Long Term Forest Plan

2016 - 2036

BRN: 183052
FGS Contract Reference Number: 15FGS01473
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A WOODLAND DESCRIPTON

A.1 Property

Aigas Forest was largely planted by the Forestry Commission between 1957 and 1968, although there are some older remnants of Scot pine dating as far back as 1880. The woodland area amounts to some 255ha or thereby, and comprises a mix of species. Aigas Community Forest Was successful in buying the Aigas Forest from the Forestry Commission in March 2015.

A.2 Location

The property is located in an area of mixed woodland and farmland in Lower Strathglass where the views along the A831 start to open out after being largely contained by the river gorge for several miles south of Beauly. Strathglass is heavily wooded, with a mix of productive and native woodlands, and has a long history of woodland husbandry and management. The area is intensively used for hydro-electricity generation and all the main rivers have been dammed and harnessed for this purpose. The A831 is also an important tourism corridor for people visiting Glen Affric.

The woodland comprises 4 main units lying west of the River Beauly and, with the exception of one block, the A831 public road. The woodlands mostly comprise commercial species, but with some regenerated native woodlands near the River Beauly. The main access is taken from the A831, with the gate located at OS grid reference NH 464 419.

The location of Aigas forest and the compartment numbering is shown in Map 1.

A.3 Existing Schemes

There are no existing schemes on this forest. Aigas Community Forest bought the land through the National Forest Land Scheme on 5th March 2015 from Forestry Commission Scotland.

A.4 Stakeholder Engagement

Prior to scoping Aigas Community Forest carried out a range of stakeholder engagement to help inform the Scoping document. This included:

- Four community consultation walks held in May 2015, the findings of these were then displayed at a forest open day and Barbeque held on 6th June 2015
- Engaging with the Woodland Trust & RDI Associates Ancient Woodland Restoration project, this lead to the production of an Ancient Woodland report for Aigas Forest which has helped inform future management planning
- Engaging with the Aigas Field Centre over future management concept, Field Centre use and environmental surveying of the forest
- Forming a Deer management subcommittee including representatives from Aigas Field Centre, Aigas Mains and Aigas Community Forest to discuss and agree future collaborative Deer control and monitoring

Scoping was mainly by correspondence with a further consultation walk held in the fourth week of scoping on 6th February 2016. A full list of findings is detailed in the scoping report. A list of the main issues highlighted given below, and a list of the stakeholders consulted is given in Appendix 1;

Main issue	Issue addressed in:
Concern of disturbance to wildlife and protected species through increase public access, and the need for monitoring and habitat enhancement	Section C – Zones 2, 4, 5, 6 & 7

Disturbance to local residents and local businesses	Zones 5, 6 & 7
Access to the forest	Sections C & D
Diffuse pollution, and the prevention of	Section C & D
Habitat restoration – peatland, wetland, wet woodland and Ancient Woodland	Section D
Collaboration with neighbours and community involvement	Sections C & D
Education	Section C

A.5 Management Objectives
The Aigas Community Forest Vision is;

> *"A productive working forest providing measurable social, environmental and economic benefits for local residents and visitors alike"*

To achieve this vision Aigas Community Forest has set out its objective which can be summarised as the 5 E's:

Environment: Woodland management which will combine a mixture of replacement conifers, appropriate broadleaves to enhance biodiversity and improve amenity and small areas of open space for biodiversity enhancement. We will also aim to protect, enhance and restore habitats throughout the forest.

Economy: Use of the forest's resources to create or support local businesses and jobs and to produce a sustainable income source for the effective management of the Forest over the long term.

Enjoyment: Development of a path network, wildlife viewing opportunities and associated visitor infrastructure taking advantage of existing key viewpoints. This is to include all abilities access and will build on existing roadside/ River Beauly access. Based on this we will build a range of cultural and heritage events and activities based around the community's close connection to the land.

Energy: To exploit existing renewable energy opportunities through the production of fire wood and to explore the viability of other renewable energy technologies in keeping with our community ethos.

Education: To participate in the Forest Education Initiative and provide a resource for local primary schools, Aigas Field Centre, who run an extensive education programme for all ages, and others including Highland Council Rangers; Also to build skills within the community through a volunteering programme.

In developing this plan we are committed to the following principles:

- We will follow the requirements of the UK Forest Standard
- We will aim to gain certification under the UK Woodland Assurance Standard
- We will work with neighbours and local businesses to ensure that wherever possible our activities are complementary to their needs
- We will deliver our responsibilities as a landowner under the Scottish Outdoor Access Code and in addition deliver facilities for access that facilitate good forest management

- We will protect and enhance habitat used by wildlife. Including a number of Schedule 1 and LBAP species already identified. We will also set up monitoring programmes for these species, and to inform us of any new species, to ensure the management is not harmful and where possible beneficial.
- We will comply with Water Environment (Controlled Activities) (Scotland) Regulations (CAR) and follow the Forest and Water Guidleines.
- Conservation with commerce – Management will always aim to keep conservation and commerce on equal footings, looking after the ecology of the forest and using this to help provide for the future of Aigas Community Forest.
- We will aim for a conversion to Continuous Cover Forestry in this rotation where possible. In area where a conversion is not possible in this rotation restocking and subsequent management will aim for a conversion to CCF in the next rotation or Long Term Retention in the most inaccessible areas.
- We will restore Ancient Woodland Site present at Aigas Forest.
- Where the current crop is on deep peat (>45cm) we will restore the peatland habitat where appropriate, or use peatland edge planting models for restock where peatland restoration is not deemed appropriate.
- We will provide for the local community as much as possible through links with local businesses, links with Teanassie school, the provision of recreational facilities and events, volunteer opportunities, and the creation of jobs in the community.
- We will protect significant Archaeological features in the forest. We will also work with the North of Scotland Archaeological Society to enhance forest users' enjoyment of these features through events, interpretation on trails, etc.
- We will work with our neighbours to control deer numbers in the area to make CCF and restocking possible without the need for fencing.
- We will continue to co-operate with studies on Pine Tree Lappet moth

A.6 Site Description

The elevation of the woodlands ranges from almost 50m beside the River Beauly to nearly 290m towards the summit of Bad Losgainn Mor. The woodlands occupy a position spanning riverbank to valley floor to hill top, such that all aspects are represented and there is no prevailing aspect. The more productive species of Douglas fir and Sitka spruce are generally on south and south-east facing slopes, with the Scots and Lodgepole pine on the colder, flatter summits and the north facing aspects.

Four main factors affect the relative suitability for forestry and these are climate, stability, nutrients and topography. As expected, the lower ground holds the better soils and drainage, with the upper elevations significantly poorer in both respects and also limiting in climatic terms. The woodland occupies some very steep ground, distributed around a hilltop position and the topography presents some significant challenges with regard to working the timber. DAMS on the site ranges from 7-15

Bedrock geology of the forest consists mainly of Pasmmite and Pelite metamorphic sandstones with an area of conglomerate sandstones to the East end.

There are a range of soils at Aigas Forest. Soil types found during the survey were; deep peat, podzol, hardpan podzol, peaty surface-water gley, Surface-water gley, podzolic brown earth and even some areas of typical brown earth (typically small areas interspersed within the podzolic brown earths. The soils map, Map 2, shows the layout of these soils at Aigas Forest. The mineral soils are mostly of a sand, to loamy sand texture, with only a few other soils types being recorded; namely sandy loam, silt loam and sandy clay on the South –South East facing slopes of compartments 7, 12, 15 & 16. The soils at Aigas Forest do have a tendency to be stony, with

around a quarter of the soils pits qualifying for a 's' phase – 'extremely stony – stones occupying more than 35% of the soil volume'. Again this tended to be on the steeper slopes of compartments 7, 12, 15 & 16, being a particular problem in the latter two compartments, it being more widespread here and more localised in other areas.

There is also some cause for concern regarding soil stability in compartments 15 & 16. Due to an almost complete lack of ground vegetation caused by the present tight conifer crop soil movement is evident over most of the steep slopes above the A831 and Beauly River. This is also true for compartment 8 which is above Aigas Loch, the water supply for the Aigas Field Centre. As there is no ground vegetation the surface of the soil is not bound together at all, this could lead to increase run off during, or after, harvesting operations before ground flora can re-establish and bind the soil surface again.

41.91ha of Aigas Forest appear in the ancient woodland inventory as 'Ancient (of semi-natural origin)' (PAWS). A further 52.29ha appear as Long-Established (of plantation origin) (LEPO). These areas are shown in the constraints analysis maps in section C. Other than Ancient woodland there are no designations on the site.

B SURVEY DATA

B.1 Survey Data

Survey	Date	Author	Summary
Archaeological survey	2015/16	Roland Spencer-Jones, NOSAS	Finds shown in Map 3
Ecological & nesting bird survey	On going	Aigas Field Centre	AFC gave information on presence of important species during scoping, The full survey is yet to be completed however
Bryophyte survey	2016	Sandy Payne	Appendix 2
Soils map	2016	Donnie Chisholm, ACF	Map 2
Compartment schedule	Revised 2016	Donnie Chisholm, ACF	Appendix 3
View point photographs	2016	Donnie Chisholm, ACF	Map 4
Ancient Woodland Survey	2015	Steve Morris, RDI Associates	Appendix 6
Deer numbers survey*	Not yet commissioned	A stalker has now been appointed and will start deer control in July 2016.	Deer sign and any browsing was noted during the soils, vegetation and mensuration surveying

*Once the LTFP has been approved ACF will commission an impartial survey of deer numbers and produce a Deer Management Plan. At present Deer impacts are estimated through anecdotal evidence from the lack of regeneration of palatable species in open areas, browsing of unpalatable species, tracking and the presence of dung in the forest. The Aigas Field Centre also report on numbers and species of deer sited in the forest.

C ANALYSIS OF INFORMATION

C.1 Constraints and Opportunities

Aigas Community Forest is an extensive area containing a range of habitats. For this reason the forest has been split up into 7 management zones. These zones keep similar habitats together, therefore ensuring that the concept of management within each zone can be the same over the whole area. This also allows us to deal with some issues more efficiently such as public access, disturbance to wildlife and habitat restoration, whilst still being able to produce commercially. This is not to say that there will be some bits of the forest that will be wholly given over to commercial production to the detriment of the ecology in that area (or the inverse); more that it will help us strike the balance between conservation and commerce over the whole forest by highlighting the zones that require more attention in either area.

However some of the issues highlighted during the planning process apply to a number of zones or the forest as a whole rather than just in specific areas. To avoid repetition these are shown in the Tables below, before the zones are reviewed individually.

