017-8)⁴. Opportunities have been limited due to the stage of the crop and the lack of open spaces; it is acknowledged that there will be a need for a greater deer control effort prior to restocking.

There are records of otter in Kendoon Loch and as a consequence the need for riparian and aquatic buffer zones is particularly important. Exclusion zones would be required around any identified otter breeding and/or resting places.

The forest design plan records that an osprey nest was observed within the Castlemaddy unit; osprey activity was recorded in 2011 and they have been observed regularly by many in the community. Likewise red kite are seen regularly in the vicinity. Goshawk activity has been recorded on site but information from FLS suggests that there are currently no goshawks present. Appropriate pre-harvest monitoring will be carried out for raptors and timing of forest operations adjusted if necessary.

3.1.4 Flora

The portion of Muirdrochwood that CCW are seeking to acquire comprises mostly second rotation conifer crops planted in the 1980s with a small area of first rotation 1950 planting.

³ Information from FLS Forest Design Plan

⁴ No figures are available for the specific area that CCW are seeking to acquire.

About a quarter of the site is stocked with broadleaves, mostly of relatively recent origin but with some fragments of older woodland on steep slopes. Future restocking plans will include a greater proportion of native trees and shrub species.

There is a PAWS (plantation on ancient woodland site) at the southern edge of the area; this is currently largely occupied by the mature larch stand and will be appropriately restocked.

There are limited areas of non-woodland habitat, chiefly for access but including some pockets of rushes and bracken. Future restocking plans will incorporate a significantly increased area of open ground to meet the UK Forest Standard.

3.1.5 Designations

There are no statutory environmental designations on or adjacent to the site⁵.

The High Bridge of Ken (adjacent to the southern edge of the site) is a category B listed building.⁶

Canmore, the national record of the historical environment, records three sites in the block to the east of the B7000:

- Building at Bell's Craig at NX 6212 9044⁷
- and at 6199 9028⁸
- Corn drying kiln at NX 6207 9038⁹

Future forest management and other operations will be designed to ensure that no damage is done to recorded sites or their surroundings.

⁵ This was checked using the Land Information Search on the SF website and the map search facility on the SNH website.

⁶ "Earlier 18th century bridge, possibly of earlier origin spanning Water of Ken at narrow ravine on Dalry/Carsphairn parish borders. 2 semi-circular arches separated by wide spandrel, long abutments, narrow carriageway. Arch to N spans main flow of river; subsidiary flood arch to S; both approximately 24 ft spans. Squared granite springers rise from natural rocky outcrops, squared voussoirs, rubble spandrel, soffits, abutments and parapet, latter with dressed granite coping." <http://portal.historicenvironment.scot/designation/LB3627>

⁷ <https://canmore.org.uk/site/177461/bells-craig-high-bridge-of-ken>

⁸ <https://canmore.org.uk/site/177462/bells-craig-high-bridge-of-ken>

⁹ <https://canmore.org.uk/site/177468/high-bridge-of-ken>

3.2 The Forest

3.2.1 Species

Until 2018 Muirdrochwood was well-stocked: the FLS sub-compartment database indicates that 95% of the woodland area was tree-covered. However, species diversity was very limited: 76% of the stocked area comprised Sitka spruce, 18% was Japanese and Hybrid larch, with just 7% broadleaves. Most stands were monocultures.

The discovery in 2017 of *Phytophthora ramorum*, led FES to initiate a very significant felling operation in the main forest block, however this did not affect the areas which CCW is now seeking to acquire.

The proposed acquisition area, whilst still dominated by Sitka spruce monoculture, has considerably more diversity than Muirdrochwood as a whole, as demonstrated in Table 1 below.

As part of the process of developing this plan a more detailed appraisal of species present and compartment areas in the woodland has been undertaken. A revised compartment and sub-compartment map and schedule has been drawn up, subdividing the proposed acquisition area into 3 compartments: see **CCW Muirdrochwood Map 2: species & cpts** (supplied separately) for details.

Species	Area in ha	% of total	% of stocked area
Sitka spruce	28.89	59%	65%
Japanese larch	4.88	10%	11%
Birch	4.14	8%	10%
Mixed broadleaves	6.23	13%	14%
Open ground	2.76	6%	
Roads, verges and river	1.80	4%	
Total	48.70		

Table 1: Acquisition area by species and land type

As noted previously, the larch stands are infected with *P. ramorum* and will require felling in the first 5 year period

3.2.2 Age

The area to be acquired predominantly comprises second rotation spruce and larch crops planted between 1985 and 1989. There are two older areas: a small area of broadleaves on steep slopes adjacent to the Water of Ken (dated 1948 in the FES sub-compartment database), and the mature larch stand at the southern end of the site (planted 1950).

The remaining broadleaved areas are of relatively recent origin, most notably the roughly square block of birch by the junction of the B729 and B7000 which was clearfelled in approx. 2007 and left to regenerate.

3.2.3 Yield Class¹⁰

¹⁰ Yield class is an index of the potential productivity of even-aged stands of trees. It is based on the maximum mean annual increment of cumulative timber volume achieved by a given tree species growing on a given site. It is measured in units of cubic metres per hectare per year (m³/ha/year) and conventionally expressed in increments of 2. The range of values found in GB is from 2 to 30.

The figures in the table below demonstrate the considerable variability across the site, particularly amongst spruce crops, where yield class is very dependent on ground conditions.

Yield Class	Area in ha	% of stocked area
4	1.69	5%
6	4.37	13%
8	0.00	0%
10	1.24	4%
12	1.70	5%
14	5.56	16%
16	8.22	24%
18	0	0%
20	4.10	12%
22	6.89	20%
Subtotal	33.77	100%
Birch / broadleaves	10.37	
Open ground / RVR	4.56	
Total	48.70	

Table 2: Acquisition area by yield class for conifers (figures from CWA remapping)
RVR = Roads, verges, river.

Stands can be aggregated into three main groupings:

- 6.06ha (18%) has very low yield class (4-6): this comprises poorer areas of spruce (usually waterlogged) and the mature larch
- 16.72ha (49%) has moderate yield class (10-16): the younger larch and much of the spruce
- 10.99ha (32%) has a high yield class (20-22): this is the majority of the spruce stands adjacent to the Kendoon Loch.

The 10.37 ha of birch and mixed broadleaves are all YC 2 or 4, with very little potential for timber harvesting in the next 20 years.

3.2.4 Volume

Species	Standing Volume (m3)
Sitka spruce	10,100
Larch	1,700
Total	11,800

Table 3: Acquisition area: estimated standing volume (conifers) 2020

Based on our remapping and inspection of stands, our estimates of the standing volume in the conifer stands of the revised area is shown in the table above. Note that this estimate has a considerable margin of error, and that the standing volume is never fully recovered at harvest.

There is a small volume in the broadleaved stands, perhaps 2-300m³, but it is not anticipated that there will be any felling of these stands in the foreseeable future and this volume has not been included in any production calculations.

3.2.5 Quality

Tree form in Sitka stands seems generally good – as expected it is better in stands with higher growth rates. A brief inspection revealed very little windblow in spruce, even in stands that have been thinned.

Tree form in younger larch stands is (with a few exceptions) moderate to poor (as is often the case in unthinned larch stands), and there is some windblow in subcompartment 7800d.

3.2.6 Notable stands and features

Three “special features” of the forest - key sites or attributes worthy of particular note – were identified: the loch frontage, the river frontage & meadow, and the mature larch stand.

i) Mature larch stand. Sub-cpt 7800e comprises a mature, well thinned larch stand, adjacent to the Water of Ken and the Kendoon Loch, with very high amenity value. This stand is now showing signs of *Phytophthora ramorum* infection and will require felling.

ii) Loch frontage to the Kendoon Loch from Cpt 7800. This will add significantly to the amenity value of the site.

iii) The meadow by the river. Sub-cpt 7799c comprises ~2.5 ha of largely open land with scattered broadleaves and spruce adjacent to the River of Ken. It has very little forestry value but would be a significant asset as a potential site for development of tourist accommodation.

3.2.7 Access and Roding

There are limited vehicle access points to the wood:

- The main forest road access to the large forest block is at NX621907. This access also serves the small-holdings and associated buildings at Muirdrochwood, and could provide shared access to the portion of subcpt 7799a which lies north of the B729
- The block to the west of the B7000 has a well-made, gated timber access at NX614903
- The block to the east of the B7000 has a ~50m access and loading area at NX618905
- There is evidence of ATV access to this block at NX619902 by the High Bridge of Ken
- A rough farm access track crosses the NW corner of the isolated small, eastern block, joining the road at NX622909

Pedestrian access is possible from public roads (there is limited fencing) but there are no designated places for parking.

The roads are all dead-ends, with no circular routes available for pedestrians and cyclists, however this could be easily rectified with some new, relatively short sections of trail.

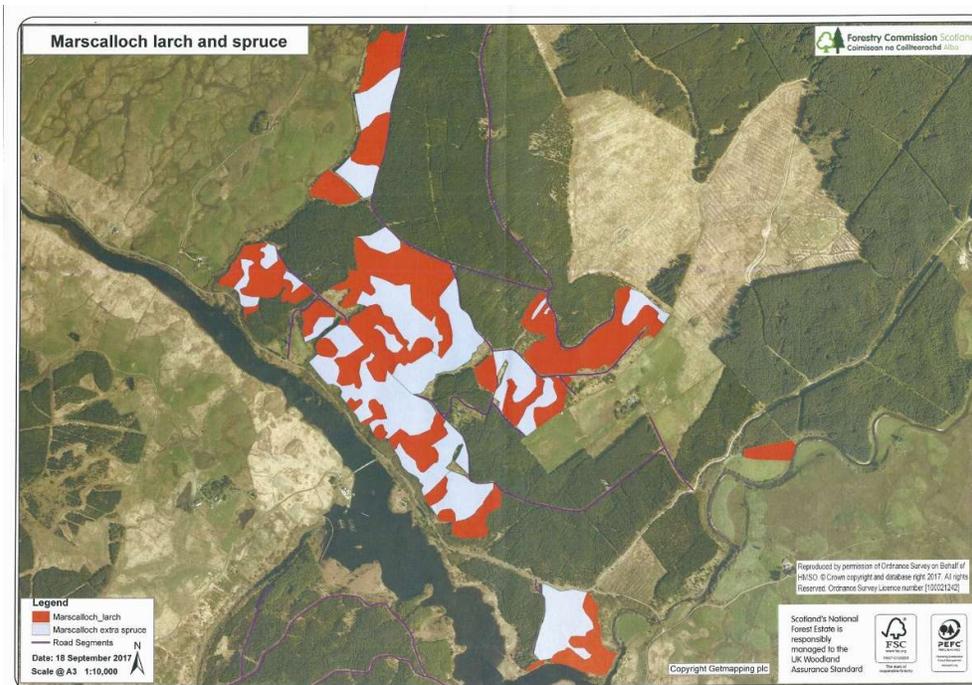
There is no formal recreation provision within the forest, although the construction of a hardstanding in Cpt 7800 has provided an informal car parking area. There is evidence of very limited pedestrian use within this block (anglers accessing the loch?) but none elsewhere in the forest.

3.2.8 Recent Management

A thinning operation was carried out across part of Muirdrochwood in 2016, the intensity and regime varying somewhat between stands. This included thinning operations in much of subcpt 7800a and some of 7800b. No detailed map of the extent of operations, or figures for the volumes removed from these blocks is available¹¹.

3.2.9 *Phytophthora ramorum*

In September 2017 FES advised CCT that *Phytophthora ramorum* infection had been recorded in some of the larch stands in the forest. FES's opinion was that the best course of action was to fell all the larch in the forest, and that this would require the felling of significant areas of spruce for access and to limit windblow. FES proposed the felling of 53ha of larch (this would be most, but not all of the ~54ha of larch in the forest) and an additional ~43 ha of Sitka spruce to facilitate access and reduce future windblow risk.



Map 3: FES proposed felling of spruce and larch

The discovery of *P ramorum* and the subsequent extensive felling had significant effects on the community acquisition, Nonetheless the community felt strongly that they should continue to pursue the acquisition of the whole forest as this presents the greatest potential for long term economic regeneration and development. As this was unsuccessful CCW now wish to purchase a smaller area of forest, in which the Larch, at their request, has been left standing, enabling the community to fell the Larch, providing a source of wood/income to the community.

¹¹ FLS reported that the contract quantity for the thinning (across the whole forest) was 12,247 tonnes, but only 7,101 tonnes was actually felled (The difference was due to areas of poor/checked crop which were not viable to thin or areas of soft/wet ground which the machines could not access).

3.3 Carsphairn

Muirdrochwood is ~ 4km ESE of the village of Carsphairn, along the B729, and is at the south-eastern edge of the Carsphairn Community Council area. Dumfries and Galloway Council estimate the population of the Community Council area as 186, the population spread between the village and across the wider Community Area¹².

Carsphairn is a rural community set in a beautiful part of Dumfries and Galloway, adjacent to the Galloway Forest Park and Dark Sky Park and within the UNESCO designated Galloway and Southern Ayrshire Biosphere which is recognised as a world class environment for people and nature. It lies near the northern boundary of the Dumfries and Galloway area, equidistant from Ayr and Castle Douglas. The nearest substantial settlements are St John's Town of Dalry (pop 400¹³) 10km and New Galloway (pop 340) both to the south of the forest, Moniaive (pop 500) 17km to the east of the forest and Dalmellington (pop 1,390) 15km NW of Carsphairn¹⁴. Outside the main settlements, population density is low, with scattered houses and occasional hamlets. There are a few houses adjacent to Muirdrochwood.

Carsphairn is part of a large, rural data zone which is just below mid-ranking in Scottish index of Multiple Deprivation. There is considerable variation in the scores for component elements: the area is in the 8th decile for health, education/skills and crime, but in the lowest 1% (61st of 6976 zones) for geographic access. Employment patterns have changed significantly: Hill farming employed 26 shepherds locally in the 1970s and by the 1980's over 40 people were employed locally in forestry: the figures now are one and two respectively. The expansion of windfarms locally - there are now 3 operational and three more approved – has not provided jobs: there are currently no locals employed in the renewables sector.

Community activity (see 3.3.2 and 3.3.3 below) has successfully saved some basic community infrastructure, but the lack of local employment opportunities has resulted in an ageing population and threatens the sustainability of the village: the primary school has now been mothballed due to insufficient numbers of pupils.

3.3.1 Local Policy background

Dumfries and Galloway Council relaxed planning regulation to allow the purchase of land for creation of small holdings in an attempt to attract young families to the area, but a lack of employment opportunities has meant few young people have been able to buy these holdings.

The new Dumfries and Galloway Local Development Plan (2019)¹⁵ includes a number of policies and objectives which are relevant to CCW's plans for Muirdrochwood, including:

- **OPI(f): Sustainability.** Development proposals should limit the impacts of climate change, support resilience, and promote sustainable development by: assisting the development of the local economy through sustainable economic growth; supporting reduction in carbon emissions through: passive aspects of design, including consideration of: location, layout, orientation, massing, materials, detailed design, topography, and vegetation; and supporting sustainable technologies by requiring that all new buildings demonstrate that a proportion of

¹² <http://info.dumgal.gov.uk/CommunityCouncils/Home/Detail/47>

¹³ <http://theglenkens.org.uk/index.php/about-the-glenkens/the-glenkens-villages/st-john-s-town-of-dalry>

¹⁴ Mid-2012 population estimates of Moniaive and Dalmellington from <https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/special-area-population-estimates/settlements-and-localities/mid-2012/list-of-tables> (table 3a)

¹⁵ <http://www.dumgal.gov.uk/LDP2>

the carbon emissions reduction standard, set by Scottish Building Regulations, will be met through the installation and operation of low and zero carbon generating technologies.