C.1.1 Ecological Impact

Factor	Constraint	Opportunity
Deep peat	Current crop planted on deep peat in some areas (Particularly in zones 1, 2 & 3). As much woody material should be removed from peatland restoration sites as possible	• Follow FC practice guide – Deciding future management options for afforested deep peat • Restoration of peatland habitats where appropriate • Peatland edge planting to improve habitat for Black Grouse • Follow Guidance note LUPS-GU27 – Use of trees cleared to facilitate development on afforested land
Riparian habitat	Planting up to water bodies and course	• Riparian restoration along water bodies will create habitat corridors for the lower edge of the forest up to the hill ground above • Minimum buffer zones for individual water bodies to be outlined • Any redundant species should be identified for removal or improvement
Ancient woodland	Most or all of zone 4, 5, 6, & 7 are designated either Paws or LEPO. There are also significant areas of PAWS	• Incorporate management principles outlined in RDI/WT Ancient Woodlands

	and LEPO in zones 2 & 3 and a small area of LEPO in zone 1	Report (Appendix 6) • Thin to favour Ancient Woodland feature still present • Use principles from report to inform management in other areas
Open space	There is currently a lack of open space in the forest	• Increase open space through restructuring to bring it in line with UKWAS • Design open space to aid management, E.g. deer control, use by protected species, etc.
Deadwood	Lack of some forms of deadwood in some areas of the forest at present. Need to justify felling to waste proposals where they may be used	• Follow SEPA Guidance – Management of Forestry Waste • Create a range of deadwood types • Bring deadwood content at least in line with UKWAS over the whole forest • Aim for higher deadwood content where possible
Diffuse pollution & water course management	No water body within or adjacent to the plan area is currently less than good ecological potential any run off for operation could adversely affect this. Water courses in the forest should also be inspected for inappropriately designed or redundant structures	• Comply with Water Environment (Controlled Activities) (Scotland) Regulations (CAR) • Adhere to UKFS and UKWAS • Follow forest and water guidelines • Plan and time harvesting and ground preparation operations to minimise impact • Survey water courses for potential improvements • Restore Riparian areas to help act as a buffer for future operations
Pine Tree Lappet Moth	PTLM is present in Aigas Forest. With the forest being in a core PTLM area timber movement restrictions apply	• Continue to assist as much as possible with research into PTLM • Forest operations to avoid conflict with timber movement

		restrictions
Nesting birds	A number of important species, included several schedule 1 species, bread in Aigas Forest	• Plan harvesting operations to avoid nesting season • Follow FC Guidance Note 32 – Forest operations and birds in Scottish Forests • Implement monitoring programme for nesting birds
European Protected Species	Present – Bats spp., Otter, Wildcat	• Bat, Otter and Wildcat surveys will be carried out

C.1.2 Herbivore Impact

Factor	Constraint	Opportunity
Deer	• Forest appears to be used for shelter in bad weather • No deer control has been carried out for a several years • Signs of deer damage noted in forest whilst surveying, though present numbers are not known • Deer fence surrounding ACF and Neighbours land only bounders on ACF ground in a very short stretch but is critical to the success in deer control in the forest	• Start controlling deer population in the forest • Survey the deer population to establish numbers and continue to monitor • Work with neighbouring landowners to develop a Deer Management Plan to prevent the need for further fencing • Collaborate with neighbours on both sides of the fence to keep it secure • Collaborate with neighbours inside the fence to ensure deer control is effective

C.1.3 Social Impact

Factor	Constraint	Opportunity
Roads (external)	Increased use of A831 for timber traffic and road closures will be required for harvesting operations on steepest slopes above road	• Work with HC and KCC to minimise impacts to local residents • Time operations to minimise impacts • Consider the pros and cons of LTR for most problematic areas

Roads (internal)	Good road network at present, however need to be extended to gain access to some areas.	• Present network in fairly good condition • Needs to be extended through zone 3 to gain access to zone 6 •
Public access	Forest used by a range of local user groups, including walkers, mountain bikers and horse riders. Also concern from Crask of Aigas residents over increased usage of road through Crask and unauthorised use of old road 'loops' by zone 6	• Work with Mountain bikers to form 'land use agreement' to allow them to build and maintain trails in a given zone to help minimise any potential conflict with other user groups. • Provide better horse access along forest roads and ride to help protect walking paths • Maintain existing trails • Develop a separate access plan to investigate possible extensions to trail networks, appropriate work on viewpoints, facility provision, etc. • Direct all user groups away from Crask road • The Crask road is not suitable for use during forestry operations • Provide car parking facilities by forest gate
Employment	Contract labour may have to come from out with the area due to a lack of skills for specific operations	• Create of volunteer opportunities and employment through forest management activities, firewood production, etc. • Provide training where possible for volunteers • Encourage community engagement both in management planning and practical operations
Local school	No set provision in the forest at present for the local school to use, though the school does visit and use the forest periodically	• Work with the local school to see how best this could be achieved • Continue to host school days at the forest • Investigate possible path

		links, outdoor classroom option with the local school and at their advice • Work with local school to help create the next generation of interest in the forest
Community engagement	Need to keep the community engaged over the long term to ensure the future success of Aigas Community Forest	• Create volunteer opportunities to physically involve the local community in the management of the forest • Continue to provide 'Consultation Walks'

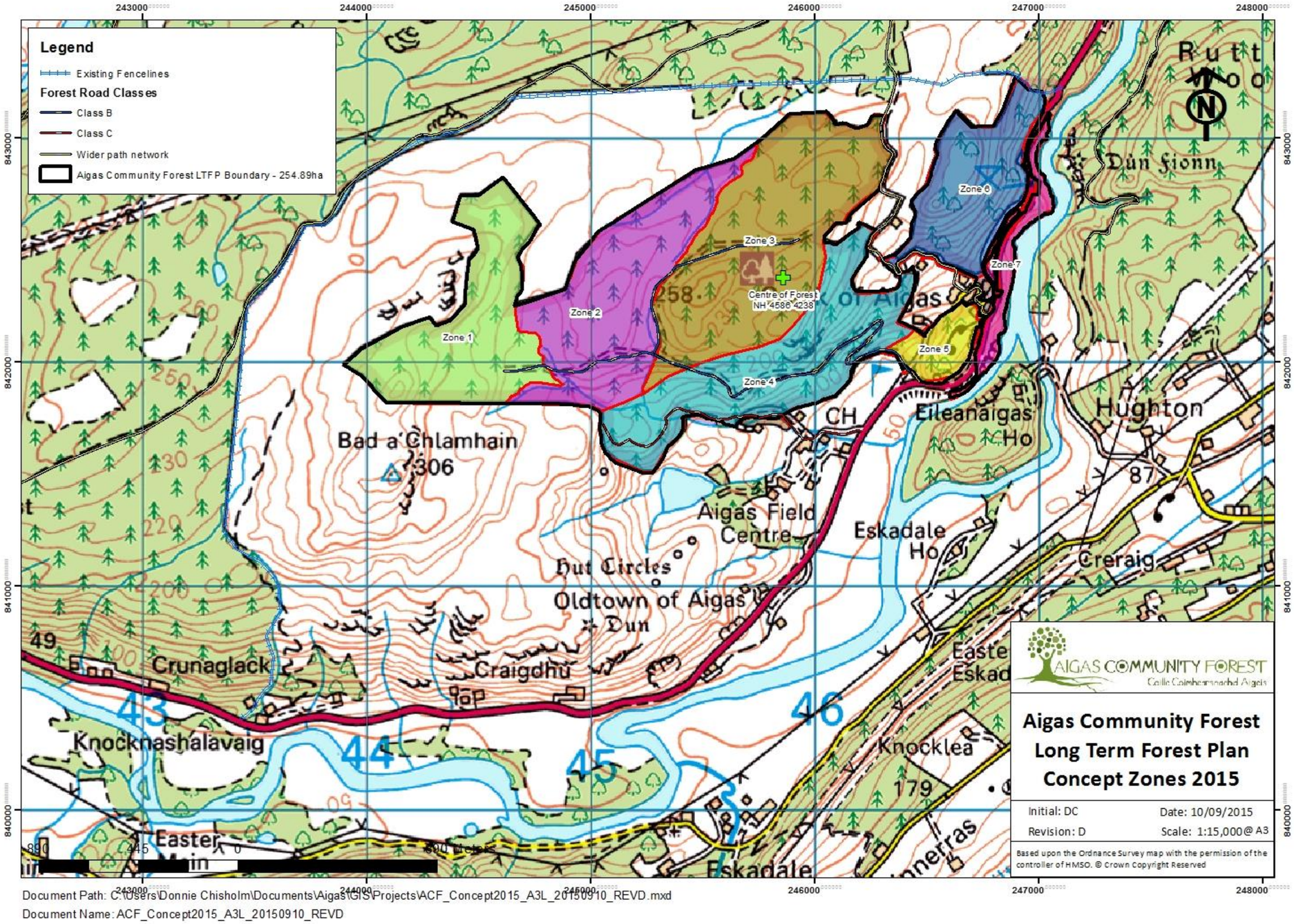
C.1.4 Bio-security Impact

Factor	Constraint	Opportunity
Introduction of Insect, fungal and bacterial pests. Dothistroma Needle Blight & Ash Die-back currently not in ACF back reported in local area	Potential to lower productivity of forest in 'outbreak' situation	• Follow FC guidance specific to each threat as they arise • Follow relevant bio-security measures to prevent further introductions to forest • Educate forest users to potential damage that can be causes through consultation walks, signage, website, etc. • Continue to monitor crop for new threats
Existing threats	Pine Tree Lappet Moth present. Fungal root and butt rots also noted during surveying	• Follow FC guidance for each threat and continue to monitor • Change species during restructuring where appropriate to prevent continued problems in new crop • Take necessary precautions during felling and thinning operations • Follow timber movement restrictions

C.1.5 Zonal Impacts

In the following pages the first map shows the location of each zone within Aigas forest. Subsequent pages then analyse each zone in turn.