- **ED2: Business Development and Diversification in the Rural Area.** Proposals which expand existing businesses or create new ones in the rural area will be considered favourably subject to other policies in the Plan. Sites outwith settlements may be acceptable where they offer opportunities to diversify an existing business, or are related to a site specific resource or opportunity.
- **ED9(a): Tourist Attractions and Recreational Facilities.** The Council will favourably consider the development of indoor and outdoor tourist attractions and recreational facilities.
- **ED9(b) Tourist Accommodation.** The Council will support the provision of a range of serviced and non-serviced tourist accommodation subject to other policies in the Plan.

The Dumfries and Galloway Forestry and Woodland Strategy (2014)¹⁶ has the vision of “Developing the region’s forests and woodlands for the benefit of all, promoting economic development and healthy communities, enriching cultural heritage, landscape and the natural environment.”

Theme B Woodlands and Sustainable Growth includes the following policy objectives:

- Promote greater use of sustainable construction using local timber and supporting greater added value to local forest products,
- Support forestry employment and skills development, and
- Further develop and enhance forestry related tourism

And the following key action:

- Encourage and support greater private sector provision of both forest based tourism facilities and associated support services such as accommodation

Theme C: Woodlands and Climate Change includes the following policy objectives:

- Encourage sustainable forest management practices and appropriate woodland expansion (including greater diversity of the woodland resource) to mitigate the effects of Climate Change, and
- Encourage effective development of renewable energy from forests in the form of biomass woodfuel and the integration of appropriate renewable energy schemes within forests and woodlands

Theme D: Woodlands for People includes the following policy objectives:

- Encourage and promote the use of forests and woodlands to improve health and wellbeing in a variety of ways
- Encourage and promote the use of forests and woodlands for outdoor learning
- Increase the opportunities for access and links to and enjoyment of forests and woodlands by all sectors of society, particularly by ... promoting community development and participation in woodland management

This suggests that there is strong policy support from Dumfries and Galloway Council for CCW’s proposals.

Muirdrochwood lies within the Galloway and Southern Ayrshire Biosphere, and CCW has signed up to the the Biosphere Charter to endorse the sustainable nature of the project and make contact with both the Biosphere staff and participating businesses. Details of the application are contained Appendix I.

¹⁶ https://www.dumgal.gov.uk/media/17433/Dumfries-and-Galloway-Forestry-and-Woodland-Strategy/pdf/Forestry_and_Woodland_Strategy_April_FINAL1.pdf

3.3.2 Carsphairn community activity

Carsphairn is a small but vibrant community with a number of active community organisations, several of whom own and manage assets (see 3.3.3 below). The Community Council is very active in responding to local issues such as wind farm applications and road conditions. The community website, www.carsphairn.org is maintained by members of the community and details all the activities and groups, along with useful information for visitors such as details of leisure opportunities (such as astronomy and hillwalking), local history, maps, nearby facilities, as well as giving access to planning applications and active forestry grants and licences.

Other notable local organisations include the Carsphairn Pastoral and Horticultural Society, founded in 1875 to promote the agricultural produce of the Parish, which organises an annual show held on the first Saturday in June. The Carsphairn Renewable Energy Fund Ltd¹⁷ (CREFL) is a company set up to administer community benefit funds given annually to Carsphairn by the owners of Windy Standard and Wetherhill windfarms and is anticipated to be a valuable source of funds for projects and Muirdrochwood.

A Resilience Group has been set up to help the community work together to develop robust arrangements for dealing with incidents. The group was instrumental in helping during the village flooding of 2015/16 and has sourced emergency supplies for the community such as sand bags, torches and blankets. Two community defibrillators have been acquired, one kept by the shop, the other in Lagwyne Hall, with many community members having received training to use them.

3.3.3 Carsphairn community assets

Community ownership of assets is not a new idea in Carsphairn: the community have acquired or established several assets over the years:

- The Carsphairn Heritage & Craft Centre was built in 1992 and is run by the Carsphairn Heritage Group (a charitable company and currently undergoing community acquisition from the Council)
- The Carsphairn Shop & Tearooms has been community owned since 1995 when a Community Council steering group raised the funds to purchase the premises. A company, Carsphairn Village Shop Ltd (CVSL), was formed to manage the shop, which is leased to tenants.
- Lagwyne Hall, Carsphairn's village hall, is situated opposite the Heritage Centre. The hall is available to hire and hosts a very wide range of community activities. Facilities include a well-equipped kitchen, lounge area, a large hall with marked badminton court, a curtained stage and toilets. The post office is run once a week from the hall. The hall is WiFi enabled and an air to air heat system keeps it at a comfortable temperature year-round.
- The Carsphairn Community Garden was opened in 2011 after a group of dedicated volunteers, aided by the Community Council, transformed an area of derelict land in the heart of the village. The garden has picnic benches and a great view of the hills with a viewpoint board at the top of the garden and is well used by the school, by locals and by visitors passing through.

3.3.4 Carsphairn Community Trust

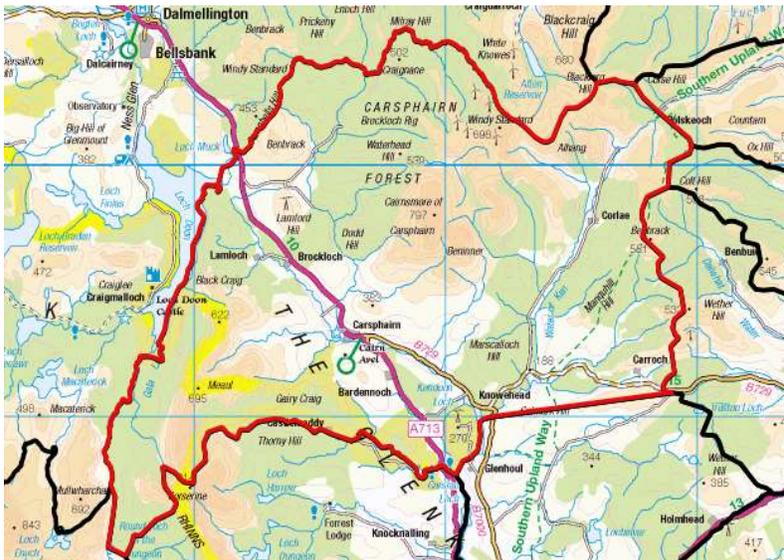
Carsphairn Community Trust (CCT) is a Scottish Charitable Incorporated Organisation (SCIO) registered on 10 October 2013. CCT is a single-tier SCIO and was initially established to work with other community groups to develop a Future Plan, providing a framework for identifying and

¹⁷ <http://carsphairn.org/CREFL>

prioritising projects to be funded with wind-farm community benefit funding. CCT's area of operation is the Carsphairn Community Council area as shown in map 4 below.

CCT's constitutional purposes are:

- The making of educational grants to persons ordinarily resident or employed or self-employed in the Area of Benefit
- The creation of and improvement of existing facilities in the Area of Benefit to encourage community association and recreation
- The creation and improvement of existing facilities in the Area of Benefit to assist young persons, the elderly and disabled to participate in community activities
- The promotion of environmental protection
- The co-operation with charities registered under Charities and Trustee Investments (Scotland) Act 2005 which carry out similar purposes in areas which adjoin the Area of Benefit.



Map 4: Carsphairn Community Council / CCT membership area¹⁸

As a single-tier SCIO CCT is not eligible to use the Asset Transfer provisions of the Community Empowerment (Scotland) Act 2015. A new community organisation, Carsphairn Community Woodland Ltd, was therefore established to take forward community acquisition of Muirdrochwood, detailed in section 3.4 below.

3.3.5 CCT Communication and Community Engagement

CCT has a webpage¹⁹ as a section of the Carsphairn community and post updates to the Carsphairn Facebook page²⁰. The group carried out a number of specific communication and community engagement activities during the planning and development phase of this project.

¹⁸ from Dumfries and Galloway Council website <http://www.dumgal.gov.uk/index.aspx?articleid=15979&cc=Carsphairn>

¹⁹ <https://www.carsphairn.org/CCT>

²⁰

https://www.facebook.com/Carsphairn/?hc_ref=ARSUijXZaVEOY5vn5uHYnra0HACW8BjffB2YxfMUo0_huS5Cbtg4q_w_OuK5FjdMNgy4&fref=nf

The Carsphairn Future Plan was produced in 2015²¹. This aimed to show how the community of Carsphairn would like to see the area developed in the coming years, to prioritise particular projects and indicate where wind farm community benefit funding could be directed.

CCT worked with the Stewartry CVS to develop a 51-question survey covering 5 key themes: housing, employment, transport, education and community safety which was distributed to all 165 on the electoral roll. 80 questionnaires were completed and returned (48.5%).

The highest scoring projects were a broadband upgrade and renewable energy. Community woodland was scored positively (60% of respondents), and additionally community acquisition of woodland could deliver several other higher rated priorities including tourism, community housing, environmental projects and outdoor recreation.

Following the notification of the sale of Muirdrochwood, CCT carried out a community survey to establish whether there was local support for further investigation of a community acquisition. The survey included a map of the woodland area, a brief covering letter outlining the opportunity arising from FES's repositioning programme and noted some of the benefits that other community groups have derived from acquiring and managing woodland²².

The survey had three yes/no questions

- Do you support the idea of a Community Woodland project for Carsphairn?
- Would you be interested in becoming a Member of a Community Group that manages the woodland?
- If the opportunity to be on the board of a Community group that manages the woodland arose, would you consider becoming a Director?

56 responses from 33 addresses were received – 39% of the population responded

	Woodland	Membership	Directorship
Yes	40	32	13
No	13	21	39
Neutral	3	3	4

Table 4: Woodland survey responses

In October 2017 CCT were awarded £10,000 Stage 1 funding by the Scottish Land Fund to enable the production of this business plan, as well as a contribution to the costs of the valuation and the community consultation.

A public consultation event was held at Lagwyne Hall on 5 October 2018, attracting a total of 58 visitors. The event ran from 1pm to 7pm, featured display boards with maps and photos outlining CCW's initial proposals for the forest. Nine of the CCW Board were available to discuss these proposals with members of the community, who were invited to join CCW if they had not already done so and complete the woodfuel survey. A fuller report on this event is included as Appendix 2.

During the development of this project CCT/CCW directors have looked at other community woodland groups both through various websites and visits – NW Mull Community Woodland was visited in 2014 and a talk by the group attended locally in 2016, Kilfinan was visited in June 2018 utilising the Scottish Community Alliance's Community Learning Exchange Programme and Abriachan and Aigas in October 2018 through the Community Woodlands Association

²¹ Available from <https://www.carsphairn.org/CCT>

²² Results available at http://carsphairn.org/docs/CCWL/Community_Woodland_Results.pdf

Conference. Further contacts were made at the Scottish Rural Parliament in November 2018. These contacts and experiences have helped shaped the direction and content of the project.

The unsuccessful attempt to acquire the whole of Muirdrochwood was a blow to the community for the potential it would have given to help regenerate the community. However, the membership realised there was still an opportunity to contribute towards regeneration, albeit in a smaller way, through acquisition of a smaller area, requiring less significant funding, that would be acceptable to the Scottish Land Fund. 23 members (including Five Directors) agreed to go forward and look at this possibility after the AGM in October 2019. CWA were commissioned to review the potential of such an acquisition in order to enable the members to assess the potential.

At the EGM of 29th October two resolutions were put:

Resolution 1: That Carsphairn Community Woodland pursue the potential acquisition of the two small compartments (approx. 49ha) of Muirdrochwood that adjoin Kendoon Loch/Water of Ken for the benefit of the community.

Or:

Resolution 2: That Carsphairn Community Woodland sits dormant for the foreseeable future in readiness for the eventuality of another suitable woodland project becoming available to the community.

The result of the EGM were that 14 members voted for resolution 1 and no members voted for resolution 2. It was therefore agreed to pursue acquisition of the smaller area.

3.4 Carsphairn Community Woodland Ltd

As noted previously, whilst much of initial preparation work was undertaken by CCT, the Trust is not eligible to use the Asset Transfer provisions of the Community Empowerment (Scotland) Act 2015. Carsphairn Community Woodland Ltd,²³ was therefore established in 2018 to take forward the community's woodland acquisition proposals.

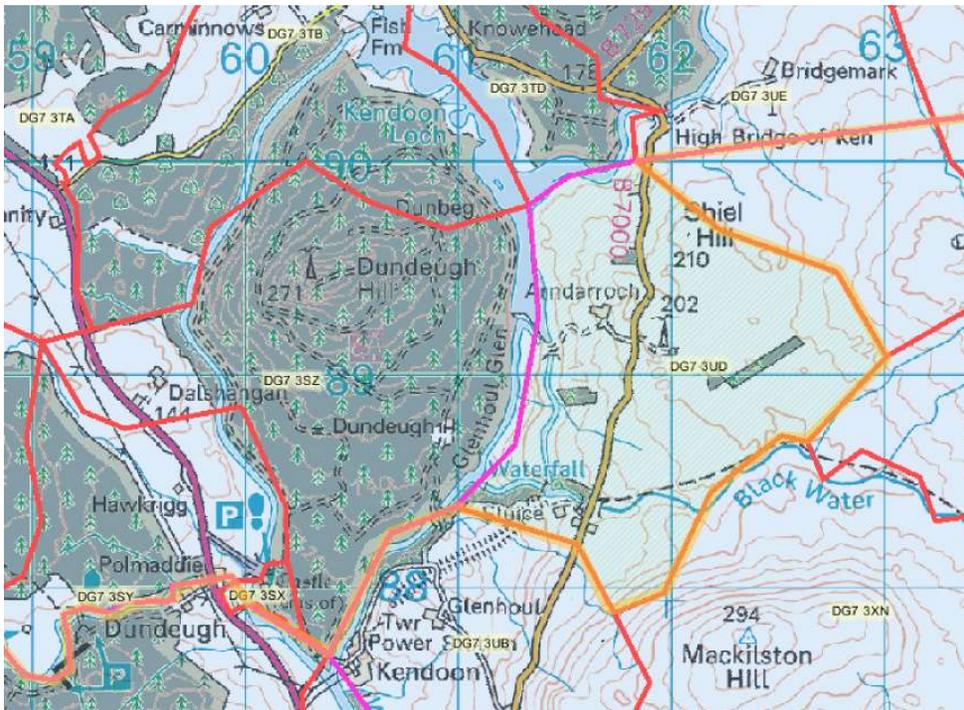
CCW's defined community area is the Carsphairn Community Council area (as per CCT) and additionally the area covered by the postcode unit DG7 3UD, which includes a few houses outwith the Community Council area which overlook the forest. On the map below the pink lines are community council boundaries, the red lines are boundaries of postcode units.

The CCW constitution has been drawn up using the model template for Asset Transfer provided by the Scottish Government²⁴ and is available online from the Companies House website²⁵. The constitution is intended to meet the requirements of the charity test and it is intended to seek charitable status before finalising the acquisition. As of 14th November 2019 CCW has 30 members.