C.1.5.1 Aigas Community Forest Zones Map



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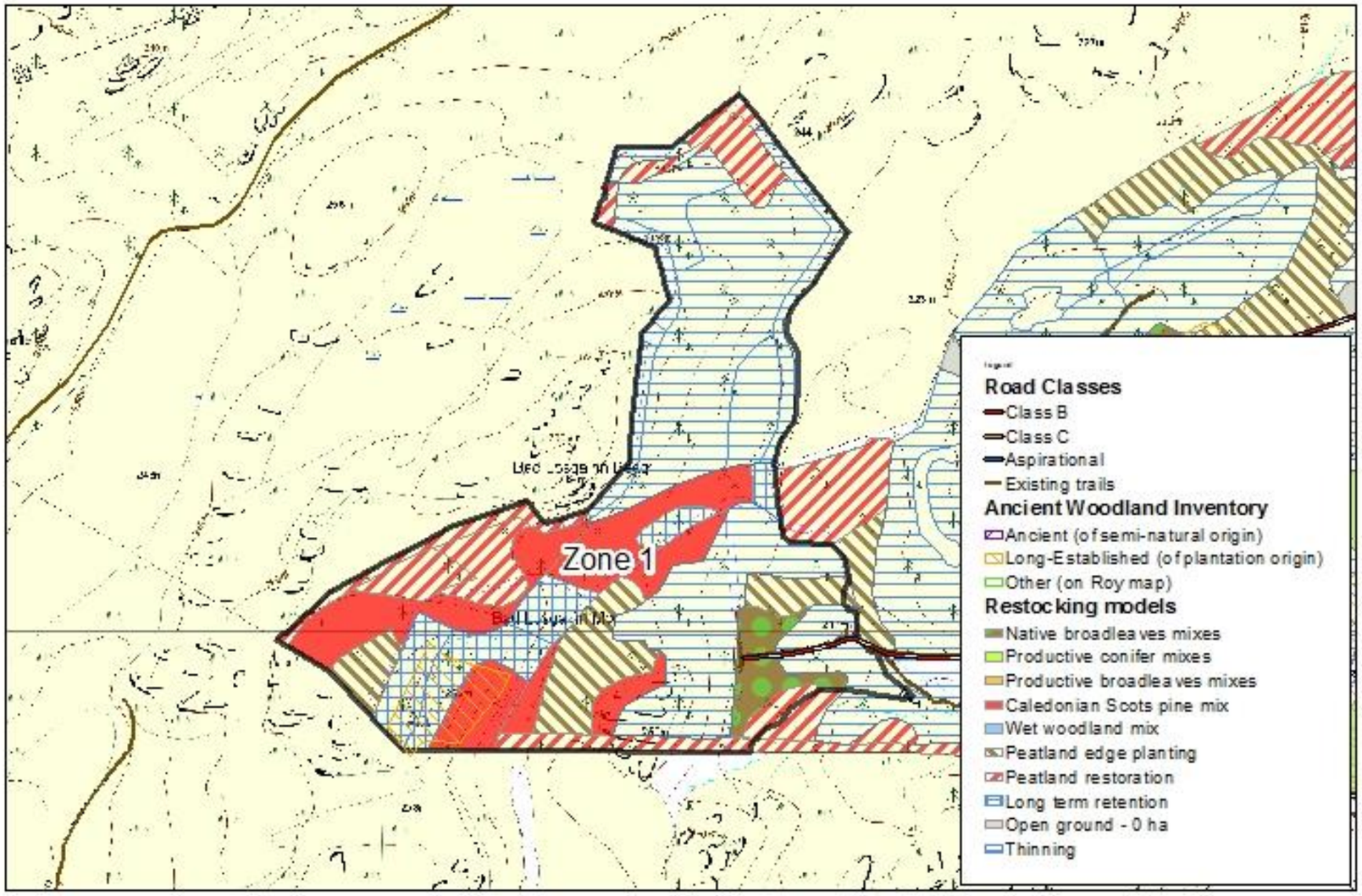
C.1.5.2 Zone 1



Description

Zone 1 is the least accessible area within the forest and lies at the top of the hill abutting areas of open moorland. It is not visible from within Strathglass. The terrain in this zone is quite gently undulating or flat, the flattest areas tending to be deep peat (>45cm deep). This Zone is also on the poorest soils, mainly ironpans or podzols; as a consequence the trees have not grown very fast.

The main tree species present are Scots Pine and Lodgepole Pine on the wetter areas, some of which has started to blow over. These have been relatively slow growing due to climatic conditions. There are also a few patches of Sitka Spruce and Japanese Larch around some of the edges. The anicient woodland features still hold some interesting features such as *Goodyera repens* and *Ptilium crista-castrensis*. This zone also contains most of Aigas forests population of wood ants, and some of the oldest archaeological features.

Priorities

Our priority in this area is to improve biodiversity, peatland restoration where appropriate and to convert to CCF where possible.

- Increasing biodiversity.
- Removal of tree cover from deep peat.
- Firewood production.
- Future conversion to Continuous Cover Forestry in better areas.

Issues Highlighted

- Peatland restoration – not all areas will be suitable for restoration. Peatland edge planting a good alternative (500 stems/ha)
- Diffuse pollution - as much timber as possible should be removed from restoration sites as possible
- Black Grouse present on adjacent ground – any new fencing to be marked and redundant rabbit netting to be removed where applicable.

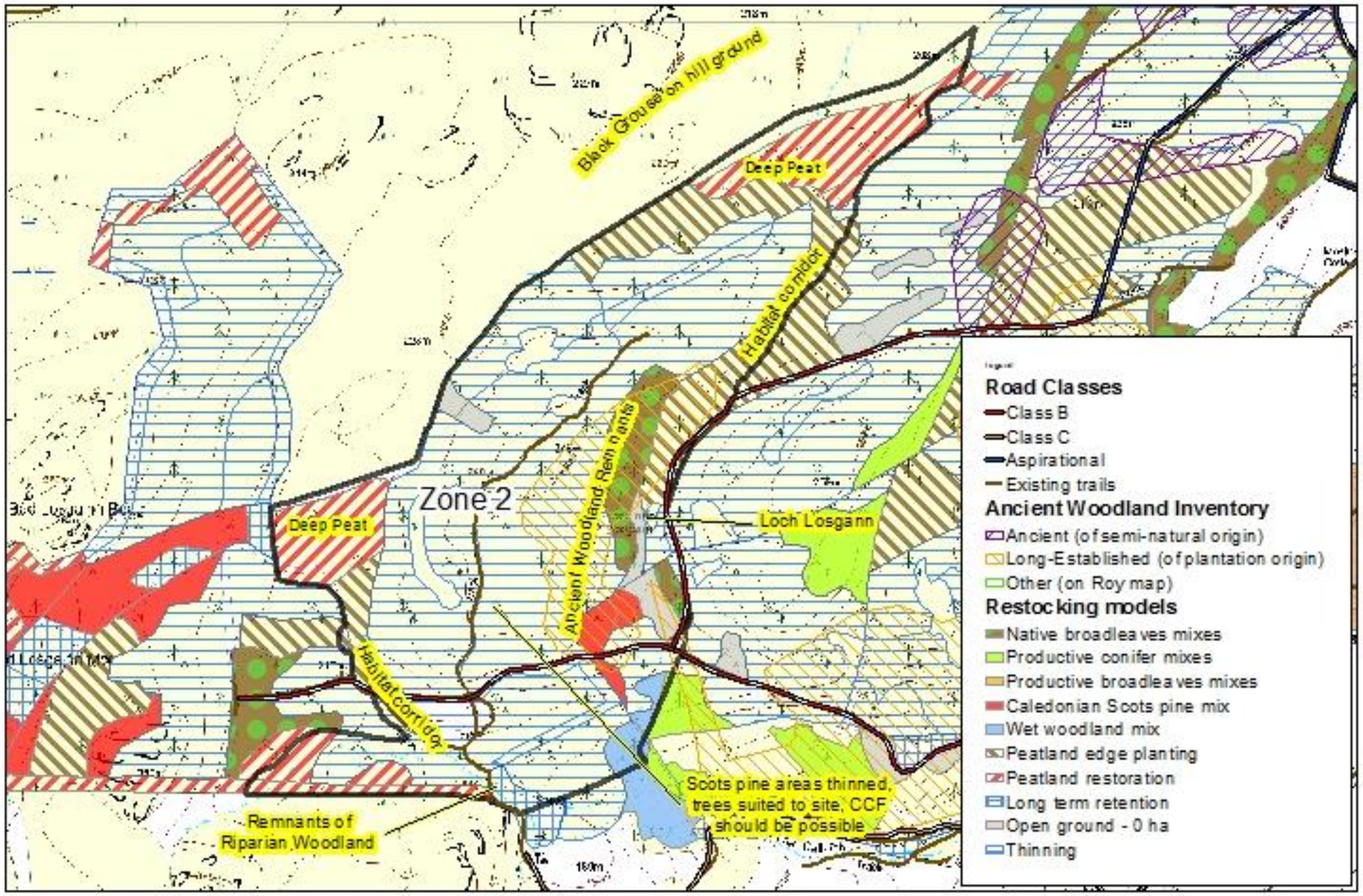
Opportunities & Constraints

- Although not of great value in terms of timber this zone would provide a lot in terms of biodiversity.
- *Ptilium crista-castrensis, goodyera repens* and wood ants all present in this zone. Management to favour these species.
- Deep peat areas pose problems for harvesting and should not be planted under current guidance; peatland restoration would be a good option, or peatland edge planting where restoration is not appropriate.
- Most exposed to prevailing Westerly winds and provides protection to rest of forest.
- The Scots and Lodgepole pine has been thinned allowing a greater range of management options.
- Black Grouse present on adjacent moorland.
- Archaeology – thought to be an old farmstead. To be protected during forestry operations, otherwise no special protection required.

Actions

- Peatland restoration (tree removal and drain blocking), with peatland edge planting where restoration is not appropriate.
- Thinning of Scots Pine for future conversion.
- Felling Lodgepole pine and Sitka spruce, restocking with native species where appropriate.
- Soften edges to favour Black Grouse .
- Reduce deer numbers to aid natural regeneration.

C.1.5.3 Zone 2



Description

Zone 2 mainly consists of elevated ground towards the back of the site as is not readily viewed from within Strathglass although visible from across the Glen. It is consists of free draining podzolic soils, with a fringe of wetter areas, ranging from deep peats to surface water gleys. The main tree species present are Scots Pine on the elevated ground, again with some Lodgepole pine on the wetter areas. There are still some remnants of riparian woodland along the watercourses and lochside, as well as some remnants of Ancient woodland. The main forest track extends through much of this area and is well used by recreational users.

Priorities

The priority for this area is to retain as much of the Scots Pine as possible converting it to CCF and facilitating public use of the current track while providing other facilities particularly around Loch Losgain. There is scope for increasing biodiversity along watercourses and of the Loch itself which is gradually infilling.

- Increasing biodiversity, ancient woodland and riparian restoration.
- Restoration of Loch. Habitat and species monitoring to continue. Work to be guided by Aigas Field Centre.
- Recreation provision – paths, events venue by Loch Losgain.
- Future conversion to Continuous Cover Forestry (CCF) in better areas.
- Timber and firewood production.

Issues Highlighted

- Urgency to start loch restoration
- Lack of open space
- Resident population of Crested Tit (schedule 1 species). Wood ants also present.
- Black Grouse present on adjacent hill ground –any deer fencing to be marked and redundant rabbit netting removed.
- Protection of wetland features in restocking proposals and wet woodland restoration.