²³ Company Number SC591976, incorporated 20 March 2018

²⁴ <https://beta.gov.scot/publications/asset-transfer-model-documents/>

²⁵ <https://beta.companieshouse.gov.uk/company/SC591976/filing-history>



Map 5: Postcode unit DG7 3UD²⁶

3.4.1 Purposes

The purposes of CCW are as follows:

- To manage community land and associated assets for the benefit of the Community and the public in general.
- To advance citizenship and community development, including rural regeneration, through the encouragement of voluntary activity, increasing the involvement of individuals in community activity, the improvement of the physical, social and economic infrastructure and by assisting people who are at a disadvantage because of their social and economic circumstances.
- To provide or advance the accessibility of recreational, facilities, and/or organising recreational activities, which will be available to members of the Community and public at large with the object of improving the conditions of life of the Community.
- To advance the provisions for educational opportunities in the Community relating to environment, culture, heritage and/or history.
- To advance environmental protection or improvement including preservation, sustainable development and conservation of the natural environment, the maintenance, improvement or provision of environmental amenities for the Community and/or the preservation of buildings or sites of architectural, historic or other importance to the Community.

3.4.2 Board of Directors

CCW's constitution specifies that the minimum number of Directors is five, the maximum ten, and that the majority of Directors shall be ordinary members. There are currently five Directors – brief biographies are contained in Appendix 3.

²⁶ Map from SG Rights to Buy mapping tool <http://crtb.sedsh.gov.uk/crtb/> Pink lines are Community council boundaries, red lines postcode units. Orange line is CCW boundary, green hatched area shows area covered by DG7 3UD

4 The CATS process

The Muirdrochwood block was identified for disposal by FES as part of the then named Repositioning Programme²⁷. The local community was, along with other stakeholders, informally advised of the forthcoming sale in July 2016 and formally notified of the intention to dispose of the property in October 2016.

CCT registered an interest in acquiring Muirdrochwood on 14 October 2016.

FES responded on 18 November 2016, advising the community that FES was developing a new scheme for asset transfer to comply with the requirements of the Community Empowerment Act and build on the National Forest Land Scheme, which closed in the summer. The new Community Asset Transfer Scheme (CATS) would be launched when the asset transfer regulations came into force, subject to approval by the Scottish Parliament, on 23 January 2017.

The woodland survey carried out in the community early in 2017 showed 71% of respondents were in favour of the acquisition of Muirdrochwood.

CCT issued an invitation to tender for a Feasibility study and Business plan in April 2017. Two responses were received.

CCT's initial application for stage one funding from the Scottish Land Fund was refused as only two tenders had been received, and they had significant divergence in the amounts quoted.

The Invitation to Tender was reissued in July 2017, stage I funding was forthcoming on this occasion and the Community Woodlands Association was confirmed as CCT's consultant in October 2017.

Later in 2017 FES discovered that larch stands in the forest were infected with *P ramorum* and determined that this necessitated significant felling both of larch and Sitka spruce, to facilitate access, mitigate windblow and increase the financial return from harvesting.

Muirdrochwood is within the SW Scotland *P. ramorum* Management Zone, however because the area of spruce to be felled exceeded the thresholds permitted, FES had to seek permission from FCS for felling.

This felling was completed in March 2019, allowing CCW to proceed with their acquisition proposal. FLS approved the sale of the forest to CCW through the CATS process (decision notice dated 3 May 2019²⁸).

CCW's funding bid to the Scottish Land Fund was unsuccessful (letter dated 29 August 2019)

CCW are therefore now pursuing the acquisition of a smaller area of forest.

²⁷ Now known as the New Woodland Investment Programme

²⁸ <https://forestryandland.gov.scot/images/corporate/pdf/cats-asset-requests/muirdrochwood/CATS-Muirdrochwood-Decision-Notice.pdf>

4.1 Draft Plan

CWA produced a draft plan for CCT in February 2018. This compiled background information on the woodland and contained two very significant chapters addressing initial issues

4.1.1 Options appraisal of governance models and recommendations

This chapter explained the requirements of the CATS process and the Scottish Land Fund, compared the Asset Transfer and Community Right to Buy models, outlined the three governance forms (Company Ltd by Guarantee, Scottish Charitable Incorporated Organisation, Community Benefit Society), gave a briefing on charitable status and tax, trading subsidiaries and provided recommendations including notes on detailed constitutional aspects.

4.1.2 Appraisal of acquisition and development options

This chapter appraised the options for acquisition: whether CCT should seek to acquire the entire forest or to concentrate on developing an Asset Transfer Request for a smaller area of woodland. The land (and other) demands of various possible projects and initiatives were considered, to illustrate which require a whole forest acquisition and which could be equally well delivered in a relatively small area. Finally the prospects for a successful funding bid for acquisition of the entire forest and the likelihood of a positive cashflow from forest management in the short to medium term (5-10 years) were assessed.

4.2 Valuation

The forest was valued by the District Valuer, jointly instructed by FES and CCT in April 2018, whilst FES felling operations were in progress, with the valuation intended to reflect the situation once felling was complete (i.e. with substantial bare land awaiting restocking).

The forest was valued in three lots, with the methodology relying heavily on evidence from other sales of plantations and bare land. A deduction of £200,000 was made to cover the estimated cost of restocking; this was applied on a pro rata basis from the valuations for each Lot.

The DV's valuation is as follows:

Lot 1 (The main part of the plantation, to the north of the B7000 and the B720) £1,280,780

Lot 2 (The southern block, between the B7000 and Kendoon Loch) £57,550

Lot 3 (The remaining areas, north of the B7000 and east of the B729) £63,590

Total £1,401,920

The forest was re-valued in May 2019 (when timber prices were at a high point), giving an increased valuation of £1,860,000, representing a 33% increase in value in just over a year. Unfortunately the second valuation was not on exactly the same basis as the first so direct comparisons are difficult but the increase seems to have been highest for the areas of birch and mixed broadleaves.

A further valuation was instructed for the reduced area. Our estimate of the likely valuation is in the range £300,000 - £360,000.

4.3 Community decisions

CCW have prioritised some key projects for delivery in the first five years, and to create a further list of projects and initiatives to be developed when capacity and finances allow.

The priority projects are discussed in section 5 below, and include:

- Woodland management operations (harvesting larch and spruce crops)
- Recreation infrastructure
- Community building and volunteering development
- Woodfuel provision
- Tourist accommodation

Costings have been provided for these priority projects.

The future projects are discussed briefly in sections 6 and 7 below, and include

- Rural skills provision
- Affordable housing
- Woodland burials
- Non-timber forest products
- Health initiatives

Costings have not been provided for these projects in this plan.

5 Development Plan

The acquisition and management of Muirdrochwood to deliver the intended community benefits will entail a number of managerial and practical tasks, which have been grouped into the following workstreams:

1. Community Acquisition
2. Management and Governance Systems
3. Community Forest Manager and Forest Worker
4. Forest Management Planning
5. Forest Management Operations
6. Recreation infrastructure
7. Community Building and Volunteer Development
8. Woodfuel & wood products
9. Tourist accommodation

5.1 Community Acquisition

Acquisition of the forest will take place via FLS's Community Asset Transfer Scheme²⁹, which follows the provisions of part 5 of the Community Empowerment (Scotland) Act 2015³⁰. The Asset Transfer Request (ATR) must state the price that the Community Body is offering to pay for the asset, this can be at market value as assessed by an independent valuer (see section 4.2 for fuller discussion) or at a lower amount, with the discount requested being justified in terms of the additional public benefit to be delivered.

CCW intend to request a discount of £80,000, based on the very high levels of public benefit expected to accrue from community ownership, management and development of the woodland. The justification for discount is contained in section 8 below.

It is anticipated that CCW will apply for the majority of the purchase price (and legal fees) to the Scottish Land Fund (SLF)³¹, which supports communities to become more resilient and sustainable through the ownership and management of land and land assets, and can fund up to 95% of eligible project costs.

£50,000 match funding for the acquisition has been obtained from CREFL (Carsphairn Renewable Energy Fund Ltd).

Once the acquisition is concluded a celebratory event will be held to publicise community ownership and promote opportunities for community members to get involved.

5.1.1 Valuation and estimated base purchase price

The revised valuation for the proposed acquisition area is not available at time of writing, nor is there confirmation of the level of discount that FLS will grant. The figures in the table below reflect our expectation of the maximum price, and the discount requested from FLS; in practice we expect the market value set by the DV to be lower, however this may be offset by FLS granting a lower level of discount than that requested.

²⁹ <http://scotland.forestry.gov.uk/managing/get-involved/community-asset-transfer-scheme>

³⁰ <http://www.gov.scot/Topics/People/engage/CommEmpowerBill>

³¹ <https://www.biglotteryfund.org.uk/scottishlandfund>

Item	£
Acquisition cost (assumed maximum)	360,000
Discount requested	-80,000
Legal fees	6,000
Total	286,000
Scottish Land Fund	236,000
Local fundraising (CREFL)	50,000
	286,000

Table 5: Acquisition costs and income

5.2 Management and Governance Systems

Post-acquisition, responsibility for management of the woodland will be vested in the Board of the CCW, which will establish appropriate management and governance systems. Decisions will be made collectively, however individual Board members will be identified to lead on specific areas.

The Board will elect a Chair, Treasurer and Secretary from amongst their number. One of the Directors will take on the role of Line Manager for the Community Forest Manager (see 5.3 below) and two additional roles will be established:

- Safety officer, responsible for ensuring appropriate insurances are maintained, oversight of risk assessments for activities in the woodland and compliance with relevant Health and Safety legislation.
- Communications officer, responsible for regular communication with the membership – e.g. via the body’s Facebook page

CCW will seek appropriate professional assistance to support the Board and Community Forest Manager as required. CCW is a member of the Community Woodlands Association (CWA) which provides advice, assistance and information to community woodland groups across Scotland. CWA organises training and networking events on a range of topics for member community groups, and through CWA’s membership of the Scottish Community Alliance, CCW will be eligible for the Community Learning Exchange, which supports community groups to visit their peers (and have already undertaken one such visit, to Kilfinan Community Forest Company). In addition to support delivered “in-house”, CWA operates a “mentor” scheme by which private sector foresters are available to give practical advice and support to CWA member groups on an ad-hoc basis. Additional advice on a range of topics including funding and volunteer management has been gained from Third Sector Dumfries and Galloway and Social Investment Scotland (SIS). Further advice may be available from the Stewartry Council of Voluntary Service³².

There will be a number of annual recurring costs associated with management and governance systems, such insurance and the preparation of annual accounts, as well as office costs, consumables and sundry expenses. These costs are estimated at £3,000 per annum, with some additional office setup costs in year 1.

The compulsory VAT registration threshold is currently £85,000 over a 12-month period. It is anticipated that VAT registration will be required for CCW. All figures in the budgets and cashflow below are net of VAT. For simplicity all costings are at current prices, i.e. there is no adjustment for inflation.

³² <http://www.stewartrycvs.org.uk/>

5.3 Community Forest Manager and Forest Worker

CCW will recruit a part-time (0.6 FTE) Community Forest Manager (CFM) to manage the woodland and deliver the CCW Business Plan. This will be a 5-year post, initially funded by a revenue grant from the Scottish Land Fund, and line-managed by a Director. A draft job description is included as Appendix 4.

The key responsibilities of the role will include:

- completing the Long Term Forest Plan and associated funding applications, and then implementing the plan;
- promoting and coordinating community involvement in the management of the woodland, and developing the woodland as a venue for community volunteering.
- tendering for and managing forestry and other contractors and coordinating sales of timber and firewood
- developing future projects e.g. tourism accommodation facilities or affordable housing

The CFM starting salary will be £28,000 pro rata, it is anticipated that this will be funded in the first year by a revenue grant from SLF, then from years 2-5 by revenue funding from other sources (e.g. South of Scotland Enterprise Agency, LEADER replacement fund, CREFL). The 25 year cash flow uses a conservative estimate that grant funding for 50% of CFM costs will be available from year 2, the remainder of costs being borne from project income.

From Year 6 onward the CFM post will be funded through the proceeds of income from other projects. In the 25-year cashflow this is currently at a reduced time commitment of ~0.4 FTE; based on income from projects that have already been costed, however CCW anticipate that future developments will ensure that the CFM post can be continued at at least the initial level of 0.6 FTE.

CCW will also recruit a part time (0.6 FTE) Forest Worker (starting month 4 year 1). The Forest Worker's responsibilities will include the processing and delivery of woodfuel (see section 5.8 below) plus a range of woodland management and maintenance tasks. If demand for woodfuel expands beyond the modest levels projected in this plan then the hours associated with this post could expand (potentially to full time).

The Forest Worker starting salary will be £20,000 pro rata, this will be funded from income from the forest primarily through the woodfuel business³³.

The Forest Worker will be line-managed by the Community Forest Manager.

Both posts will benefit from an annual cost of living uplift of 2%

CCW will establish a staff pension scheme and make an employer's contribution of 3% of salary.

The 25 year cashflow includes Year 1 recruitment costs of £1,500 and an annual T&S and training budget of £2,000.

Office space and welfare provisions for the Community Forest Manager and Forest Worker will be provided, initially in Carsphairn, moving into the new Community Building once it is available. (see 5.7 below).

³³ The Forest Worker post does not appear as a separate line in the 25 year cashflow for this reason, as employment costs are included in operational costs.

5.4 Forest Management Planning

There are a number of formal actions which will need to be taken post-acquisition to ensure access to Scottish Rural Development Programme (SRDP) grant schemes.

CCW will register with the Scottish Government Rural Payments and Inspections Directorate (RPID) to obtain an Business Reference Number (BRN), and then register Muirdrochwood with RPID and obtain a Land Parcel Identifier (LPID): this is a requirement for the SRDP.

Once registered CCW will apply to the SRDP Forestry Grant Scheme³⁴ for funding to prepare a Long term Forest Plan (LTFP)³⁵.

As noted previously a revised compartment and sub-compartment map and schedule has been drawn up, subdividing the proposed acquisition area into 3 compartments: see **CCW Muirdrochwood Map 2: species & cpts** (supplied separately) for details

5.4.1 CCW Forest Management Objectives

CCW's long term objectives are to create a forest with significant structural and species diversity that contributes positively to biodiversity and is of high amenity value.

In the short term the key objective is to harvest diseased larch stands and restock with a mix of broadleaved and conifer species.

In the longer term spruce stands will be progressively thinned (and eventually felled) to generate feedstock for the woodfuel business, and sawlogs for export to generate income which will support the maintenance of recreational and other facilities in the forest.

5.4.2 FES Forest Design Plan

As part of the process of acquiring the forest CCW will be required to adopt (temporarily) the current FLS Forest Design Plan, initially approved in 2013 but amended in 2017 after the identification of *P ramorum* infection to reflect the new harvesting plans: see **CCW Muirdrochwood Map 6: FLS restock plans** (supplied separately).

The 2017 Forest Design Plan for this portion of Muirdrochwood will be adjusted to better deliver CCW's objectives of a sustainable community woodland.

5.4.3 CCW Long Term Forest Plan proposals

CCW's forest design proposals are shown in **CCW Muirdrochwood Map 7: CCW restocking proposals** (supplied separately) and are intended to meet community objectives for sustainable forest management. They feature:

- Significantly increased area of broadleaves to cover 45% of the area to be acquired:
- Increased use of open ground to benefit biodiversity and amenity, to ~12% of the acquisition area.
- Greater connectivity of broadleaved stands and open space.

³⁴ <https://www.ruralpayments.org/publicsite/futures/topics/all-schemes/forestry-grant-scheme/woodland-improvement-grant/long-term-forest-plan/> The grant rate is £25 per hectare for first 200 hectares, £5 per hectare thereafter.

³⁵ An LTFP is not a formal requirement – woods under 100ha can produce a simpler Woodland Management Plan – but it is considered that it would be beneficial for CCW to prepare a LTFP.

- Retention of Sitka spruce as the primary timber species, but focussed on appropriate ground, and at a reduced overall percentage of 29% of the total area.
- A further 6.3 ha of mixed conifers (including Norway spruce and Douglas fir) will be planted on appropriate sites on lower slopes for timber and environmental (e.g. Norway spruce for red squirrel habitat) objectives.

Additional changes vis-à-vis FLS's plans

- FLS's proposed 8.4ha of lodgepole pine will not be used. Sitka (and other conifers) will only be planted where they will deliver productive crops (YC14+) without a nurse.
- CCW will not use Scots pine on unsuitable waterlogged sites.

Restocking will be achieved by a combination of planting and natural regeneration (primarily birch).

The table below compares the species breakdown by area in hectares and percentages of

- The acquisition area at present.
- FLS's future plan (mixtures have been assumed as 50/50)
- CCW's proposed Long Term Forest Plan

Species	current		FLS future		CCW future	
Sitka spruce	28.89	59%	14.0	28%	14.5	29%
Lodgepole pine			8.4	17%	0.0	0%
Douglas fir			3.2	6%	0.0	0%
Scots pine			2.7	5%	0.0	0%
Larch	4.88	10%	1.3	1%	0.0	0%
Mixed conifers			3.1	6%	6.3	13%
Birch	4.14	9%	0.0	9%	4.1	8%
Mixed broadleaves	6.23	13%	16.2	33%	17.8	37%
Open ground / RVR	4.56	9%	0.6	1%	6.0	12%
Total	48.70		49.5		48.7	
Total conifer	33.77	69%	32.7	66%	20.8	43%
Total broadleaf	10.37	22%	16.2	33%	21.8	45%

Table 6: comparison of species composition of FLS and CCW future plans³⁶.

NB percentages may not add to 100% due to rounding

5.5 Forest Management Operations

CCW's aspiration is to manage the woodland under a continuous cover system, however given the necessity of clearfelling diseased larch stands and the preponderance of single-age Sitka stands it is anticipated that this will only be fully delivered in future rotations.

Larch stands will be clearfelled as soon as practical, to ensure that as much timber value as possible is salvaged.

The Sitka spruce stand in the block adjacent to Kendoon Loch will be progressively thinned but not scheduled for clearfell.

³⁶ FLS figures based on approved planting plan, mixtures assumed at 50/50. Note that these figures add up to considerably more than the actual ground area.

Other spruce stands will be scheduled for clearfell over the next 30 years (with between 3.7 and 5ha to be felled per 5 year phase) and restocked with a range of conifers and broadleaves as detailed below

Existing areas of broadleaves will be maintained as long term retention, potentially with thinning operations to manage species mix and promote biodiversity and expanded as opportunity arise through natural regeneration and/or planting.

The small area in the southern block adjacent to the river and loch identified as Plantation on Ancient Woodland Site and currently occupied by mature larch will be restocked with mixed broadleaves, predominantly oak and hazel.

Open space is a key element of diversity within woodland. Over the course of the establishment of the next rotation open space within the main forest block will be increased to ~12% from the current 9%.

Woodland diversity and biodiversity value are enhanced by long term retention of older trees, deadwood retention and permanent habitat corridors. CCW will seek to:

- Develop a long-term forest structure of linked permanent habitats, such as riparian corridors, open space and broadleaves.
- Leave a proportion of standing and fallen deadwood in each forest management unit, with concentrations in areas of high ecological value,
- Where windblow and ground conditions permit, identify small stands of older trees for retention.

5.5.1 Harvesting operations – general

CCW's future harvesting plans will be subject to Scottish Forestry approval through the Long Term Forest Plan process. CCW's initial proposals are shown in **CCW Muirdrochwood Map 8: CCW felling proposals** (supplied separately).

Felling plans must conform to UK Forest Standard³⁷ requirements, e.g. "In forests characterised by a lack of diversity due to extensive areas of even-aged trees, retain stands adjoining felled areas until the restocking of the first coupe has reached a minimum height of 2 m; for planning purposes this is likely to be between 5 and 15 years depending on establishment success and growth rates."³⁸

Clearfell operations will predominantly be carried out by conventional mechanised means, with some small scale motor-manual (chainsaw) felling for path clearance and thinning.

In the 25-year cashflow it is assumed that clearfell operations take place in the first year of each five year phase, (with restocking in two years later) whilst thinning operations take place in the third and fourth year of the five year phase. In practice there is likely to be some variance depending on market conditions, machine availability and forest worker capacity.

³⁷ [https://www.forestry.gov.uk/pdf/FCFC001.pdf/\\$FILE/FCFC001.pdf](https://www.forestry.gov.uk/pdf/FCFC001.pdf/$FILE/FCFC001.pdf)

³⁸ UKFS p33

5.5.2 Harvesting operations – phase I (2020-2024)

Two blocks of Larch and a small area of sika spruce (which would otherwise be exposed on 3 sides and very vulnerable to windblow) will be clearfelled:

- 4.54 ha of larch: volume estimate for 2020 is 1600m³
- 0.50 ha of Sitka spruce: volume estimate for 2020 is 270m³

The larch is already showing symptoms of *P. ramorum* and felling will have to take place early in the 5 year period. Permission to fell these larch stands (and the adjacent spruce) was obtained by FES and will carry forward to CCW.

One small area of larch (not showing signs of infection earlier in 2019) does not appear on FLS maps and thus permission to fell has not yet been obtained. The area is currently inaccessible and will be felled in the second phase along with the surrounding spruce.

A further 14ha of Sitka spruce has been identified for thinning in the first 5 years: estimated volume to be harvested in 2023 is 1030m³.

5.5.3 Harvesting operations – future phases

Long term harvesting proposals are shown in **CCW Muirdrochwood Map 8: CCW felling proposals** (supplied separately). These may be subject to Scottish Forestry approval and amendment due to changing circumstances e.g. windblow.

Over the first 25 years CCW will fell 17.86ha of spruce and 4.88ha of larch, with an estimated volume of 10,740m³, as shown in the table below.

Plan period	Area of larch clearfell ha	Area of spruce clearfell ha	Estimated volume m ³
Phase 1 (2020-24)	4.54	0.50	1870
Phase 2 (2025-29)	0.34	4.50	1870
Phase 3 (2030-34)		4.16	2230
Phase 4 (2035-39)		4.04	2600
Phase 5 (2040-44)		4.66	2170
Total	4.88	17.86	10,740

Table 7: Estimated clearfell areas and volumes

Thinning operations will also be carried out where stand conditions allow and growth rates make it worthwhile. Estimated areas and volumes are shown in the table below. The area of spruce available for thinning declines through the plan period as stands are harvested.

Plan period	Area of spruce thin ha	Estimated volume m ³
Phase 1 (2020-24)	14.0	1030
Phase 2 (2025-29)	13.6	1000
Phase 3 (2030-34)	9.4	730
Phase 4 (2035-39)	9.4	730
Phase 5 (2040-44)	7.7	640
Total		4130

Table 8: Estimated thinning areas and volumes

Sawlogs from harvesting operations will be sold for processing in conventional markets. 300m³ of small roundwood per year (200m³ in year 1) will be retained for the woodfuel business. The anticipated breakdown of sawlog and woodfuel volumes, and the estimated income from sawlog sales is shown in table 12 below.

Plan period	Total volume	Sawlog volume m³	Sawlog income £	Woodfuel volume m³
Phase 1 (2020-24)	2900	1500	67500	1400
Phase 2 (2025-29)	2870	1370	61650	1500
Phase 3 (2030-34)	2960	1460	65700	1500
Phase 4 (2035-39)	3330	1830	82350	1500
Phase 5 (2040-44)	2810	1310	58950	1500
Total	14870	7470	336150	7400

Table 9: Estimated income from harvesting³⁹

5.5.4 Harvesting post 2044

After 25 years there will still be 11.03 ha of the current Sitka crop remaining, with an estimated standing volume of 5,331m³. 4.00ha of this will be clearfelled in the period 2045-50, with the remaining 7.03ha forming a long term retention.

Regenerated and planted stands from the post 2020 restocking will be available for thinning from 2045, enabling a continuing supply of timber from the forest.

5.5.5 Restocking

CCW will seek to restock using a mix of planting and natural regeneration. A range of both broadleaved and conifer species, matched to site conditions, will be employed to deliver CCW's varied objectives for the woodland. Detailed restocking plans will be drawn up in consultation with Scottish Forestry during the Long term Forest Plan process.

Natural regeneration is likely to be predominantly birch (and in some places Sitka spruce). Whilst this species mix is sub-optimal from amenity and biodiversity perspectives, utilising natural regeneration has significant advantages, notably in terms of reduced cost (plants, planting, maintenance, deer management) at the beginning of the rotation, which more than outweigh any additional costs of cleaning and thinning overstocked stands later on.

Natural regeneration also potentially facilitates at least some site occupancy quicker than waiting for planting – harvesting will have significant visual impacts and the sooner some of the felled ground “greens up” the better. Areas where natural regeneration is not apparent after year 3 will be planted.

Broadleaved planting will be informed by site suitability: information on the SF Map Viewer suggests the proposed acquisition area is very suitable for NVC W4 (birch) and W9 (ash-rowan) woodland, with small areas of W11 and W17 (oak-birch) woodland at the lowest margins.

Riparian corridors will be restocked at low density with native broadleaves: willow, alder, birch, rowan, with small numbers of e.g. hazel, holly in fertile pockets.

³⁹ Net sawlog income based on £40/m³

Fruiting and flowering trees and shrubs, including crab apple saplings, will be planted at appropriate sites to improve the biodiversity and amenity value of the forest.

Planting of ash is currently inhibited by the threat of Chalara dieback but CCW will plant ash if resistant stock becomes available.

Remaining areas will be restocked with a range of conifer species for timber production, including : Norway spruce (good for red squirrels), Douglas fir and Sitka spruce. Conifers will not be replanted in blocks where Yield Class is anticipated to be below 12.

A small area with good access will be identified for planting mixed conifers at high density to produce some Christmas trees for the local market⁴⁰.

A restocking grant rate of £1400 has been assumed for the initial felling of larch stands infected with *P. ramorum*⁴¹.

For future harvesting areas a restocking grant rate of £550 felled ha has been estimated⁴².

5.5.6 Protection of restock

Red and roe deer are present within the forest, and deer management effort by FES to date has been limited. Deer present a significant threat to successful restocking, and control and/or exclusion will be required.

Ring-fencing the whole woodland is not a viable option, neither is comprehensive internal deer fencing around all felling coupes. Temporary plastic fencing around small areas of vulnerable planting (e.g. broadleaves) may be more cost effective and will be trialled. Tree tubes will be employed for more vulnerable broadleaved tree species.

Deer culling within the reduced area of forest will be difficult. CCW will seek to work collaboratively with the new owners of the remainder of Muirdrochwood (who will have a very substantial restock obligation and thus a high incentive to control the deer population) and other neighbours to reduce deer numbers throughout the local woods. High footfall in the forest will also act as a deterrent.

5.6 Recreation Infrastructure

Developing and enhancing safe public access is a key component of community management, both to ensure that the health and amenity benefits of woodland recreation are available to as much of the community as possible, and to broaden community engagement with, and sense of ownership of, the site: this is seen as essential to the long-term flourishing of community ownership and management.

⁴⁰ The nearest current sources are Ayr/Castle Douglas shops or Kirkgunzeon for locally grown trees (<https://www.scottishchristmastrees.co.uk/>).

⁴¹ This reflects the current Forestry Grant Scheme rate for restocking after harvesting infected stands <https://www.ruralpayments.org/publicsite/futures/topics/all-schemes/forestry-grant-scheme/tree-health/>

⁴² This reflects the current Forestry Grant Scheme rate for restocking delivering diverse and resilient woodland <https://www.ruralpayments.org/publicsite/futures/topics/all-schemes/forestry-grant-scheme/woodland-improvement-grant/restructuring-regeneration/>

Whilst there are an increasing number of long distance waymarked walking routes in Scotland (including the Southern Upland Way a few km east of the forest), in practice most recreational visits to woodlands (and other greenspace) are of a relatively short distance and duration.

The main public entry (and car parking) point will be at the current hard standing site in FLS cpt 7800, which is where the works to develop recreation infrastructure will be focussed.

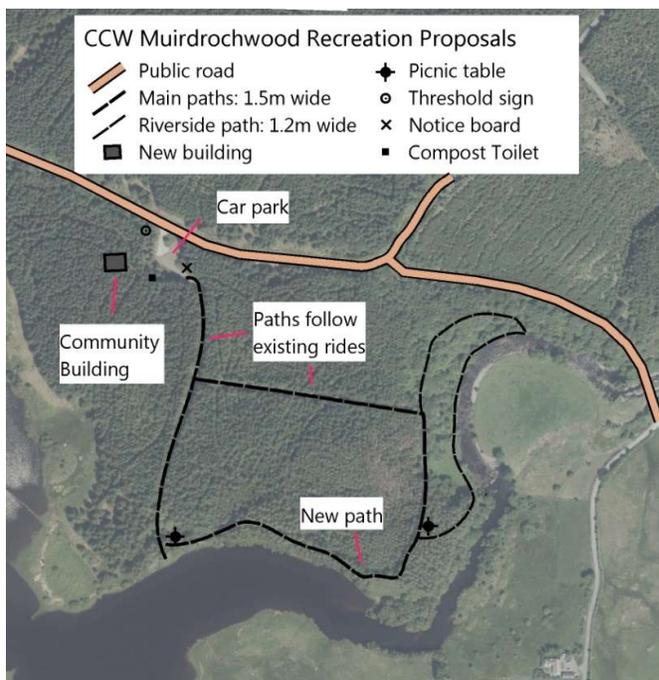
As the wood is remote from local communities, visitors will primarily arrive by car or bicycle, so road access, signage and adequate parking is required. Visitor experience and numbers will be enhanced by facilities: benches, picnic areas, toilets.

The other blocks (north east of the B7000) will not be developed for recreation in the initial period, although there will be some path works associated with tourism accommodation and other development projects.

5.6.1 Proposed works

There will be some surfacing (blinding and rolling) work to enhance the existing timber loading area to improve the surface and facilitate use as a carpark (approximate area 500m²).

A threshold sign will be installed at the roadside, and a welcome sign / noticeboard adjacent to the carpark. A compost toilet will be constructed adjacent to the carpark.



Map 9: recreational works (NB does not show location of benches, waymarkers etc)

Path construction works will be in three parts:

- Car park to loch: 300m long, 1.5m wide, following the line of the existing overgrown track to the loch with unbound rolled surface to Scottish Rural Development Programme (SRDP) Improving Public Access specification⁴³.

⁴³ <https://www.ruralpayments.org/publicsite/futures/topics/all-schemes/agri-environment-climate-scheme/management-options-and-capital-items/new-path---unbound-surface/>

- Main loop: 720m long, incorporating a section of the existing ride running east-west, 1.5m wide with unbound rolled surface to Scottish Rural Development Programme (SRDP) Improving Public Access specification as above.
- Riverside path: 500m long, simple path 1.2m wide with unbound rolled surface⁴⁴, incorporating the (overgrown) line of an old riverside path.