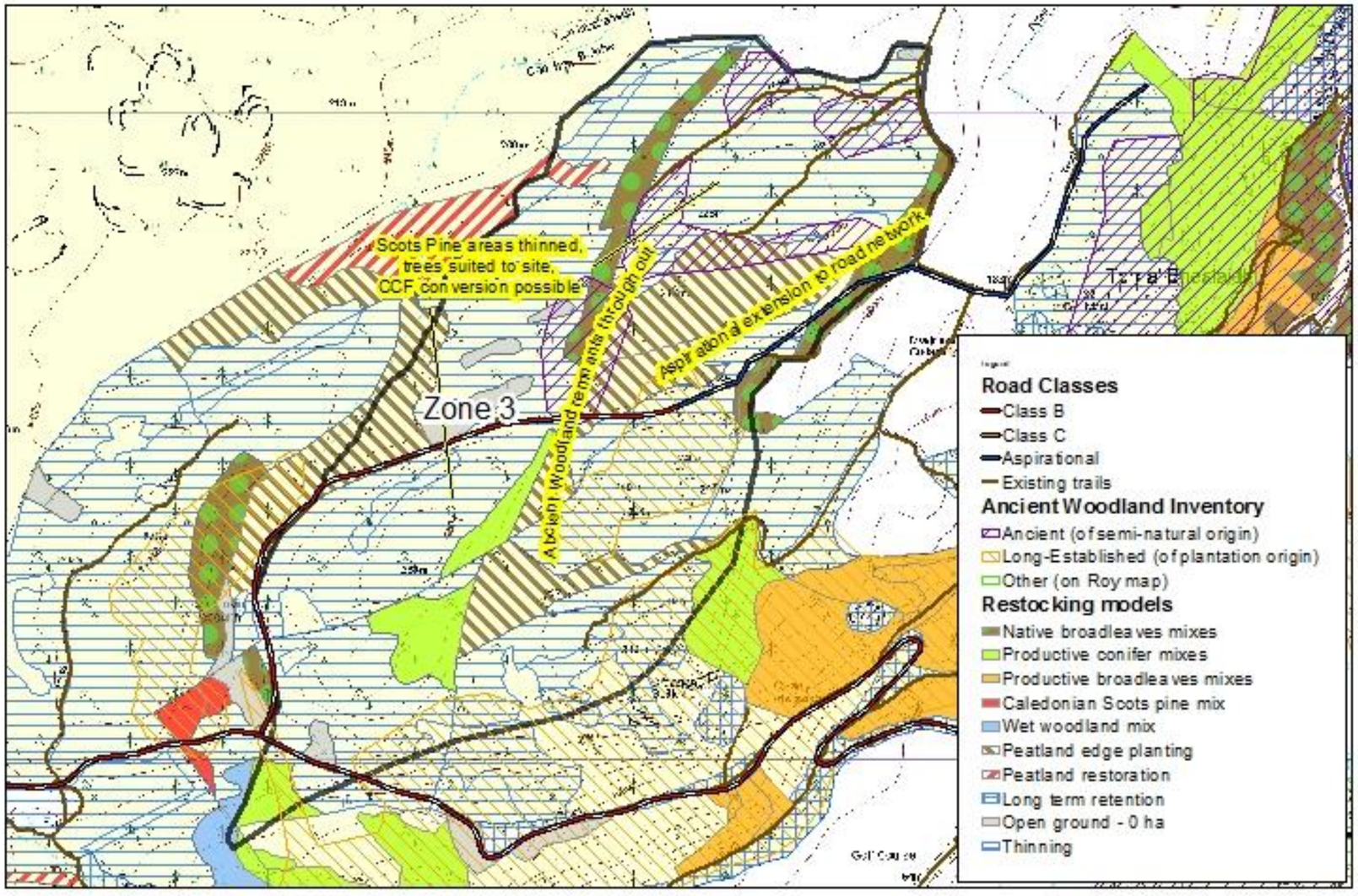
Opportunities & Constraints

- The Scots Pine in this Zone has been thinned; conversion to CCF in this rotation should be possible. Poor provenance is an issue, limiting end use.
- Riparian restoration would create habitat corridors through the forest.
- Peatland restoration/peatland edge planting would be a good option for deep peat areas.
- Black Grouse present on adjacent moorland. Opportunity to feather edges and improve habitat.

Actions

- Thinning of Scots Pine for future conversion also to favour ancient woodland remnants.
- Improve provenance through planting as part of CCF management.
- Peatland, peatland edge and riparian restoration.
- Restoration of loch and surrounding area with creation of an outdoor venue.
- Soften edges to favour Black Grouse.
- Reduce deer numbers to aid natural regeneration and protect restocking.
- Fencing first tranche of restocking to give stalking time to reduce deer numbers.

C.1.5.4 Zone 3



Description

Zone 3 lies at the top of the hill face that is visible from Strathglass and Kilmorack. It has two small hills in it with a broad peaty flat between. There is a little steep ground on the edges of the hills. The main tree species are Scots Pine, Lodgepole Pine, Sitka Spruce and Douglas Fir. The Scots Pine has previously been thinned however there are also small areas of windblow appearing. The other tree species have not been subject to thinning and are mature/ over mature. There are some remnants of Ancient woodland in this zone. This zone is also being used for a number of studies on Pine Tree Lappet Moth. Recreation and access take place in this zone linked to the main forest track and a number of informal paths. It is also used by local mountain bikers. The main forest track terminates in this block.

Priorities

The priority for this area is to retain as much of the Scots Pine as possible converting it to CCF and managing informal access. There is scope for increasing biodiversity in line with restoration of ancient woodland and sympathetic management along watercourses. Informal access will be provided for and agreement reached with local mountain bikers over management of their trails.

- Increasing biodiversity, ancient woodland restoration.
- Recreation provision – paths, MTB trails.
- Conversion to Continuous Cover Forestry (CCF) in better areas, starting with some of the areas that have already blown.
- Timber and firewood production.
- Continue co-operation with Forest Research PTLM studies.

Issues Highlighted

- Red Squirrel present and breeding (LBAP species). Scottish Crossbill also present (schedule 1 species).
- Windthrow damaging stock fences most winters.
- Extension to road network to access zone 6.

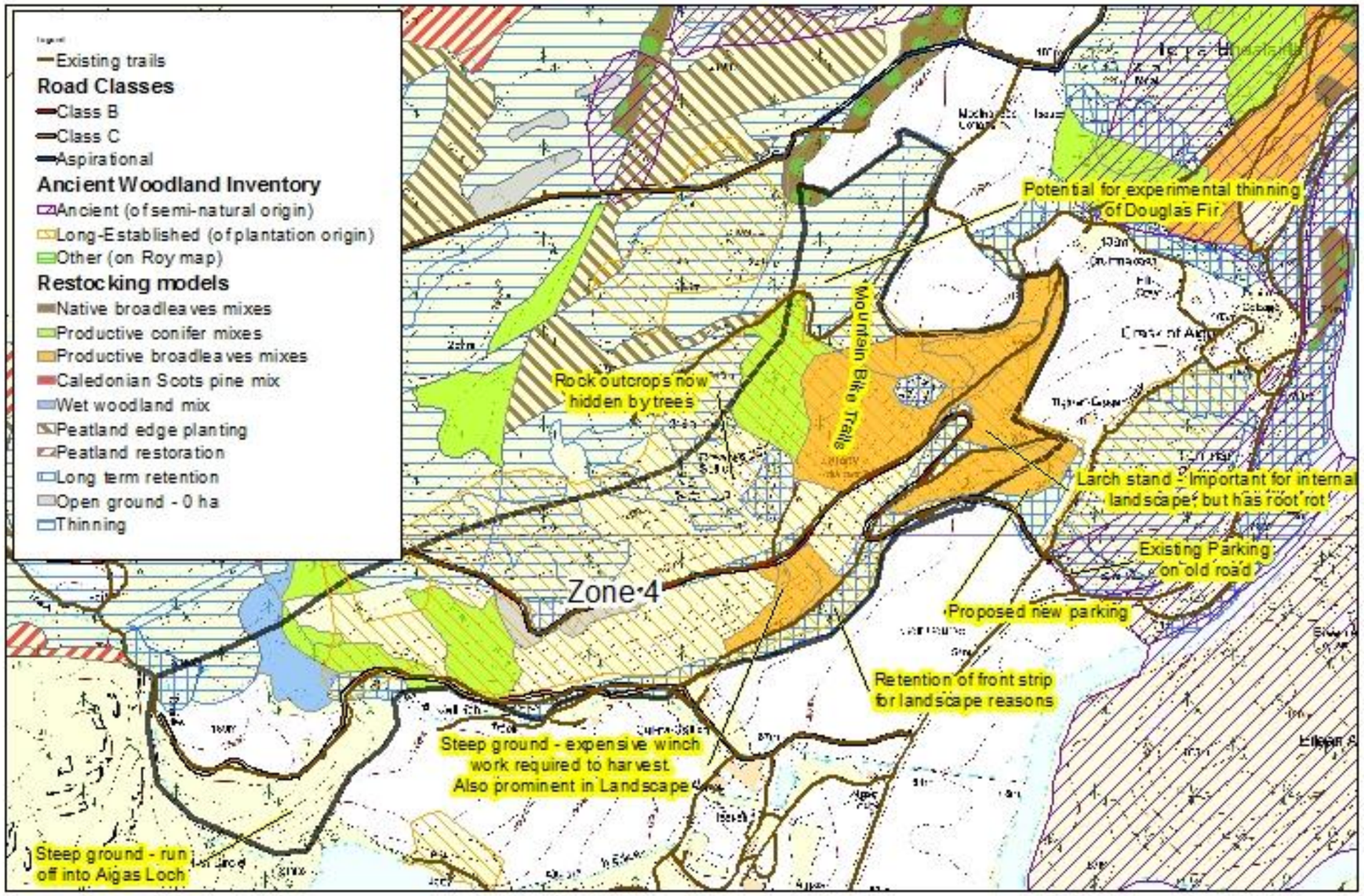
Opportunities & Constraints

- The Scots Pine in this Zone has been thinned; conversion to CCF in this rotation should be possible.
- Windblow appearing which will require management.
- Poor provenance of Scots Pine as well as past thinnings not managing to produce good branching habits have produced poor quality timber in this rotation. Poor provenance also makes natural regeneration less viable for the next rotation.
- Black Grouse present on adjacent moorland.
- Area favoured by mountain bikers.
- Scope to extend forest track to provide access to Zone 6.
- *Ptilium crista-castrensis* and *Goodyera repens* present.

Actions

- Thinning of Scots Pine for future conversion also to favour ancient woodland featuress.
- Restoration of wet woodland areas where appropriate in hollows.
- Species diversification and improvement of provenance through planting as part of CCF management.
- Soften edges to favour Black Grouse.
- Reduce deer numbers to aid natural regeneration and restock.
- Work with local mountain bikers to manage trails.

C.1.5.5 Zone 4



Description

Zone 4 comprises the steep afforested slope which provides the backdrop to the A831, Aigas Golf Course and Aigas Field Centre so is very prominent in the landscape. The main tree species are Douglas Fir, Norway Spruce, Sitka Spruce, Scots Pine and Larch. Very little in this zone has been thinned and some areas of windblow have already appeared. The Norway Spruce shows considerable signs of deer damage and the Larch is suffering from a form of rot which weakens it. Most of this zone appears in the Ancient Woodland Inventory. Soils are good, being mostly brown earths with some areas of podzol on the highest ground. However the soils generally are not stable on the slopes, with very little or no vegetation present under the denser canopy areas to bind the soil surface.