2 Picnic tables and 4 simple bench seats will be installed at various points lochside, riverside and in the big larch area and waymarking will be provided by 10 (est) treated and routed timber waymarker posts.

The Glenkens Red Squirrel group have funds available from the Galloway Glens Project to install hides with cameras and they have indicated they are keen to do so in this woodland.

5.6.2 Costs & Delivery

The cost of the package of works outlined above is estimated at around £53,780 (see table below). Estimates for most items have been based (with some rounding) on the standard costs used for the SRDP Improving Public Access⁴⁵ scheme.

In practice costs can vary significantly from the standard: remote sites and challenging ground conditions can greatly increase path building costs, whilst access to volunteer labour, as anticipated here, allows delivery at lower cost, and it is anticipated that these proposals will be delivered significantly under budget.

5.6.3 Funding

The majority of the path works are designed to be eligible for SRDP Improving Public Access funding, although it is noted that the future of this scheme is unclear given Brexit. Other potential funders for elements of the works include Awards for All Scotland⁴⁶, Paths for All community grants⁴⁷, UK Shared Prosperity Fund / LEADER replacement.

Item	year	length	width	unit	cost/unit	£
Carpark resurfacing	2			1	5,000	5,000
Composting toilet	1			1	5,000	5,000
Path S block 1	2	320	1.5	480	18	8640
Path S block 2	3	720	1.5	1,080	18	19,440
Path S block 3	4	500	1.2	600	18	10,800
Threshold sign	1			1	300	300
A2 welcome and notice board	2			1	1,500	1,500
Picnic tables	2/4			2	700	1,400
Simple bench seats	2/4			4	350	1,400
Waymarkers	2/4			10	30	300
Total						53,780

Table 10: recreation infrastructure costs

⁴⁴ NB alternative construction / surfacing may be needed on riverside section to prevent flood damage

⁴⁵ <https://www.ruralpayments.org/publicsite/futures/topics/all-schemes/agri-environment-climate-scheme/management-options-and-capital-items/improving-public-access/>

⁴⁶ <https://www.biglotteryfund.org.uk/awardsforallscotland>

⁴⁷ <http://www.pathsforall.org.uk/pfa/support/community-path-grants.html>

5.6.4 Maintenance and monitoring

Maintenance of paths and other recreational infrastructure will be the responsibility of the volunteer groups (see section 5.6). The 25-year cashflow includes an annual sum equivalent to 5% of the infrastructure cost for maintenance. Regular inspections will be carried out to ensure any issues are noted and dealt with timeously. CCW will seek to install people counters to quantify recreational use of the forest. Other community woodlands have done this in conjunction with e.g. local colleges who have designed and built counters as projects.

5.7 Community Volunteer Development

CCW will establish a community volunteering hub and actively develop and promote opportunities for volunteer activities in the woodland and hosting community groups and rural skills training.

Voluntary involvement is a key component of the sometimes intangible community development benefits arising from community asset ownership. Whilst some forest management in the woodland will necessitate the use of appropriately skilled and qualified professional contractors, many activities have the potential to be carried out by volunteers, overseen by the Community Forest Manager and other individuals with appropriate training and experience.

5.7.1 Community Forest building

CCW will install a community building to be located adjacent to the main car park⁴⁸. This will incorporate office space, toilets and volunteer space and will include storage for forest machinery and tools and a drying area for woodfuel.

The construction will be a 60 x 30 foot portal frame building. An open-fronted roofed area will run the length of the building to provide a drying area for woodfuel and storage for large machinery.

The estimated building cost is £54,730 plus electric supply, based on a quote from a local contractor. Electricity costs are estimated based on mains supply but there may be cheaper options such as a generator or woodfuel (or other renewables).

Groundworks, water storage for fire-fighting and survey planning work have been costed as per the table below. It is recognised that costs are subject to planning determinations and may change as the proposal is developed.

Item	£
Main building 60' x 54' (18 x 16m)	54,730
Ground works and access	25,200
Electricity	20,000
Portacabin for office	5,000
Grey water supply	5,000
Fire-fighting supply	5,000
Planning, Building Warrant, Site Investigation, Topo Survey, etc	5,000
Total	119,930

Table 11: Community building cost estimates

⁴⁸ See Map 9 above for indicative location. Actual location is subject to planning and more detailed site investigations re servicing logistics.

Office space will be provided by a portacabin to be located inside the building. Office set-up and running costs have been included in the Community Forest Manager budget. It is estimated that the office portacabin will require replacing in year 15 and there is provision for this in the 25 year cashflow, along with maintenance costs of 10% of construction cost at 5 yearly intervals.

5.7.2 Volunteer development

Key tasks in the woodland will include tree planting and path maintenance, but a broad range of activities would be available for volunteers of all ages and abilities, including environmental monitoring and survey work, along with a range of demand-led workshops.

The opportunities for involvement, whether as a group member, a volunteer or a user of the facilities, will be promoted on CCW's website / Facebook page, and also via contributing stories / pictures to local newspapers when events take place in the woodland.

The volunteer group will be based in a portacabin sited within the forest building (NB this is a different cabin from that used which will be used as the CCW office). CCW will equip the cabin (heater, chairs, crockery, first aid kit etc) and acquire appropriate tools and personal protective equipment (PPE) for volunteers.

Item	£
Portacabin	5,000
Kitting out	500
Hand tools	1,000
PPE	500
Total	7,000

Table 12: Community volunteering setup costs

There would also be on-going costs (e.g. for replacement tools & equipment) estimated at £500 a year. The portacabin will require replacing after 10 years and there is provision for this in the 25 year cashflow.

Quantifying volunteer numbers is difficult; CCW has taken a very conservative estimate of work days, starting at 60 days in Year 1 (equivalent to 5 individuals in a monthly work party) rising progressively to 100 days in Year 5.

In the longer term there is potential to develop the site as a venue for volunteering as part of Corporate Social Responsibility (CSR) programme; experience from other community woodlands demonstrates that beneficial long term relationships can be forged through such activities.

5.7.3 Funding

An application to the South of Scotland Economic Partnership (SoSEP) for funding through the new South of Scotland Enterprise Agency (SoSEA) due to launch in April 2020 is under development in conjunction with an adviser from SoSEP. This application, covering funding for the community forest building, woodfuel enterprise and tourism infrastructure (see 5.8 and 5.9 below), has had positive indications for a successful application.

If the SoSEP application is unsuccessful, funding to develop and equip volunteers will be sought

from the Scottish Forestry Community Fund⁴⁹. This fund aims to support groups and organisations to encourage and support greater use of woods by people to derive health, well-being and community benefits. Amongst the eligible activities are facilitation of volunteering for skills training, health improvement and community development, establishment of volunteer groups and the induction of volunteers.

Alternative funding sources for community volunteering projects include the Big Lottery Fund's Awards for All Programme, local windfarm distribution funds and any future replacement for the LEADER programme.

5.7.4 Future developments

The community building is deliberately designed to have capacity for expansion of provision and development of new activities, which could potentially include:

- a wood-working workshop, providing space for small scale woodland craft output.
- a Men's shed group.
- Hosting rural heritage skills training

5.8 Woodfuel

CCW seeks to use and add value to timber from Muirdrochwood to provide employment opportunities, deliver useful products locally and establish sustainable income streams to support the achievement of CCW's broader objectives. In the medium term it may be possible to establish sawmilling capacity at the site, to process some of the sawlogs otherwise destined for export, however in the immediate post acquisition period CCW will focus on adding value to small roundwood through processing and sale as woodfuel.

Woodfuel is widely used in this rural area which has no mains gas supply and according to survey results (see below) accounts for 50% of heating fuel. Although Galloway has a very high percentage of forest cover there is limited local supply, especially of processed firewood, and many local residents source their wood from a considerable distance, such as Dumfries – in part due to the successful Wood Fuel Cooperative⁵⁰ which has a base there.

Not all firewood users will be familiar with what needs to be done to manage their stock of wood once it has been delivered. CCW will also offer advice on the storage and stacking of firewood prior to use, and there is a potential additional market in the sale of firewood storage and shelters.

5.8.1 Assessment of woodfuel demand

A community woodfuel survey was distributed in May 2018 to the Glenkens Community Council mailing list to assess likely demand for woodfuel. The survey was also issued at the CCW community event in Lagwyne Hall on 5 October, with checks made to ensure no double-counting of previous respondents. A copy of the survey is provided at Appendix 5.

51 responses were received, all but 2 from respondents who currently burn wood. Collectively wood made up approximately 50% of their fuel use. Total woodfuel usage was reported as ~350m³. Of this the majority (~250m³) was self-harvested or bought as green lengths and processed by the user, with ~100m³ bought processed.

⁴⁹ <http://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/communities>

⁵⁰ <https://www.woodfuel.coop/>

Several respondents have access to their own woods or a regular supplier and were not interested in the possibility of buying firewood from CCW, however ~260m³ of the volume was attributable to respondents who answered “yes” to the question “Please indicate whether you would consider buying firewood from Carsphairn Community Woodland”, albeit that some responses were caveated e.g. “if the price is right”.

It is estimated that the survey reached ~40% of households within the community area, however the likely sales area of a woodfuel business at Muirdrochwood extends considerably beyond the CCW area, encompassing many outlying properties to the south and east, and potentially as far as St John’s Town of Dalry, from where interest has been shown.

The potential local market for woodfuel, leaving aside those who source and burn their own wood, is therefore four or five times higher than captured by survey responses, and is estimated at >1000m³ per annum, with ~400m³ of this being for processed material. It is considered that the proportion of processed material may grow in future if a reliable supply is established, and as householders age and are less able to process wood themselves.

In addition to the potential domestic market, the CCW woodfuel business could, in the longer term, supply the tourism accommodation and affordable housing. There is potential to convert other community buildings in Carsphairn to woodfuel use as and when their current heating systems require replacement.

Additionally, 19 respondents indicated they would be interested in buying other wood products from CCW, mostly sawn timber, wood chippings and planed timber, some sawdust and wood shavings.

5.8.2 Woodfuel proposals

CCW will establish a woodfuel business to service the local market. The business will focus on selling air-dried wood, cut to two sizes to accommodate larger and smaller appliances and delivered in 1m³ bags. Production of woodfuel (including woodchip discussed below) will be the main tasks of the PT forest worker.

Anticipated sales are 450 m³ bags (equivalent to 300m³ timber) and costings below are made on that basis, although it is anticipated that it may take until year 2 for sales to reach that level. It would certainly be possible to increase processing volumes beyond 300m³ per annum if there were sufficient demand, but this would require buying in round wood from other forests.

Initial setup costs are shown in the table below. Good quality second hand machinery will be sought to keep initial costs down. It is anticipated that some or all elements of setup costs will be grant-aided, e.g. by SoSEA. Other potential funders include the Climate Challenge Fund, UK Shared Prosperity Fund / LEADER replacement and CREFL. Some of the machinery will have additional uses within the forest.

Acquiring a truck/trailer with crane would enable a greater delivery radius. The potential market increase will be weighed against the higher cost this would bring in terms of a driver with Certificate of Professional Competence (CPC), vehicle maintenance, crane testing etc. A lower cost alternative that could operate initially would be the acquisition of a simple trailer and use of the tractor for deliveries.

Item	£
Firewood processor + hydraulic log lift	8,000
Tractor with PTO & front forks	11,000
Log bags (250 @ £6/bag, vented, multi-trip)	1,500
Tools (bag loading frames, tarps, rakes/shovels etc)	1,000
C/saw & PPE (2x c/saw gear)	1,000
Flatbed truck/Trailer with crane (see note below)	10,000
Total	32,500

Table 13: Woodfuel setup cost

Firewood needs to be dried down to around 20% moisture content to ensure efficient combustion. CCW will initially dry wood by stacking under open cover beside the community building, allowing air to circulate.

If the market allows CCW would consider accelerated drying methods such as polytunnels in an open sunny location with a good through draught, or kiln drying.

Item	Unit cost	Units	#	£
Timber cost to roadside	15.00	green tonne	300	4,500
Transport to stackyard	5.00	green tonne	300	1,500
Processing cost	6.00	m3 bag	450	2,700
Fuel costs	1.00	m3 bag	450	450
Administration	3.00	m3 bag	450	1,350
Delivery - labour	7.00	m3 bag	450	3,150
Delivery - transport	2.50	m3 bag	450	1,125
Total operating cost				14,775
Cost per bag				32.83

Table 14: Woodfuel operating costs

Operating costs are shown in table 14 above. Labour costs for processing and delivery are for the part-time Forest Worker, who may also be responsible for some motor manual harvesting. The figures in the table do not include depreciation, which is estimated at £6,650 per annum, or ~£14.78/m3 bag. The likely price point is ~£60/m3 bag, giving total sales of £27,000

Small volumes of kindling wood will be produced and sold, this will bring some additional income. Small volumes of firewood will be distributed free of charge at CCW's discretion. e.g. to pensioners in fuel poverty. To keep the plan simple, the additional net income from the kindling is considered as equivalent to the additional cost of free firewood distribution.

5.8.3 Wood for craft use

Small volumes of timber could be harvested from existing broadleaved stands and in future years from newly planted broadleaved areas managed as coppice for carving, turning, etc by community volunteers, e.g. through a Men's Shed. This might generate a small positive income, however because of the level of uncertainty this has not been included in overall cashflows.

5.8.4 Brash

A market has been identified with a local contractor who will pay £1-5/tonne dependent on site, which would provide a small but useful additional income from felling operations (not included in

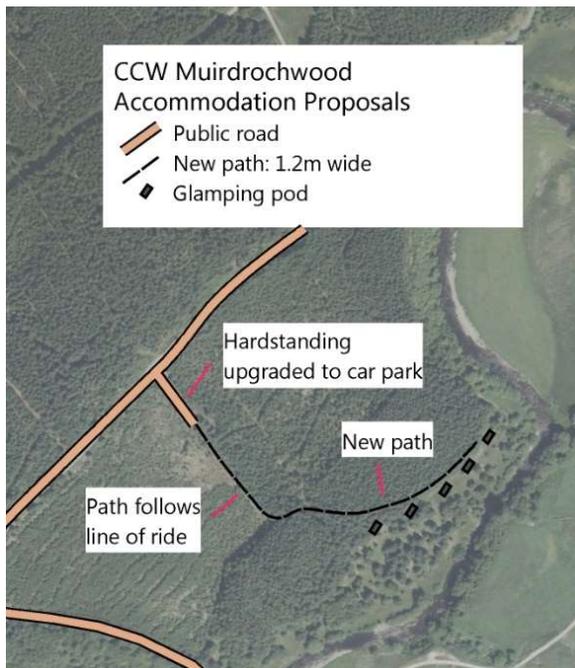
spreadsheets). The contractor takes it straight from the ground and as Muirdrochwood is well serviced with roads this should be a straight forward operation, which will have additional benefits in promoting natural regeneration and facilitating replanting. The volume of brash varies according to species. Conservative estimates are 30 tonne/ha for spruce, 10 tonne/ha for larch. Given the small volumes involved the income has not been included in the cashflow.

5.9 Tourist accommodation

The development of tourist accommodation in the forest will help deliver a number of CCW's objectives, including establishing a sustainable income stream and providing employment (through management, maintenance and cleaning). Tourist accommodation provision will increase visitor numbers to the area, with a knock-on benefit to other local businesses. A range of accommodation types has been considered, including yurts, glamping pods, shepherd's huts and chalets. The preferred option is for timber glamping pods and this proposal is detailed below, with additional information on demand and local competition in Appendix 6.

In order to allow time for planning and development, and to better manage community capacity, this proposal will be taken forward in year 2 of community ownership, with the expectation that year 3 will be the first year of operation. All costings and site information below are subject to planning and further investigation of logistics.

A provisional site has been identified in Cpt 7799 offering a tranquil location near to the Water of Ken (see map and photos below), with access via the existing hardstanding area which will be surfaced to provide a better parking area, and new paths (~350m) to the units. The intention is to create a site of five glamping units. The units would all be fully equipped wooden units with electricity and heating suitable for year-round hire, and will be a mix of two and four person units, with at least one fully accessible unit.



Map 10: provisional layout for tourist accommodation



Photos: River frontage

The units will each be set on a concrete slab, with a separation of 30-40m to ensure relative seclusion, and with very limited visual impact on the surrounding area due to the topography and screening effect of trees. Each unit will have electricity, water and waste disposal provision.

The tourism accommodation will be aimed principally at holiday makers, with the location, adjacent to the Water of Ken, providing an attractive base for visitors to enjoy a tranquil forest experience. CCW intend (as detailed previously) to create and enhance paths through the forest, and may in the future develop additional recreational activities for visitors and the local community such as cycle hire, guided walks and canoe trails and woodland activity/obstacle courses.

5.9.1 Governance

CCW will establish a wholly-owned trading subsidiary to take on the management of the accommodation. The establishment of trading subsidiaries is common practice for community bodies and has a number of potential advantages, including ensuring the parent charity operates within its charitable purpose and insulating the parent company from day to day operational management and business risk.

The optimal structure is yet to be confirmed but it likely that the subsidiary will be a Company limited by Shares (all shares owned by CCW), with a small board including nominees from CCW and those with expertise in the field. For simplicity this subsidiary is referred to as Carsphairn Forest Lodges (CFL) although this name has not been formally agreed.

It is anticipated that CCW will develop and own the site, and retain responsibility for management of adjacent woodland, whilst CFL will be responsible for all aspects of the management of the business, including the employment of staff.

5.9.2 Costings

As noted previously this project will be taken forward in year 2, with accommodation ready for business in year 3.

Estimated set-up costs are shown in the table below. Costs for accommodation units are based on a quote obtained in 2019 for high spec units, lower cost options are available. Electricity costs are based on mains supply, cheaper options may be available from woodfuel and renewables.

Item	£
5 x chalets (3x 4 bed, 2 x 2 bed)	94,000
Concrete bases x 5	5,000
Electricity	5,000
Access	15,000
Water	20,000
Sewerage system	11,000
Planning, legals etc	5,000
Total	155,000

Table 15: Tourist accommodation set-up costs

CFL will pay an agreed annual rent to CCW and have the capacity to gift aid surpluses to the parent, although it is anticipated that in the first few years of operation it is likely that any surpluses will be retained to reinvest and develop the business. This is reflected in the 25 year cashflow for CCW, which includes the initial installation costs and grants, and the annual rent, but not the operating costs and income, which are tabulated below.

It is anticipated that that initially two part time posts will be created:

- CFL Manager (0.5 FTE): managing the lodge site, including promotion/advertising, website, booking etc.
- Cleaning staff: this is proportionate to the number of bookings and is estimated as rising from 750 hours to 1125 hours per annum over the first three years. This could be a direct employee or organised on a contract basis.

A 2% annual cost of living increment has been included in salary calculations (along with ENIC and 3% pension contribution.

Expenditure	Year 1	Year 2	Year 3	Year 4	Year 5
Maintenance & repairs			7,500	15,000	15,000
Insurance, fire safety, rates			5,000	5,000	5,000
Broadband			600	600	600
Heat & power			5,000	6,250	7,500
Laundry			9,000	11,250	13,500
Welcome packs			3,000	3,750	4,500
Cleaner			7,569	9,978	12,480
Manager (0.5 FTE)			13,409	13,701	13,999
Admin costs			2,000	2,500	3,000
Marketing and promotion			6,000	4,000	4,000
Rent to CCW			1,000	3,000	5,000
Total			60,078	75,029	84,578
Income			63,000	78,750	94,500
Annual surplus			2,922	3,721	9,922

Table 16: Tourist accommodation running costs and income

The rent has been set at a low level for the first year of operation, rising to £5000 per by the third year.

Maintenance and repair costs are based on 10% per annum of set-up costs minus legals (5% in first year of operation).

Heat & power, laundry, admin and welcome pack costs are proportionate to occupancy rate.

Income projection are based on occupancy rates of 20, 25 and 30 weeks per year (i.e. just under 40%, 50% and 60% respectively – this is estimated as equating to 300, 375 and 450 separate bookings) over the three years of operation at £90 a night per unit.

5.9.3 Funding

Funding for the tourist accommodation is anticipated to be from the South of Scotland Enterprise Agency (SoSEA) as described above (5.7.3). An application is currently in preparation in conjunction with an adviser from the South of Scotland Enterprise Programme (SoSEP)⁵¹.

Other potential sources of funding include Visit Scotland⁵², Carsphairn Renewable Energy Fund Ltd (CREFL), and the proposed UK Shared Prosperity Fund (replacement for LEADER)⁵³

5.9.4 Future tourism developments

A variety of other tourism developments may be considered in the future, including:

- Shepherd's huts⁵⁴ - these can be off-grid and sited singly in locations around the site and are moveable. A hand-made basic Shepherd's hut made locally costs £12,000. They are fully insulated and double glazed.
- A campsite
- A small shop for basic provisions

⁵¹ <https://www.gov.scot/policies/economic-growth/south-of-scotland-enterprise/>

⁵² <https://fundingscotland.com/Funds/Fund/a0Rb000000HN1jREAT-rural-tourism-infrastructure-fund>

⁵³ an example of a current project funded by LEADER is Glamping at Buchan (£33,000 grant): <https://nalag.org.uk/buchan-community-business-gets-30k-funding-boost-for-glamping-venture/>

⁵⁴ www.shepherdshutscotland.co.uk

6 Development Projects for Future Phases

A range of project ideas were suggested and appraised during the development of this plan. This section briefly discusses two potential projects which would make substantial contributions to delivering CCW's objectives and which will be investigated and if at all possible taken forward at an appropriate time, which may be in a second phase. (i.e. years 6-10).

6.1 Rural Heritage Skills

There is a good deal of support and demand for rural heritage skills training in the area; this is outlined in Appendix 7 and the Galloway Glens Report provided in a separate document. CCW will be in a position to run training opportunities in a range of forestry and rural skills (e.g. tree felling, path building, fencing, drystone dyking), enhancing the employability skills of the participants. Other community woodland groups who have explored this idea have found that the provision of training activities requires a certain level of infrastructure: shelter, servicing (water, toilets) and staffing, but CCW's intention is to develop this provision utilising the tourism accommodation provision/infrastructure and facilities installed for the community, but also making use of other community facilities such as the community hall (Lagwyne) if required. Training could be delivered partly by existing staff (allowing for an increase in hours) and partly by bringing in qualified trainers.

CCW are in contact with the Galloway Glens Landscape Partnership who have proposals for the development and delivery of a programme of heritage skills training activity (see Appendix 6) and they are interested in working in collaboration with CCW on this. They have indicated that they would be interested in paying for use of the forest and infrastructure for their own activities such as the successful 'Galloway Glens goes Wild' Project⁵⁵ as soon as 2020 (a letter of support is provided). Discussions have also taken place with Dumfries and Galloway College (Complete Training Solutions⁵⁶) with regards to their rural skills training proposals. CCW will continue to explore to what extent we can work with these organisations and help deliver their programmes.

6.2 Affordable housing

The Carsphairn Community Future Plan identified the need for more affordable housing to encourage young families to settle in the area, and there is potential to develop housing within the forest, subject to the planning authority approving proposals for new housing outwith areas identified in the Local Development Plan.

The need to provide road access, services, etc. will limit the potential sites, which will also be constrained by the need for ground conditions suitable for building and suitable drainage.

The most likely site for affordable housing provision appears to be in the South-eastern block of the forest, adjacent to the B729 / B7000, in the area currently occupied by birch and Sitka regeneration (see map below).

Development of housing requires significant investment and would be taken forward in partnership with a local housing association, e.g. Dumfries and Galloway Housing Partnership or Loreburn Housing Association. CCW could contribute timber for construction and supply biomass for heating.

⁵⁵ <https://gallowayglens.org/celebrating-the-end-of-this-years-galloway-glens-goes-wild-project/>

⁵⁶ <https://www.dumgal.ac.uk/dumgalportal/index.php?pageid=about-cts.cts>

7 Other potential projects

The sections below outline a number of other project ideas which were suggested during the development of this plan and could contribute to CCW's objectives.

7.1 Woodland / green burials and/or memorial woodland

There is increasing interest nationally in woodland and green burial sites and a number of community woodland groups have developed or are taking forward proposals. Such a project requires moderate investment and some ongoing management costs but potentially valuable returns so could contribute useful to developing a sustainable income from the forest

Woodland / green burial sites require relatively small areas of land but can be quite demanding in terms of site conditions (regulated by SEPA): they must have suitable depth of well-drained soil and be a certain distance from watercourses. They are typically established on bare ground or restock sites, rather than mature woodland. Planning authorities can add additional requirements around vehicle access, parking, etc. Picturesque sites with a good view can demand a premium.

If a suitable site for interments cannot be found it would be possible to focus on cremation burials, which are considered to present a lesser risk to the water environment, and subsequently face fewer restrictions.

A related possibility is the designation of an area for the planting of memorial trees, where people would pay to have a tree planted in memory of a loved one, providing a peaceful area for reminiscence, away from other activities and more used areas but easily accessible and with a tranquil outlook over hills or loch. Guidelines on e.g. symbols on trees, daffodils and other bulbs would be provided to retain a natural area.

7.2 Non-timber forest products

Installation of a polytunnel and community growing area would deliver various CCWs objectives, including income generation and increasing social activities. A range of non-timber forest products could be sourced from the site: e.g. fruits and berries, fungi, willow (for basket making).

A small tree nursery providing stock for the forest and other local markets would be possible and could be a valuable engagement tool as a focus for educational and inclusion activities.

7.3 Health initiatives

There are opportunities to develop a business delivering health-focussed woodland activities for a range of client groups: young people excluded from school, those with mental health issues, or undergoing rehabilitation from substance abuse etc. Abriachan Forest Trust⁵⁷ has pioneered learning and employability programmes – with adult and youth education, skills for work, mental health support, criminal justice support and volunteering, and with funding from a range of sources including service contracts with the NHS and Local Authority. Directors of CCW have visited this site and been impressed with its set up and success.

⁵⁷ <http://www.abriachan.org.uk/>

8 Assessment of public benefits and justification of discount

Community acquisition, management and development of the portion of Muirdrochwood will deliver wide-ranging public benefits. This section of the plan attempts to quantify and monetise these benefits for the purposes of justifying the discount requested from Forestry & Land Scotland.

Only benefits arising in the first five years of community ownership have been quantified, and where benefits arise directly as a result of public funding (e.g. a job dependent on revenue grant funding) they have not been included. Some categories of benefits are very difficult to quantify or monetise, and these have also been disregarded in the calculations. Where estimates have been necessary conservative figures have been used.

Three categories of benefit have been quantified:

- Public recreation
- Direct employment (by both CCW and CFL)
- Community volunteering

	year 1	year 2	year 3	year 4	year 5	5 yr total
Recreation	1,400	1,400	1,400	1,400	1,400	7,000
CCW job - Forest Worker	5,400	7,344	7,491	7,641	7,794	35,669
CFL jobs - Manager	0	0	6,000	6,120	6,242	18,362
CFL jobs - Cleaner	0	0	3,600	4,590	5,618	13,808
Community volunteering	3,240	3,780	4,320	4,050	5,400	20,790
Net value	10,040	12,524	22,811	23,800	26,454	95,629
Discounted at 3.5%	10,040	12,086	21,242	21,388	22,940	88,629

Table 17: Calculation of additional economic value of community ownership

The total net value ascribed to the additional public benefits delivered by community ownership of the woodland is therefore conservatively estimated at over £95,000, or £88,000 when discounted at 3.5%.

CCW are requesting a discount of £80,000 on the market valuation

8.1 Recreation

As noted previously there is no provision or promotion of recreation at Muirdrochwood and current recreational use of forest is minimal: the baseline is effectively zero. CCW intend to invest in recreation infrastructure in the woodland, largely for the local community but it is well placed along the Glenkens valley tourist route and close to the Southern Upland way, with no comparable recreation opportunities nearby.

Evidence from other community woodlands suggests that community ownership and management can significantly boost visitor numbers, e.g. at Dunnet Forest which now receives >60,000 visits per year. Estimates for this woodland, which is further removed from centres of population, are considerably more modest, but it is anticipated that visitor numbers will grow to 5,000 per year. A significant number of these visits will be “displaced” from elsewhere and will not be additional, so CCW have taken a very conservative estimate of additional recreational visits at 1,000 per annum.

There has been a large number of studies over the last 30 years attempting to provide monetary values for recreational visits, producing greatly varying values per visit. One method of valuing visits is Willingness to Pay figures, which in 2019 prices are estimated at around £1.40 per visit. This provides an estimated value of improved visitor access to Muirdrochwood of £7,000.

8.2 Direct employment

Community ownership and management of the woodland will create jobs, both directly and indirectly e.g. through contractor opportunities in the construction of the community infrastructure, path network and felling. The part-time Community Forest Manager post is intended to be predominantly funded by revenue grants from various sources: these are likely to be public funds and therefore this post has been excluded from the calculations.

However, the part-time Forest Worker post will be funded by income from the forest, primarily from the woodfuel business. Whilst not wholly additional - Muirdrochwood is a commercial forest and would be expected to generate income under other ownership - CCW's proposals will deliver more focussed local management, with the support of volunteer input, and develop new local markets. CCW's estimate is that 40% of the value of the role should be considered additional.

The gross starting salary for the Forest Worker post is £12,000 per annum (£20,000 FTE pro rata), 9 months only in year 1, with an assumed annual cost of living uplift of 2%. The economic impact of the Forest Worker post is based on 40% of this salary and uses a Gross Value Added multiplier for "Silviculture and other forestry activities and support services" from Scottish Government input-output tables⁵⁸ of 1.5.

Establishment of tourist accommodation, to open for business in year 3 will create two further part-time roles to be employed by CCW's wholly owned trading subsidiary as a direct consequence of community ownership.

The site manager post will have a gross starting salary of £12,500 (£25,000 FTE pro rata) with an assumed annual cost of living uplift of 2%. The cleaner role is proportionate to the level of bookings and is estimated to rise from 750 hours (@ £10/hour) to 1125 hours by year 3, with an assumed annual cost of living uplift of 2%.

As with the Forest Worker post, the economic impact of these posts is based on 40% of the salaries and uses a Gross Value Added multiplier for "Accommodation services" from Scottish Government input-output tables⁵⁹ of 1.2.

The net additional economic impact of these three posts (before discounting at 3.5%) is therefore estimated at £67,839.