Priorities

The priority for this area is to manage the conversion to CCF while being sensitive to both landscape and soil stability issues. This area has the greatest potential to generate high quality timber for income generation but this needs to be done in a way that is compatible with remnant ancient woodland. This Zone also provides the key public access point to the main forest block.

- Landscape.
- Keep soils stable.
- Ancient woodland restoration.
- Future high value timber production, in the next rotation, under CCF management.
- Recreation provision – paths, MTB trails.

Issues Highlighted

- Nationally scarce species of liverwort found during bryophyte survey.
- Crested tit (schedule 1) breeding, Scottish Crossbill (schedule 1) and Red Squirrel (LBAP) also present.
- Landscape issues with felling on steep slope above golf course. Also old viewpoints now blocked by trees.
- Diffuse pollution above Aigas loch - the water supply for Aigas Field Centre.
- Aigas Field Centre activity on adjacent ground - most of the year.

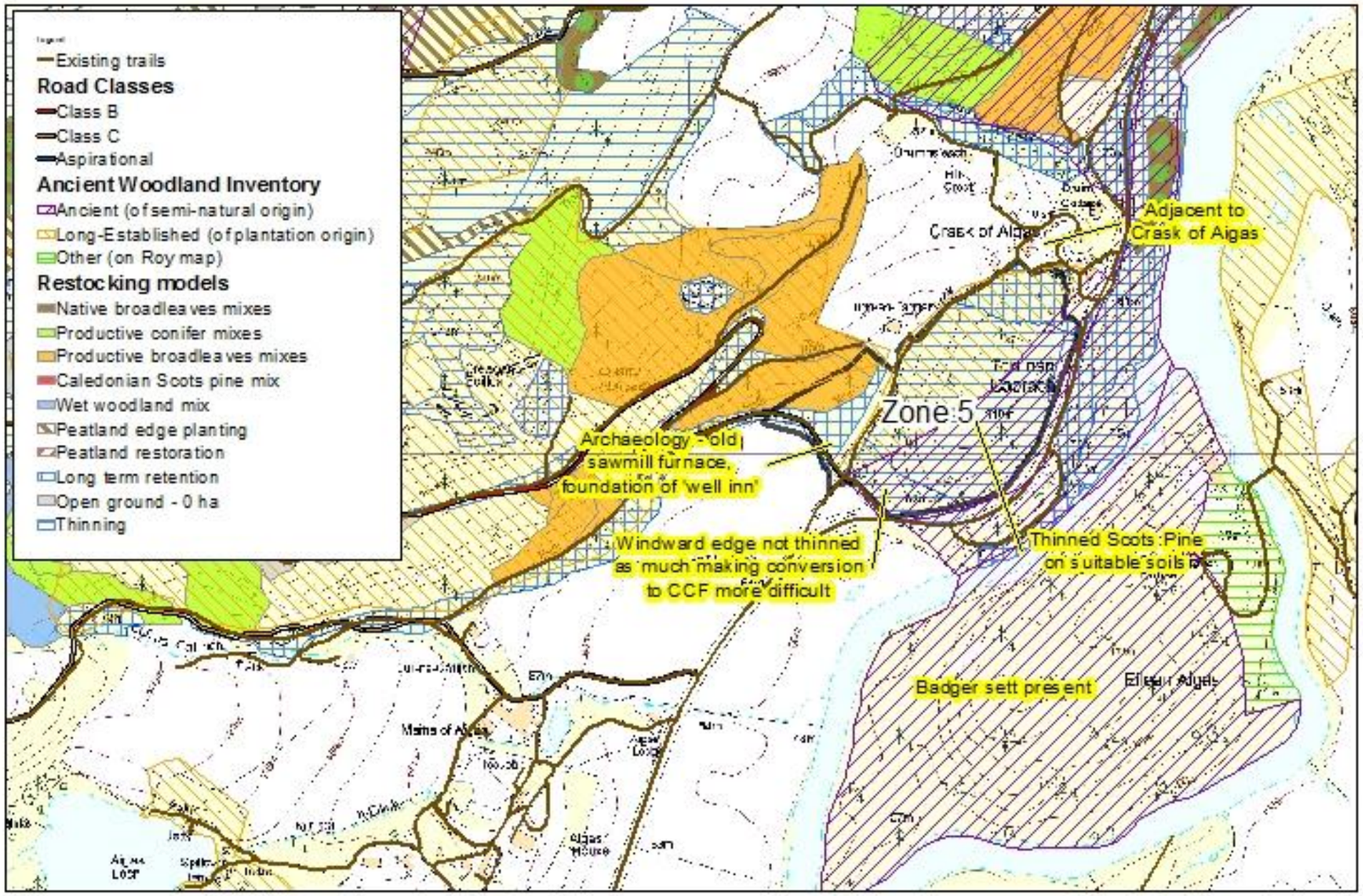
Opportunities & Constraints

- Much of the ground will require expensive winch work during harvesting.
- Due to a lack of thinning CCF management will not be possible in most of this zone, with the exception of one small area where experimental thinning could be carried out as part of the Ancient Woodland restoration.
- Unstable soils mean large clearfells would not be advisable.
- Good quality soils mean that this zone has the greater potential for income generating timber crops.

Actions

- Retain woodland fringe adjacent to Aigas Golf Course.
- Small scale clearfelling and restocking program to address mature/ over mature timber.
- Restock with high value crops to help make future harvesting more viable.
- Actively manage future crops to produce better quality timber; CCF management as well as pruning main crop, thinning nurse crop, future under planting, etc.
- Thinning to favour ancient woodland features.
- Provision of paths and MTB trails.
- Reduce deer numbers to protect restocking.
- Fencing first tranche of restocking to give stalking time to reduce deer numbers.

C.1.5.6 Zone 5



Description

Zone 5 is a rocky knoll that lies between the Crask of Aigas and the A831. It is prominent in the landscape and important to residents of the Crask of Aigas. The main access road to the forest is to the West of this block. This zone mainly consists of thinned Scots Pine on a small hill with good podzolic soils. The Pine is well suited to this site, but again is of poor provenance. Despite high deer number natural regeneration of broadleaved species is establishing in the zone. Most of this zone appears in the Ancient Woodland Inventory and is in a secure condition. There is a small area of wet open ground where there are a number of archaeological features.

Priorities

The priority for this Zone is to covert to CCF but to undertake little intervention. A car park and interpretation will be provided adjacent to main access road but this will discourage access via the Crask to minimise disruption to local residents.

- Conversion to CCF management with consideration of landscape issues.
- Increasing biodiversity, ancient woodland restoration.
- Facilities to support recreation provision.
- Protection and interpretation of archaeology.

Issues Highlighted

- Important corridor for Red Squirrel (LBAP).
- Concern of disturbance to wildlife through increased access.
- Rock netting by road – only ‘secured’ to old stumps.
- Positioning of proposed car park.
- Stand of Norway Spruce blocking light to neighbours garden.

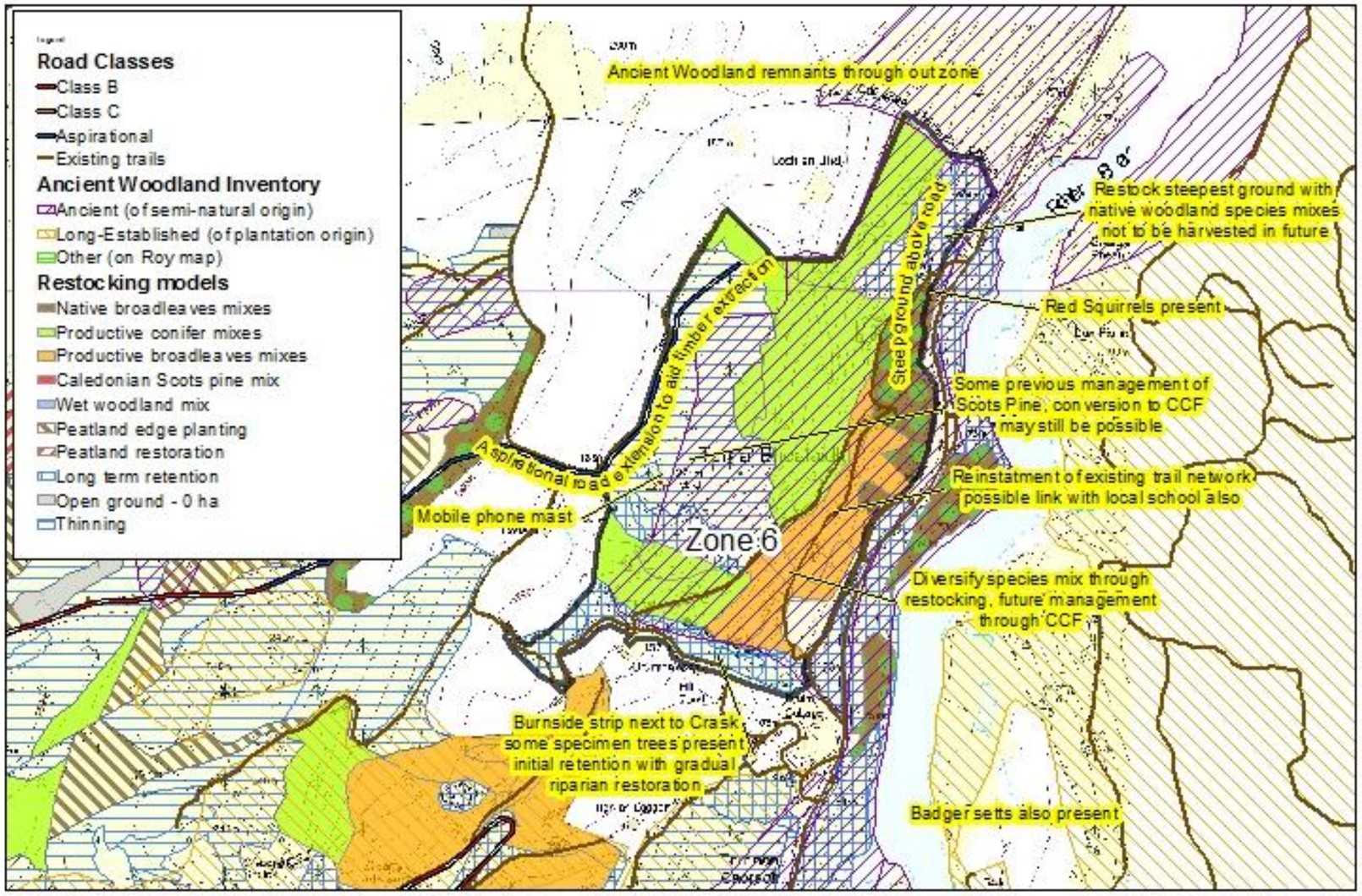
Opportunities & Constraints

- Being next to the Road and Crask makes it prominent in the landscape.
- Potential for significant disruption to local residents during operations.
- Windward edge has different species and has not been thinned as much.
- Stability still good so conversion to CCF possible.
- Archaeology present – old sawmill ‘furnace’.
- This zone also contains some prominent archaeology.