8.3 Community volunteering

Volunteer development is a priority action for CCW's Business Plan: volunteering delivers a range of benefits, to the individual, to the beneficiary/host, and to society at large e.g. through the reduced societal costs arising from improved mental and physical health and social cohesion.

⁵⁸ <https://www2.gov.scot/Topics/Statistics/Browse/Economy/Input-Output/Downloads/IO1998-2016Latest>

⁵⁹ <https://www2.gov.scot/Topics/Statistics/Browse/Economy/Input-Output/Downloads/IO1998-2016Latest>

As noted previously, CCW's conservative estimate of volunteer number is 60 days in year 1 (equivalent to 5 individuals in a monthly work party), rising progressively to 100 days by year 5, giving a total of 400 days at 6 hours a day. Basing the economic value of this on the Scottish Living Wage of £9 per hour, the net value of the outputs, is estimated to be £20,790.

8.4 Other unquantified public benefits and disbenefits

A range of other public benefits will accrue from CCW ownership, management and development of Muirdrochwood, but have not been quantified for a range of methodological and other reasons.

These include:

- Social benefits arising from future projects, such as rural heritage skills training and the establishment of a Men's Shed (not included as developments are aspirational at this stage).
- Woodfuel supply reducing CO2 emissions.
- Natural capital and Biodiversity improvement from increased proportion of broadleaves.
- Public benefits from future projects such as affordable housing beyond the first five years.

Similarly, a range of possible disbenefits have been considered, none were thought to have a significant impact.

- There will be very little change to FLS management input which pre *P. ramorum* was minimal (and the site has in any case been notified for disposal).
- Clearfell operations will be carried out by private sector contractors (as would be the case if forest is sold on open market) so there will be no change.
- A small volume of wood (300m³ per year) will be retained for local woodfuel sales, this will have a negligible impact on hauliers and downstream processors (and will have a positive effect in reducing the number of timber lorry journeys).
- Use of volunteer labour will reduce opportunities for contract planters, but this will be on a very limited scale.

9 CCW 25 Year Cashflow

A twenty-five year cashflow has been prepared and is supplied as a separate pdf document. This draws information from the budget tables for the individual workstreams and projects detailed in section 5 above.

Year 0 is the acquisition process.

Future development projects intended for year 6 and beyond, such as affordable housing, have not been included. These and other future projects will be taken forward if feasible and financially sustainable.

Inevitably the further into the future projections are made, the more speculative and less reliable they become, nonetheless they demonstrate the reasonable expectation of sustainability for a period of 25 years.

10 Workplan and major milestones

WS	Task	When	Who
1	FLS CATS process		Board
1	Submit application to Scottish Land Fund	On CATS approval	Board
1	Additional fundraising	Prior to acquisition	Board
1	Appoint legal advisors	Prior to acquisition	Board
2	Obtain Public Liability insurance and Employers Liability insurance	By acquisition date	Board
2	Prepare and submit annual accounts & OSCAR annual return	Annually, on-going	Treasurer
2	Maintain communications with membership and wider community	Ongoing	Communications Officer
2	Prepare and maintain risk assessments	Starting Year 1	CFM, Safety Officer
3	Identify & secure office space	On acquisition	Board
3	Recruit for CFM	On acquisition	Board
3	Recruit for Forest Worker	Year 1	Board, CFM
4	Register CCW with SG RPID	On acquisition	Board
4	Register woodland with SG RPID	On acquisition	Board
4	Apply for FGS LTFP preparation grant	On acquisition	Board / CFM
4	Complete LTFP	On acquisition	CFM
5	Apply for FGS grants if available	Once plan approved	CFM
5	Implement LTFP	Once approved	Contractors, CFM
5	Deer management	From Year 1	CCW Director
5	Restocking	From Year 3	CFM, FW, volunteers
5	Larch felling	Year 1	Contractors
5	First tranche of spruce thinning	Year 3	Contractors
6	Path creation	Starting Year 1	CFM & contractors
6	Signage	Starting Year 2	CFM & contractors
6	Interpretation	Starting Year 2	CFM & contractors
6	Maintenance of recreational facilities	Starting Year 1	CFM, volunteers
7	Fundraising etc for Community building	In progress	Board
7	Finalise layout, planning etc for Community building	Year 1	Board, CFM
7	Install community building	Year 1	Contractors
7	Volunteer development - funding	Year 1	CFM, Board
7	Volunteer infrastructure & tools	Year 1	CFM, FW
7	Promoting volunteer opportunities	Starting Year 1	CFM, Comms Officer
8	Woodfuel – funding	Year 1	CFM, Board
8	Woodfuel – equipment	Year 1	CFM, Board
9	Fundraising etc for accommodation	In progress	Board
9	Planning etc for accommodation	Year 2	Board, CFM
9	Install accommodation	Year 2	Contractors
9	Establish subsidiary	Year 2	Board
9	Promote accommodation	From year 2	Subsidiary
9	Employ accommodation staff	Year 3	Subsidiary

Table 18: Workplan (Numbers in LH column refer to workstreams).

10.1 Explanation of abbreviations

CATS	Community Asset Transfer Scheme
CFM	Community Forest Manager
SF CF	Scottish Forestry Community Fund
FLS	Forestry & Land Scotland
FGS	Forestry Grant Scheme
FW	Forest Worker
LTFP	Long Term Forest Plan
OSCR	Office of the Scottish Charity Regulator
PPE	Personal Protective Equipment
SG	Scottish Government Rural Payments and
RPID	Inspections Division
SLF	Scottish Land Fund

11 Monitoring and evaluation

CCW will monitor and evaluate progress in delivering desired outcomes in a variety of ways:

- Reports to funders;
- Preparation of annual accounts and report to OSCR;
- Recording key outputs from work in the forest:

Key outputs and indicators are presented in the table below.

Output / outcome	Indicators
Employment	# jobs created
Volunteering	# volunteer days
Woodfuel	Volume sales
Biodiversity	# ha restocked with broadleaves
Community cohesion	# events and activities in forest
Recreation	# m paths created
Health	# recreational visits
Accommodation	Occupancy rate

Table 19: Outputs and indicators

CCW will encourage comments on the organisation's Facebook page and use a range of opportunities such as volunteer days, fundraising events and the AGM to secure feedback and ensure that CCW's activities and objectives remain aligned with the aspirations of the members and the wider community.

12 Analysis of major risks

Risk	Likelihood	Impact	Mitigation
FES refuse Asset Transfer request	Low / Medium	Project cannot proceed ⁶⁰	High quality application
FES offer lower discount than requested	Medium-High	CCW seek additional match funding for acquisition	Good justification of discount.
Funding bid to SLF unsuccessful	Medium	Project v unlikely to proceed	High quality application
Community unable to raise match funding for acquisition	Medium	Project v unlikely to proceed	Robust fundraising plan and implementation
Significant fall in timber prices	Low	Reduced income for CCW	Flexibility in harvesting plans
Issues with neighbouring householders / landowners	Low	Delays, changes to plans, loss of community support	Maintain good communications, sensitive management.
Severe windblow in woodland	Low/ Medium	Reduced income, potential impact on amenity and other projects	Careful management, flexibility if needed
Lack of community involvement / volunteers	Low/ Medium	Delays in implementation, lack of community commitment or buy-in	Active communications and promotion of opportunities
Lack of capacity within group / loss of key individuals	Low/ Medium	Delays in implementation, management failures	Robust governance systems, wider networking and support
Funding bids for development projects unsuccessful	Medium	Delays, projects unable to proceed	Good quality applications, flexibility

Table 20: Major risks

⁶⁰ NB it is possible to seek a review of the decision or to resubmit an amended request

Appendix 1 Galloway and Southern Ayrshire Biosphere Supporters Charter CCW Sign-up information

Describe how you or your school, community, business or organisation meets or intends to meet the following principles of the Biosphere Charter.

1. Help to conserve the natural resources of the Biosphere:

We aim to manage our woodland in a sustainable manner and to diversify the structure of the woodland in order to enhance its benefit to the environment, wildlife and people. This will ensure the resources within the woodland are regenerated by careful replanting using a mixture of appropriate native species to help increase native woodland within the Biosphere and mixed conifers to ensure wood products will be available to future generations and to help conserve species such as High Focus Red squirrel.

2. Support the economy to benefit local people and nature

A driving force for CCWL is to help regenerate the Carsphairn area by increasing sustainable employment through woodland management, Community woodland enterprises and activities, outdoor education activities and increased visitor attraction, all carried out in a sustainable manner to ensure the environment is at the heart of all activities.

3. Promote cultural heritage and local products

The woodland will be developed as a hub for woodland activities and products, assisting local craft production and increasing awareness of the local heritage such as the old farm stead

4. Contribute to the health and wellbeing of the community

An integral part of the running of CCWL will be enhancing access and enjoyment of the local woodland by creating a series of path networks through the forest and linking with existing core paths, providing open areas for recreation, areas for outdoor woodland activity and establishing community groups to assist locals and visitors in accessing and enjoying the woodland area.

5. Develop knowledge, understanding and promote research

Courses and workshops will be held in rural skills, crafts and local history as part of the development of the community woodland, to help enhance an understanding of the local environment, history and rural activities.

6. Raise awareness of the Galloway and Southern Ayrshire Biosphere

The fact that the woodland lies within the Biosphere, the reasons the area is a Biosphere and what it has to offer will be included in promotional literature, information about the woodland, educational brochures etc

Appendix 2 CCW Open Day at Lagwyne Hall 5 October 2018

Invitations were sent to all known addresses within the Community Area, along with a summary of the project. This information was also emailed out to all the Glenkens Community Councils via Stewartry Council of Voluntary Services (SCVS), along with a number of organisations and individuals who it was thought might be interested in learning about the project, such as local schools and community groups, local Forestry staff, environmental NGOs, Politicians and Council Members. The invitation was also advertised on the Carsphairn and CCW website and posters put up in shops, garages, noticeboards etc in Carsphairn, New Galloway and Dalry. The Galloway Glens project kindly put it on their website, along with some photos after attending.

The event featured:

- Display Boards described the development of the project from initial approach by FES through forming CCW and plans for the future development and how this may positively impact the local community, including what the outdoor education centre is planning to undertake, along with how such a centre can provide a range of benefits to pupils.
- A range of excellent photos taken of the forest by a keen amateur photographer member were included to help give an impression of the forest as it is now, including the special areas within it such as around the High Bridge of Ken and the loch frontage.
- Sticky notes (trees and speech bubbles!) were available for comments and ideas.
- The Galloway and Southern Ayrshire Biosphere Supporters Certificate was displayed along with our sign-up pledge, demonstrating our aims of sustainable development.
- A selection of potted trees and branches were included with the opportunity of matching tree names with the plants, adding a touch of woodland to the hall!
- A selection of photos was included from our Community Learning Exchange Visit to Kilfinan Community Forest, along with a presentation by and a video by Making Local Woods Work of the development at Knoydart.
- A Hedgehog box (made by a member for another member who rescues hedgehogs), was used to house the survey forms. Membership forms, Supporters and skills sheets were also available and a cotton bag with the Carsphairn Community Woodland logo on was supplied to each member in the hope that its use will encourage others to find out about the project.

The Lagwyne hall was booked from 12 noon until 8pm, the event being open between 1pm and 7pm. There was a constant flow of people attending the event and a great deal of interest was shown in the project as evidenced by comments on the supporters sheets (attached), a number of whom pledged to send a letter of support and were keen to become involved, some through participation by their own local project (Red squirrels), some being keen to find a local, reliable supply of woodfuel.

Statistics

- 58 people visited the open day.
- Nine of the ten Directors attended through the day
- 12 Skills sheet filled out, with a range of interests and skills wanted
- 14 new members, taking total to 41 as at 29th Oct 2018
- 16 supporters – all but two residing locally but out-with the Community Area and interested in becoming involved, some seeking wood fuel supply, three with Red squirrel interest, others just generally supportive. Two supporters were from Fife and appreciated how the project could be a positive for the community. One was the Mobile sawmill owner who is already in touch with the Directors and is happy to provide advice and lend his skills. His might be a suitable mobile mill to use for hire at start up and discussions are ongoing with him.



Examples of comments received at the event.

- Brilliant idea
- Excellent idea
- Sounds great, very enterprising
- Will arrange a letter from MCS Trustees
- A really welcome project to sustain the local community!
- Great project. Plenty of folk in Dalry would be interested in buying woodfuel. Will arrange letter at next meeting
- Exciting project. Deserves to succeed
- Great idea. I hope it happens. Meanwhile Well done
- Would be a real asset for the area. Good luck!
- Very good idea, will help the area to being people in
- Glemhath! (Very good!)



Appendix 3 Director Biographies

- **Alison Bradley**

Alison started her working life on her brother-in-law's farm in Northumberland, helping with the rearing of calves and sheep. She moved on to train as a microbiology technician at Newcastle Upon Tyne University, but after twenty years of being stuck in traffic jams twice a day decided on a complete change of career and went back to education to train in horticulture. She then set up her own gardening business and retired two years ago, moving to this area to enjoy the peace and quiet and indulge her love of flora and fauna.

- **Steve Cowley**

Steve has been in the building trade all his working life and has owned and run a successful electrical contracting business for the last 37 years. He is a Director of The Carsphairn Community Trust and 2 other local community organisations.

- **Wendy Fenton, ACIEEM (Secretary)**

Wendy has lived locally for over 30 years, largely on smallholdings, currently including managing a small woodland. For much of that time she has been involved in habitat conservation and enhancement as a farm conservation adviser, with experience in setting up and running a range of rural projects and preparation of agri-environment and small farm woodland creation applications. She is a Director of Carsphairn Community Trust and ex Minutes Secretary of Carsphairn Community Council.

- **Davey McMillan (Chair)**

Born locally, Davey has worked in farming and forestry in southern Scotland for 40 years. He has experience of organising and running local, national and international events and has long-term involvement in Carsphairn community organisations. He currently manages a 2,600 acre farming estate which includes woodland plantations. Responsibilities include marketing, harvesting and restocking plantations.

Previous forestry experience includes time as a tenant of a Forestry Commission holding. Employed full time by Forestry Commission, experience was gained in largescale tree planting and all aspects of forest maintenance work including deer fencing, drystone walling and operating and maintaining tracked vehicles.

Prior to that he was employed on a large farming and forestry estate with its own sawmill and timber treatment plant. Experience was gained in felling and processing timber, largely fencing materials and boarding for estate use. The work also included processing firewood for estate workers and local pensioners. (Further information available on request.)

- **Juliet Dixon**

Juliet was employed at the Royal Victoria infirmary in Newcastle upon Tyne as an out patients manager before moving to Freeman hospital as a multi-disciplinary team co-ordinator for the bone and soft tissue tumour group. She decided to retire in 2016 after 38 years working in the NHS. The time was right to move to a rural area to enable her to pursue my hobbies of walking, bird watching and gardening. She is enjoying the beautiful countryside this area has to offer and also the varied community activities in and around the Glenkens area. Juliet is a Director of Carsphairn Community Trust.

Appendix 4: Community Forest Manager Draft Job Description

Carsphairn Community Woodland Ltd **Community Forest Manager – Job Description**

Carsphairn Community Woodland Ltd (CCW) is a Company Limited by Guarantee (SC591976) incorporated on 20 March 2018 and a registered charity from XXXX⁶¹ with a volunteer Board of Directors elected by a community membership of XXXX.

CCW acquired 48.7 ha of woodland at Muirdrochwood in XXXX, and are seeking to appoint a Community Forest Manager to manage the site, implement the CCW Business Plan and develop the long-term sustainability of the woodland as a community asset.

We require a person with relevant qualifications and demonstrable experience in forest management, a good understanding of business development, excellent general organisational and management skills, a good attention to detail and a talent at problem solving. Excellent communication skills and an ability to motivate and inspire others with a commitment to development at a local level are also required.

The key responsibilities of role will include:

- completing the Long Term Forest Plan and associated funding applications, and then implementing the plan;
- promoting and coordinating community involvement in the management of Muirdrochwood, and developing Muirdrochwood as a venue for community volunteering.
- overseeing and line-managing the Carsphairn Forest Worker
- tendering for and managing external contractors and coordinating sales of timber and firewood
- developing future projects e.g. tourism accommodation facilities, affordable housing, etc

Person Specification

Essential:

- Appropriate Forestry qualifications
- Experience of woodland management and forestry operations.
- Experience of woodland management planning
- Experience of developing and submitting funding applications
- Experience of project development and management
- A good understanding of business development
- Good line management and supervisory skills.
- Good communication skills – written and oral.
- Experience of working with and leading volunteers
- Ability to work as part of a team or under own initiative - job requires a willingness to take on responsibilities, challenges and be self-motivated.
- Time management - ability to managing own time and the time of others, ensure jobs are completed within specified time frames.
- Intermediate IT skills – ability to document & record information in written or electronic formats - maintaining clear and concise team, H&S and site records.
- Good record keeping skills

⁶¹ Items in red to be completed when dates etc known

- Applicants need to be motivated, physically fit and able to work hard out of doors in all weathers and be involved in a range of physical tasks.
- Current and valid tetanus vaccination required.

Preferred

- Experience in working with timber and wood fuel.
- Experience developing a new business and employee management.
- Knowledge of cartography and Forest Design Plans.
- Experience of using chainsaws and relevant qualifications.
- Monitoring and controlling site resources.
- Current First Aid or Outdoors First Aid certificate.

Desirable attributes

- Passionate about the environment.
- Demonstrable experience in community driven sustainable development.
- Clean driving licence.

Terms and Conditions

- This is a **XXXX** year contract, there will be a 6 month probationary period, and performance will be subject to regular review.
- The Community Forest Manager will be expected to work from the CCW office **at XXXX**. On-line computing facilities will be provided. A significant amount of the post holder's time will be spent in the woodland.
- The Community Forest Manager will be directly responsible to the Board of Directors of CCW. Line Management will be undertaken by one of the Directors
- The working week comprises a minimum of 22.5 hours per week. The post holder may be required to work flexible hours, where necessary, to meet the demands of the post. Time off in lieu will be given.
- Starting salary £28,000 pro rata
- The Community Forest Manager will use his or her car for work related journeys. It is the responsibility of the post holder to ensure that their insurance covers them for this purpose. A mileage allowance based on Inland Revenue recommended mileage rates will be payable monthly in arrears. This will not be payable for the journey to and from work.

Carsphairn Community Woodland has an equal opportunities policy to ensure all members of staff employed by CCW and all applicants for employment will be given equal opportunity irrespective of sex, marital status, race, colour, nationality or ethnic origin, in all aspects of recruitment, employment, promotion and training. CCW is committed to giving full and fair consideration to people with disabilities applying for this post who possess the relevant skills and experience.

This post is part funded by the Scottish Land Fund.

Appendix 5 Carsphairn Household Firewood Survey

Carsphairn Community is investigating the community purchase of Muirdrochwood. One of the ideas we have for the future management of the forest is to establish a firewood business so we are surveying local householders to identify the likely level of demand.

Please only complete one form per household then return your completed questionnaire to the place you collected the form or email to carsphairncw@gmail.com by **25th May**

1. Do you burn firewood in your home? Yes / No

If you answered Yes - skip to question 3. If No - go to question 2

2. We would like to find out why you do not burn wood as a fuel

Please select all that apply and then go to question 14

- My home does not have a chimney / chimney is blocked up
- Burning wood creates a lot of mess and smell /is too much effort
- Firewood is difficult to source and/or expensive
- There is nowhere to store it
- Other reason (please specify).....
.....
.....

3. For people who burn wood: How do you burn it? Please tick all that apply

- Wood stove
- Kitchen range
- Open fire
- Log boiler
- Other (please specify)
.....

4. How do you heat your home?

Please provide a percentage estimate for each fuel over a typical year

- Woodfuel%
- Oil%
- Gas%
- Coal%
- Electric%
- Other.....%

5. When do you burn wood? (Tick all applicable)

- Spring
- Summer
- Autumn
- Winter

6. Where do you source your wood? (tick all applicable)

- Buy it cut and split
- Buy it as green wood for processing myself
- Grow and process it myself
- Scavenge it
- Waste wood
- Other (please specify):

7. Do you have any preferences?

- Hardwood
- Softwood
- No preference

8. How much do you use in a year? Please give an estimate of quantity and cost based on the units in which you acquire or buy wood

- Cubic metre
- Tonne
- Pick-up load
- Builders bag
- Other

9. If you would like to get more of your heat from wood please state what currently stops you burning more wood:

- N/A
- Difficult to find local wood to buy
- Difficult to find seasoned wood to buy
- Difficult to find 'free' or 'scavenged' wood
- Shortage of storage at home
- Wood is too expensive
- Other (please specify)

10. Please indicate whether you would consider buying Firewood from Carsphairn Community Woodland and add any other comments here.

.....

Please return the completed form to the shop or email to carsphairncw@gmail.com by 25th May

Thank You!

Carsphairn Community Woodland Ltd.

Appendix 6: Tourism accommodation proposal – additional information

A 6.1 Demand

Dumfries and Galloway aspire to be the Highlands of the South. Tourism is an expanding market in the Region and Galloway aims to increasingly be a tourism destination. There is already the South West Coastal 300, a circular route around the coastline and inland from Ayr to Dumfries. It is widely acknowledged that there is room for an increased tourist market. (e.g. popularity of new Oyster festival, Stranraer and Wigtown Book Festival)

The area is underserved for accommodation despite a long history of small scale lettings and increases in recent years: for example Wigtown accommodation is insufficient to serve the Book Festival requirements. There are relatively few centres in the area with lodge type 'glamping' accommodation and those that exist are found within easy reach of the coast so CFL would be well placed to advertise the centre for hill and forest breaks. With its proximity to the Galloway Forest, Dark Sky Park and lying within the Galloway and Southern Ayrshire Biosphere, provision of accommodation in the Carsphairn area will provide a scenic, tranquil place to stay in beautiful surroundings, for those seeking a quieter holiday. There are many visitors who travel from the Central Belt to the Seven Stanes Kirroughtree mountain biking centre and CFL would be well placed to offer accommodation and local woodland cycling/walks for these visitors.

The pods would also be attractive to Southern Upland Way walkers (SUW - long distance footpath). The forest is only 1/2 mile from the path and local accommodation is limited (1 hotel, 1 pub, 2 B&Bs in Dalry (8 miles away), also 2 B&Bs in Carsphairn but 3 miles from the SUW. There is a caravan site between Dalry and Carsphairn (owners are Members of CCWL and happy with proposals).

Potential National Park: It is noted that there is a strong desire in the area to create a Galloway National Park. If this should go ahead it will undoubtedly increase tourism in the area, thus increasing demand for many of the aspects of the proposed Muirdrochwood project and having this accommodation would put the project in a good position to take advantage of such an increase.

The growing market for this type of accommodation is evidenced by Visit Scotland: their occupancy statistics show a general increase for caravan and camping but they are not currently broken down specifically to Glamping.⁶² (Glamping/alternative accommodation was included in the Great Britain Tourism Survey, but there was not a sufficient sample size to provide statistics for volume or value associated with this accommodation type.)

A link to the latest Trends research demonstrates significant increases in 'Wellness Tourism' in Scotland, which CFL would be addressing through marketing the tranquil nature of the site.

A 6.2 Current competitors

There is no camp site or basic accommodation nearby and further north there is only 1 B&B before reaching Sanquhar, which is 20 miles away.

⁶² http://www.visitscotland.org/research_and_statistics/tourism_sectors/accommodation/caravan_and_camping.aspx

- The main comparable site in the area is Gorsebank (<https://gorsebankglamping.co.uk/>, 33 miles) near Kippford. They have 14 pods and show up to 50% occupancy out of season, the site being used year-round. They also have Wigwams at £17-25pp/night, posh pods at £60-70pp/night (£100 pp for 2 nights) and timber tents at £11-16pp/night).
- Loch Ken Activity Centre (<https://www.lochken.co.uk/accommodation>, 16 miles) offers three eco pods and a yurt (£50pp/night) along with a row of cabins and a camp site.
- As can be seen on the map overleaf, there are no sites within the Galloway Hills, which gives CFL the opportunity of specialising in Galloway Hills glamping amongst the stars!
- Other sites with similar accommodation include:
 - Barnsoul Caravan Park (<https://www.barnsoulcaravanpark.co.uk/glamping> , 31 miles), with a range of pods within the caravan park
 - Solway view holidays (<https://solwayviewholidays.co.uk/>, 38 miles) near Kirkcudbright, with wigwams and
 - Loch Ken holiday park (<https://www.lochkenholidaypark.co.uk/> 18 miles), which is the nearest to Carsphairn, with 5 glamping tents, but these are much bigger and therefore less tranquil, sit

It should be noted that there are no known similar community run enterprises such as this in the region so this would be unique for Dumfries and Galloway. The Mull of Galloway Trust run three holiday cottages at the Mull of Galloway Lighthouse. The Lighthouse Cottages were part of a local community buy-out in 2013 of the land at Scotland's most Southerly Point from the Northern Lighthouse Board. The acquisition was funded by SLF. The [Mull of Galloway Trust](#) was formed in 2012 with the objective of acquiring and preserving the area of national and local importance for the community and visitors to the area. CCW will be getting in touch with them to learn how they operate as a community trust managing holiday lets to help CCW develop this site.



Appendix 7: Galloway Glens Heritage Skills

Heritage Skills in the Galloway Glens November 2016 - Summary

The Galloway Glens Landscape Partnership is developing a five year project to connect people and communities with their natural, built, and cultural heritage across a 590km² area of the river catchment of the Ken/Dee, from Carsphairn in the north to Kirkcudbright in the south. Through an ambitious scheme of capital projects and activities for people, the Partnership aims to secure a prosperous, sustainable future for the heritage and communities of the area.

One element of the Galloway Glens Landscape Partnership Scheme is the development and delivery of a programme of heritage skills training activity. The aims of such a programme are to enhance employment opportunities in the area for local people, particularly young people, and to ensure that the heritage of the Galloway Glens is better understood, managed and conserved for future generations. The programme will act as a trailblazer for similar training activities in future, for example across the Galloway and Southern Ayrshire Biosphere.

Heritage Skills are the specialist skills needed to understand, protect, conserve, manage and share natural, built and cultural heritage. They include practical, professional, and technical skills, and can be generic across the heritage sector or highly specific to different aspects. Heritage skills are vital in ensuring a sustainable future for heritage, ensuring better conservation and management.

The Heritage Hubs programme aims to support four much-loved buildings in the valley, as well as exploiting opportunities for joint working with other existing facilities in New Galloway and Carsphairn. Branding and alignment of opening hours will be used to create a 'Heritage Trail', hoping to draw footfall up the valley from the more populated south of the area. Renovation and refurbishment of the Old Smiddy at Balmaclellan into a multi-purpose Heritage and Community Hub for the Galloway Glens. A wide range of heritage-focussed activities will be undertaken with individuals and groups from the local area and beyond. The hub will act as a satellite centre for the [CatStrand](#), the well-established Arts Centre in New Galloway. It will include facilities that will support a whole range of other Galloway Glens projects and wider, such as information technology equipment and a recording studio. Some elements of the construction will be undertaken with a focus on the heritage building methods local to the area. Heritage Skills in the Galloway Glens report <http://www.gallowayglens.org/wp-content/uploads/2016/06/GG-LCAP-Appendix-5-HST-EO.pdf>:

Background information:

North of England Civic Trust (NECT) was commissioned by Dumfries and Galloway Council in autumn 2016 to research current heritage skills needs, opportunities and training in the Galloway Glens, within a wider regional and national context. NECT was asked to complete this research in light of the economy and demography of the project area, and to draw up a proposed suite of recommendations for heritage skills training to be delivered through the Landscape Partnership Scheme. Research was both desk-based, drawing on the growing body of evidence highlighting the need for heritage skills, and consultative, with the NECT teams speaking to stakeholders from the public sector, third sector, land owners and managers, educational organisations, and community groups amongst others.

NECT concluded that:

There is a clear gap in current and likely future heritage skills training provision in the Galloway Glens, echoing the national situation but with some issues magnified by the remoteness of the area.

Heritage skills work can form the basis of economic opportunity for some living and working in the area, either through the creation of new businesses or, as is more sustainable for the Galloway Glens, through the diversification, expansion or upskilling of existing enterprises.

Succession planning, recruitment, and in some cases retention, are major factors in the heritage skills sector in the Galloway Glens. However, those working with young people reported a high demand for training and jobs based on **practical skills and outdoors work**, and a high level of connection between young people and the local area, suggesting that if the training gap can be addressed there is a keen audience willing to take on heritage skills roles.

There are numerous audiences for heritage skills training, the most significant of which are young people aged 11-25, and those wishing to upskill and expand their existing skill set to enhance prospects or establish new careers.

A number of barriers to both providing training and audiences accessing training were identified, the most significant of which is transport. The high costs of transport and the time it takes to travel to remote locations must be considered in the delivery of all training recommendations.

The following ten areas were identified as the most important heritage skill areas for the economy of the Galloway Glens over the next 5-10 years:

- Heritage Construction: Repair and Maintenance
- Heritage Construction: Energy Efficiency, Renewables and Retrofitting
- Heritage Construction: Specific Local Building Techniques
- Upland Path Creation and Maintenance
- Land and Estate Management
- Trees and Timber
- Raising Awareness and Aspirations
- Heritage Tourism
- Drystone Dyking, Fencing, Hedgelaying and other boundary work
- Technical and Professional Heritage Skills

In order to address the training needs for these ten skill areas, a training plan was drawn up which identifies training mechanisms, cost, audiences, training providers, partners, accreditation and progression routes, and benefits of delivery. These recommendations propose a range of different activities, including:

- Awareness raising events for local people and tourists
- An intensive programme of opportunities for secondary schools
- Short and long term bursaried on-the-job training opportunities and apprenticeships hosted by local companies, land owners, farmers, and other organisations
- Practical upskilling courses and master classes for those already working in the sector
- Training for communities and local people in aspects of heritage skills such as woodland management
- CPD networking and learning opportunities

These activities should be co-ordinated by a dedicated Heritage Skills expert working for the Landscape Partnership Scheme, working in partnership with others across the region, including those in education, skills and employability, and organisations such as the Galloway and South Ayrshire Biosphere, to ensure a joined up approach and a sustainable future for the programme after the Landscape Partnership Scheme ends.

In addition to the proposed training programme, NECT presents three Business Cases for Heritage Skills activities in the Galloway Glens area:

- Upskilling SME's with Heritage Skills
- Partnership Pilot Project – Threave Garden and Estate, Kelton Mains
- Traditional Skills Team

These Business Cases consider the ways in which the range and scope of heritage skills activity in the Galloway Glens could be expanded during the delivery of the Landscape Partnership Scheme.