Actions

- Conversion to CCF management.
- Use small scape harvesting operation to minimise impact to local residents.
- Create car park adjacent to forest road, signing people into main forest block and away from Crask.

C.1.5.7 zone 6



Description

Zone 6 on a steep hillside North of the Crask of Aigas and is adjacent to the A831 with Scots Pine on top with a mixture of Spruces and Douglas Fir on the slopes leading down to the road, some of which are precipitous. Although soils are generally rich on these slopes they are not stable. The forestry in this area is very mature and overdue for harvesting. Most of this zone holds the highest designation for Ancient Woodland but is in a critical state. This zone has an existing trail network and is regularly used by local residents. There mobile phone mast is also in this zone.

Priorities

The priorities for this zone are to fell and restock with native broadleaves to meet Ancient Woodland and soil stability objectives and to provide appropriate access and educational facilities.

- Increase biodiversity, ancient woodland restoration and sensitive management of riparian zone.
- Recreation and view point provision to provide access to visitors from roadside and to enhance local residents' access provision.
- Restock without losing soils on steep slopes and manage for long term slope stability.
- Future conversion to CCF where possible in this rotation, where not in next.

Issues Highlighted

- Unstable soils likely to lead to erosion and therefore diffuse pollution.
- Roost site for Peregrine Falcon (Schedule 1 species)
- Red Squirrel dependant on zone (LBAP species)
- Badger sett present.
- Extension to road network to gain access.
- Concern of disturbance to wildlife through increased public access.
- Disturbance to neighbours though increased access past houses, potential noise levels from glamping site (depending on siting), and from forest operations.

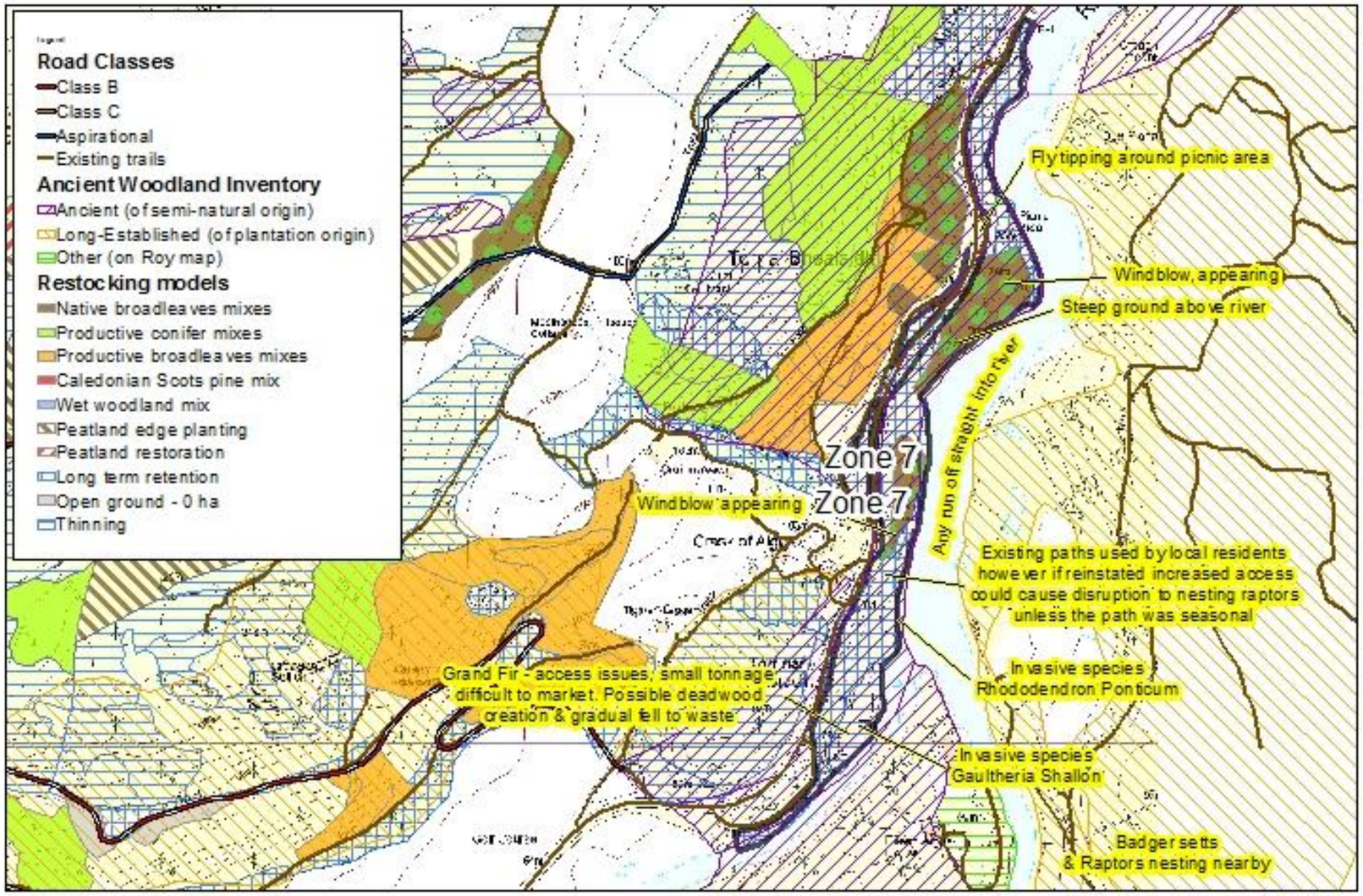
Opportunities & Constraints

- Steep slopes above main road, the most challenging ground to harvest at Aigas. Likely to be expensive and loss making.
- Potential for significant disruption during operations not just to locals and traffic but to raptors nesting nearby.
- Unstable soils on slopes above road.
- Lack of road access to top of slope an issue for harvesting.
- Significant access opportunities as good viewpoints and scope for linking to local primary school.
- There is a stream running at West of this zone is a nice feature and would also screen clearfell behind. Also important bryophyte habitat.
- Ready access to services enable opportunity for tourism accommodation (glamping) facilities to generate income.

Actions

- Consult on operations to minimise disruption to raptors.
- Improve habitat for Red Squirrels.
- Reinstate paths network and appropriate viewpoints/ interpretation.
- Manage income generation potential through mast lease and possible visitor accommodation provision.
- Follow forest and water guidelines.

C.1.5.8 Zone 7



Description

Zone 7 comprises the strip between the main road (A831) and the Beauly river. It mainly consists of Broadleaved species with two small stands of mixed Spruce and Douglas Fir and another small stand of Grand Fir. There are a number of specimen trees present as well. There are invasive species present in this zone (Rhododendron & Gaultheria). All of this zone holds the highest designation for Ancient Woodland and is threatened. There is a Highland Council maintained parking and picnic area adjacent to the forest within this area which is extensively used by visitors for viewing the Beauly river and a range of breeding bird species.

Priorities

The priorities for this area are to manage for Ancient Woodland and biodiversity priorities providing improved access to viewpoints and short walks without increasing disturbance to wildlife.

- Removal of invasive species.
- Clear and restock stands of Spruce before more windblow occurs.
- Restock without losing soils on steep slopes, bearing in mind run off into river.
- Conserve the ground flora present.
- Develop sensitive access to river viewpoints (may be site for all abilities access).
- Minimise disruption to nesting raptors nearby.

Issues Highlighted

- Risk of diffuse pollution during harvesting operations, Beauly River currently in good ecological condition.
- Parts of zone identified in modelling as being at risk from surface water flooding.
- PAWS currently considered ‘threatened’ in Ancient woodland report. Removal of invasive species would do a lot to ‘secure’ this area.
- Concern of disturbance to wildlife and local residents through increase public access.
- If paths were developed signage to prevent disturbance to Schedule 1 raptor species nesting nearby would be required.
- Justification for fell to waste proposal of Grand fir.

Opportunities & Constraints

- Steep slopes above river, harvesting will have to be carefully managed to prevent run off into river.
- Potential for significant disruption during operations not just to locals and traffic but to raptors nesting nearby.
- Lack of access an issue for harvesting.
- The most intact woodland ground flora in the forest is in this zone.
- Good parking facilities but public experience limited by lack of footpaths etc.

Actions

- Remove invasive species.
- Consult with Aigas Field Centre on operations to minimise disruption to raptors.
- Harvest what can be reached of conifers and restock with native woodland species.
- Deadwood creation followed by gradual felling to waste of conifers that cannot be reached.
- Investigate and develop options for improving access provision sensitive to potential for wildlife disturbance.

C. 2 Landscape Analysis

C.2.1 Landscape Character Analysis

The most significant areas of landscape interest are the steep slopes to the NW of the A831 and the River Beauly. These form the backdrop as vehicles pass along the road and the mixture of mature conifers, broadleaved fringes and rocky outcrops are dramatic.

Torr a' Bhealaidh (220m), Torr Nan Coarach (119m) and Creagan Soiller (250m) form a ridge which flanks the main road. Most of the settlements in the area lie on the slopes and they also form the backdrop to Aigas House and the adjacent golf course. The land continues to rise beyond these hills to form a plateau but views of these areas are less significant.

In the Inverness District Landscape Character Assessment carried out by…..Published in ….. Aigas Forest is split between to landscape sub types, Rugged Massif (roughly taking in working zones 1, 2 & 3) and Narrow Farmed Straths (roughly taking in working zones 4, 5, 6 & 7).

The Rugged Massif Landscape type consists of rugger exposed mountains which cover much of the Western part of the Inverness District. This landscape comprises of ranges of massive mountain with irregular landform, broad rounded summits connected by long ridges. The hills are mainly covered by rock outcrops and heather giving a mottled texture which varies only subtly from top to bottom making too hard to perceive the size of these hills.

The Farmed Strath Landscape Type forms a channel through the surrounding landscape. The Narrow Farmed Starths Landscape Sub Type can be distinguished by the narrowness of the strath floor and the steep side slopes which are mainly wooded.

All water courses in Aigas Forest ultimately drain in to the Beauly River. All flow directly into the Beauly apart from an old mill laid/burn running along the bottom of Compartment 6b1 in working zone 4 which first flows into Aigas Loch. This being significant as the water supply for the Aigas Field Centre is taken from Aigas Loch.

The photos of significant viewpoints are shown in Map 4, along with the visualisations of the forest, and the location and bearing of these viewpoints.

C.2.2 Concept Design

The backbone of this concept is to create a forest that will deliver both conservation and commercially. Looking after the ecology of the forest will take and equal footing with commercial production. This should allow ACF to produce a forest that is healthy, attractive, is financially sustainable and provides jobs in the local community. This is in keeping with the ACF vision:

> *"A productive working forest providing measurable social, economic and environmental benefits for local residents and visitors alike."*

ACF feels that Continuous Cover Forestry is the best way to achieve this. Where possible a conversion to CCF will be carried out. In addition where a conversion is not possible CCF management will be the aim after restocking. The aim through all future management will also be to diversify the age and species structure of the forest, whilst improving and restoring habitat and habitat corridors in the forest to benefit the local flora and fauna.

C.2.2.1 Forest Management

All forest management and associated operations will meet the requirements of the UK Forestry Standard, and follow the Guidance associated with UKFS as listed in Appendix 5.

The forest at present is very even aged having been planted largely in the 1950's. Some area of the forest have been thinned in the past, however the last thinning was carried in 1993 meaning that while the stands are over stocked individual tree stability still appears to be reasonably good, with the crowns still being more than a third of the tree on average. While this gives us some more options in the thinned areas, the lack of thinning in the rest of the forest is the main limiting factor.

As stated above we aim convert to continuous cover forestry (CCF), this will however take some time to achieve. Scots pine does not reach maximum seed production till 80 to 100 years of age. As the Scot pine at Aigas still needs 20-30 years to reach this age, regeneration felling relying on natural regeneration is not likely to be completely successful at present. This does however give us more time to prepare the crop for regeneration felling, with thinning being carried on to improve the seeding potential of the crop. Obviously this also means that the conversation will carry on well beyond the plan period.

In the unthinned areas we will be restricted to clearfelling. As it is not possible to fell to green edges in many places we will have to accept some windthrow adjacent to felling coupes if we are to keep the size of the felling coupes to a minimum. This will be a fine balancing act and require careful consideration of the felling design.

Clearfelled areas will be restocked through planting, either for future CCF management or for managed Long Term Retention where CCF would not be economically viable, for example on the steepest and most in accessible slopes, or where the ground conditions are unsuitable for commercial crops.

While some non-native species will be used in the restocking of the clearfelled areas designed for future CCF management, mainly Douglas fir European larch and Norway spruce, we intent to use native trees species, both coniferous and broadleaved species, for production in restocked areas. The use of native productive species should help us to meet our aim of conservation and commerce being on an equal footing in the management of the forest whilst also giving greater options for future management should extraction from some areas still prove uneconomic; allowing a commercially planted crop to be converted to a more natural woodland of high ecological value more easily.

Management of the LTR areas will consist of the removal of dangerous trees where the threaten other features, such as paths or archaeology, the creation of deadwood through ring barking and occasional felling to recycle of unwanted trees species, and supplementary planting in areas as they open through windblow to diversify the species structure.

We will also remove trees from areas of deep peat and restore the peatland areas where appropriate, this woodland removal will comply with the Control of Woodland Removal policy. The areas that peatland restoration has been prescribed are limited to those which would be classed as 'a presumption to restore' according to the FC practice Guide – Deciding future management

options for afforested deep peatland. The woodland removal proposal covering these areas is given in Appendix 7.

We will restock under a peatland edge model where peatland restoration is not appropriate. We will also improve wet woodland habitats in the forest by diversifying tree cover to include mixed broadleaves particularly in riparian zones (along watercourses), and in non-productive wet areas in the forest. We will include open space in our restocking design to bring the forest in line with the UKWAS requirement for open space of >10% of the forested area.

In order to achieve the UK Forest Standard requirement for separation between adjacent crops coupes should not be felled before adjacent restock have reached at least 2 metres in height. We expect that in most areas of the forest where we will be clearfelled this could be achieved in 5 years. Where survey data has shown that this may not be possible, phasing of adjacent operation has been adjusted accordingly. Where any unforeseen issues with crop separation arise during the plan period we will formally agree an amendment with Forestry Commission Scotland.

ACF also aims to achieve accreditation under the UK Woodland Assurance Standard during this plan period.

C.2.2.2 Ancient Woodland Restoration

During the first half on 2015 the Ancient Woodland sites at Aigas Forest were surveyed and a report produced as part of the Ancient Woodland Restoration Project – Great Glen and Three Firths. This is a joint project between the Woodland Trust and RDI associates and is supported by the Heritage Lottery Fund. In this report this ancient woodland sites were assessed with recommendation being given for future management to maintain and restore these sites. Ancient Woodland restoration is an integral part of the new Long Term Forest Plan. As such Ancient Woodland sites at Aiags Forest will be managed in line with the recommendations given in the Ancient Woodland report. The ancient woodland report is shown in Appendix 6.

C.2.2.3 Community

Through this Long Term Forest Plan, and the subsequent access plan, ACF aims to provide for the local community. We will strive not only to provide facilities for the local community as it is today, but also to create a sustainable and highly productive forest for the future that will not only provide local employment, but through links with local schools, organised events, recreation and engagement opportunities will help to build a greater forest sense in future generations; although some of this will be delivered through the provision of the facilities mentioned above a greater part will be delivered through silviculture, purely by creating a forest that people want to be in. Therefore community benefit will be at the heart of any decision making, and will always be considered during any silvicultural operations carried out in the forest.

C.2.2.4 Natural history

Through various surveys and projects that have recently been, or are in the process of, being carried out we now have a good picture of the diversity of species present in Aigas Forest. Naturally surveying will continue through collaboration with a number of organisations to help us monitor progress of the restoration process that we are starting with this plan. This data will be used to inform future management. As is appropriate we will also use this data during engagement exercises

and while working with the local primary school to help build an appreciation for the natural world; which in turn we hope will help secure the future of Aigas Community Forest.

C.2.2.5 Archaeology

The North of Scotland Archaeological Society is in the process of surveying the forest. This survey was completed in spring 2016, with the finds significant data being displayed in the zone maps in section C.1.5. NOSAS have advised ACF of the protection measures to be implemented; these are incorporated into the management proposals in section D. The possibility to develop recreation opportunities around the most significant sites will be investigated in the access plan when it is developed.

C.2.2.6 Deer Control

No deer control has been carried out in Aigas Forest for a number of years; consequently there appear to be a high number of deer in the forest at present. Deer tracks, dung, browsing and other sign, as well as numerous signings of deer were noted whilst carrying out the mensuration and soils surveying suggesting that the deer numbers are too high at present for restocking to be successful without fencing.

The whole of Aigas Forest along with our neighbours ground has inadvertently been deer fenced by other landowners from roadside to roadside, shown in the 'Aigas Community Forest Zones Map in section C.1.5. These fences although continuous are of varying ages and conditions. The majority of the fence is deer proof, with only a short stretch being porous to the East. ACF has already begun talking to the management of this land in order to explore the possibilities of re-securing this part of the boundary. ACF already work collaboratively with our neighbours inside the fence, to reduce the deer numbers. We will also work with our neighbours outside the fence to help maintain it. As it only runs from roadside to roadside an open boundary to the South; the narrow strips of land between the road and the Beauly River, and the possibility of river crossing are 'entry points'. During initial talks with SNH over deer control at Aigas Forest it was felt that a collaborative approach to deer control inside this fence should be successful without the need to deer fence the whole forest.

C.2.2.7 Recreation

In this plan the provision of recreational facilities will be limited to the maintenance of existing trails in the forest, the provision of a car park, and the commitment to develop a land use agreement with the mountain bikers to allow them to build trails in parts of the forest. Further development of recreational facilities will be covered by a detailed access and recreation plan that is to be developed once this forest plan is approved and fund will allow.

ACF takes its responsibilities under the Scottish Outdoor Access Code seriously and is to providing and encouraging responsible access in Aigas Forest. During forestry operations work sites within the forest will have to be closed off for safety. We will always keep these closures to a minimum, with alternatives being provided wherever possible.

D MANAGEMENT PROPOSALS

During all forestry operations best practice will always be followed. In order to prevent repetition a full list of current standards and guidelines is given in Appendix 5.

D.1 Silvicultural Policy

For the duration of this plan silvicultural policy will include the thinning of most of the Scots Pine areas in preparation for a conversion to CCF. As the conversion to CCF will not begin within the this plan approval period, i.e. the first 10 years, the CCF areas are not shown in the felling map, Map 5. Long term retention will be used to safeguard the most ecologically valuable areas, and the sequential clearfelling and restocking of areas that are not suitable for a conversion to CCF will diversify age and species structure, while helping to secure future financial viability of the forest.

The felling coupes will be kept as small as possible. The restocking proposals are designed to be more ecologically sensitive yet productive where appropriate. Restructuring will maintain, restore and enhance riparian corridors and other habitat networks through the forest to support and safeguard the viability of populations of rare and protected species present in the forest, such as the Wood ants, Red squirrel, Otter, Badger, Pine Marten, Wildcat, Crested Tit, Scottish Crossbill, Black Grouse, Osprey and Peregrine Falcon. It is also hoped that by improving habitat more species will start to use the forest, such as Wryneck which have been known to nest locally.

The percentage of open space in the forest will be increased through restructuring, peatland restorations, Peatland edge plantings and riparian restoration to meet the UKWAS requirement for >10% open space. This increase will be realised over the 20 years of this plan as shown in the Species Distribution Table in Appendix 4.

All water courses in Aigas Forest are less than 2 metres wide, with the exception of the Beauly River and Loch nan Losgann. Therefore all riparian buffer zones will be set at a minimum 20m from the waters edges for the loch and the Beauly River, and a minimum of 10m for all other watercourses in line with current forest and water guidelines.

Before all operations surveys will be carried out for all protected species, including European Protected Species, Schedule 1 birds, UK and LBAP species so that the relevant mitigation measure can be put in place. The Forestry Commission Guidance Note 32 – Forest operations and birds in Scottish forests will be followed during the planning and implementation of all operations. There is a resident population of Red Squirrel. Pre-operations surveys will be carried out for Red Squirrel before any harvesting operations and mitigation measure put in place.

Aigas Community Forest will initiate the 5 year review of the plan at the end of phase one.

D.2 Prescriptions

We will contact Highland Council Community Services, roads department, to discuss the issues surrounding timber haulage on public roads prior to the commencing operations.

D.2.1 Felling

No coupes will exceed 8.5ha in size, with smaller coupes not exceeding 2.85ha in size where visible from the A831. This will help to minimise the impact of felling on the landscape. The use of designed open ground, species mixtures and future management through CCF (and LTR to a lesser extent) will mitigate against impacts on the landscape in future rotations. Coupe shapes have been designed that there will be no geometric shapes left in the landscape. There is a possibility that the smaller coupe sizes will start to make the forest look ‘moth eaten’. This does not show in

the visualisations, but if in reality it does, this could be dealt with in year 10 of the plan, at renewal stage. The visualisations are shown in Map 4

Windthrow in the areas planned for CCF will be cleared in order to create the first regeneration groups in either a group shelterwood system or a strip system where appropriate to begin the conversion to CCF. No regeneration felling will be carried out in phases 1 & 2. Proposed felling is shown in Map 5.

Scale of proposed felling areas (including LISS final felling areas)		
Total Forest Plan Area:	254.06 ha	
Felling Phase	**Felling Area (ha)**	**Felling Area Percentage**
Phase 1	20.63	8.1%
Phase 2	25.61	10%
Phase 3	21.52	8.4%
Phase 4	19.64	7.7%
Long Term Retention	23.55	9.3%
Area out-with 20yr plan period	21.44	8.4%

D.2.2 Thinning

Thinning will continue in the Scots pine crop. The aim of thinning in these stands will be to develop the crowns for better seed production in preparation for a conversion to CCF, and to favour broadleaved species in the stands (mainly Silver Birch). By continuing thinning the existing Scots pine crop will have more time to reach maximum seed production in another 20-30 years' time. Existing racks will be used to continue thinning. Once to crop has reached maximum seed production we will apply for permission, and funding if it is available, to start to conversion to LISS. Currently all sites intended for a conversion are ranked either 'moderate' or 'good' for suitability according to FC information Note 40.

Thinning cycle will be set at 5 years initially, meaning that each stand will be thinned every once in every 5 year phase with thinning operations for the whole area to be thinned being spread over the felling phase. The first cycle of thinning will be at marginal thinning intensity with an extra years' cut being taken, to correct the stocking density.

Experimental thinning will be carried out on some of the sheltered areas of Douglas fir that have already been thinned or have self-thinned to some extent. The aim of these areas will be to let more light in to re develop the ground flora and to favour existing broadleaves in this thinning as part of the Ancient Woodland Restoration process. Proposed thinning is shown in Map 6.

In Zone 7 an inaccessible stand of Grand fir will be ring barked and thinned to waste. The timber will not be extracted as the cost of extraction would be prohibitive given the small amount of product that would come out of this stand. As there are still surviving ancient woodland features in this stand, it is important that the Grand fir is removed however. The thinning in this stand will take the form of halo thinning around the Ancient woodland remnants, with ring barking in the zone immediately beyond the halo thinning, to create some standing deadwood. In the next phase of thinning the ring barked trees will then be thinned to waste, again with more trees immediately beyond this new 'halo' zone being ring barked. The combination of thinning to waste and ring barked will create a range of types and ages of deadwood on the site, avoiding having a glut of fallen deadwood all of the same age, ultimately being better for bio-diversity on these sites. 40m³ of deadwood, including thinning and ring barking, will be created in each phase. This

rate of deadwood creation will remove the current crop of Grand fir from the stand in 20 years. We would expect some natural regeneration of Grand fir on this site. This will be controlled by hand pulling with clearing saws as becomes necessary. Any regeneration of native species will be favoured, and allowed to establish, however the main aim of the thinning is to leave the site as open space.

Scale of proposed thinning	
Species	**Thinning (ha)**
Scots pine	97.44
Lodgepole pine	0.22
Douglas fir	4.69
Sitka spruce	0.23
Norway spruce	0.72
Japanese/Hybrid larch	5.39
Grand fir	0.38
Total	109.07

D.2.3 Restructuring

The restructuring maps, Map 7.1 – Map 7.4, show the planned planting models for the four phases of this forest plan. Each planting model represents an integral species mix that will be planted during restocking. These species mixes have all been designed to meet UKFS and UKWAS, and also to qualify for the SRDP Woodland Improvement Grant – restructuring regeneration – diversify forests. Soils on all restructuring sites have been surveyed and ESC4 run for each. All species chosen are classed as suitable or very suitable for the sites they are to be planted.

The remaining areas shown as Other Woodland on Map 7 – Restructuring Map are to be restocked beyond the plan period. Thinning in these areas should work towards a conversion to Continuous Cover Forestry with Scots Pine being the predominant species in the converted areas. Areas that cannot be thinned will be restocked either with mixed broadleaves or diverse conifer depending on site conditions.

As mentioned above in the silvicultural policy open space has been designed into the restructuring to bring the amount of open space to above 10% of the forest area and in line with the UKWAS requirement.

Cleared ground will not be left fallow, with planting normally being carried out in the planting season after felling. On poor soils mounding will be used as the main form of ground preparation, although all mounds will be placed back in the hole to minimise the increase in roughness over these site, keeping them as accessible as possible, whilst also helping to mitigate erosion. Where soils are better and there is little or no requirement to remix minerals to aid establishment screefing will be the preferred ground preparation.

A summary of the Restructuring is shown in the table below

Mixture	**Species (& %)**	**Density**	**Restocking timing**
Productive conifer 1	SP (50%), NS (20%), EL (10%), SBI(20%)	2500 trees /ha	Within 1 year of felling
Productive conifer 2	DF (30%), NS (30%), EL (15%), SBI (25%)	2500 tree/ha	Within 1 year of felling
Productive Broadleaves 1	SOK (40%), SBI (30%), ASP (10%),	3100 trees/ha	Within 1 year of felling

	HBM (10%), HAZ (10%)		
Productive Broadleaves 2	NOM (30%), SOK (20%), SBI (20%), ASP (15%), HAZ (15%)	2500 trees/ha	Within 1 year of felling
Native Broadleave 1	PBI (35%), SCI (25%), XWL (15%)	1100 trees/ha	Within 1 year of felling
Native Broadleave 2	SBI (35%), HAZ (25%), ASP (15%), WCH (15%), ROW (10%)	1100 trees/ha	Within 1 year of felling
Caledonian Scots pine	SPC (60%), SBI (30%), ROW (10%)	2500 trees/ha	Within 1 year of felling
Wet Woodland	PBI (30%), SCI (25%), XWL (15%), CAR (15%), GWL (15%)	1100 trees/ha	Within 1 year of felling
Peatland Edge	PBI (40%), SCI (30%), XWL (15%), GWL (15%)	550 trees/ha	Within 1 year of felling

D.2.3.1 Conifers

Productive Conifer mix 1

Species	**Scots Pine**	**Norway spruce**	**European larch**	**Silver Birch**
Percentage	50%	20%	10%	20%

This species mix is designed to restock areas of podzol in the forest, that surveying has shown to have good productive potential but are not currently stocked with a crop that can be converted to CCF; mainly consists of areas of Spruce and Lodgepole pine, where they are on drier sites.

This mixture has also been prescribed for podzolic brown earth in zone 6. This is because the site was originally a Birch woodland, but now has a dense crop of Douglas fir and Norway spruce on it. The existing crop has grown very well; hence the site shows a lot of potential to be productive. This mixture, with its native elements will give future management the option to convert these stands into a conservation area or keep it for production if need be. The Norway spruce element should also help to support the Red squirrel population in this area.

This mixture will be planted at 3000 trees per hectare.

Productive conifer mix 2

Species	**Douglas fir**	**Norway spruce**	**European larch**	**Silver Birch**
Percentage	30%	30%	15%	25%

This mix will be used to restock areas of podzolic brown earth that are not as suitable of a productive broadleaved crop and will be planted at 2500 trees per hectare.

Caledonian Scots Pine

Species	**Scots Pine**	**Silver Birch**	**Rowan**
Percentage	60%	30%	10%

Areas suitable for a W18 woodland, and are either non-productive or important for habitat networking, are to be planted with this Caledonian Scots pine mixture. The Pine will be of N2 origin. This mixture will be planted at 2500 trees per hectare with planting being clumped to vary density, give some integral open space and allow for the avoidance of un-mappable areas of poorer soils.

D.2.3.2 Productive Broadleaves

The emphasis of this planting model is productive native. This mixture should give productive stands if properly maintained. The desired outcome being very high value logs at the end of the oak rotation (circa. 100 years); with the possibility to grow additional crops through nurse species and subsequent under-planting during the rotation. This potential for very high value products being produced with a selective silvicultural systems in the future, for example a target DBH system, lends itself better to some of the 'more accessible' steeper ground as the high value of the product could better offset the high cost of harvesting than is currently possible with conifer species. The use of native trees for production should also help to increase the biodiversity of the areas prescribed with these mixtures. Both of these mixtures are also to be planted in areas that are currently of importance to the present Red Squirrel population.

Productive broadleaves mix 1

Species	**Sessile oak**	**Silver Birch**	**Aspen**	**Hornbeam**	**Hazel**
Percentage	40%	30%	10%	10%	10%

This mixture is designed for Brown earths that are less stony, to produce a 'final crop' Oak logs, with Birch, Aspen and Hornbeam logs also being produced during the 'rotation' using a selective CCF system. This mixture will be planted at 3100 trees per hectare.

Productive broadleaves mix 2

Species	**Norway maple**	**Sessile oak**	**Silver birch**	**Aspen**	**Hazel**
Percentage	30%	20%	20%	15%	15%

This mixture is designed for Brown earths that are stony in certain areas. 'Final crop' production will be Maple and Oak logs, with Birch and Aspen logs also being produced during the 'rotation' using a selective CCF system. This mixture will be planted at 2500 trees per hectare.

D.2.3.3 Biodiversity

Although densities per hectare will vary between mixes all planting of the following models will be clumped to give integral open space throughout the stands. This will also allow for un-mappable areas of very poor ground within these stands that are not suitable for planting, or to give open space in riparian zones.

Native Broadleaves mix 1

Species	**Downy birch**	**Grey sallow**	**Eared willow**
Percentage	35%	25%	15%

Where diversity is desired this mix will be planted where W4 woodland would be classed as suitable or very suitable. It is designed to be used on poorer soils, such as ironpans where Purple moor grass (*Molina caerulea*) is dominant. This mixture will be planted at 1100 trees per hectare.

Native Broadleaves mix 2

Species	**Silver birch**	**Hazel**	**Aspen**	**Wild Cherry**	**Rowan**
Percentage	35%	25%	15%	15%	10%

This mixture is designed for areas suitable for W11 woodland. The oak element of W11 has been removed from this mixture as this is more in keeping with surrounding stands, which tend to be more W9 in appearance. Native broadleaved mix 2 will be planted at 1100 trees per hectare.

Wet woodland

Species	Downy birch	Grey sallow	Eared willow	Common alder	Goat willow
Percentage	30%	25%	15%	15%	15%

Again this mixture is designed for areas that are suitable for W4 woodland, all be it slightly rich areas on Peaty Gleys in riparian zones. Some Caledonian Scots Pine may also be included in this mix where appropriate to the individual site, all be it at a density below 15%. This would allow un-mappable areas of ironpan or podzol in the riparian zone to be planted with a more suitable species. The Wet Woodland mixture will also be planted at 1100 trees per hectare.

Peatland edge planting

Species	Downy birch	Grey sallow	Eared willow	Goat willow
Percentage	40%	30%	15%	15%

Where afforested deep peat is not suitable for peatland restoration (according to FC Practice Guide – Deciding future management for afforested deep peatland) this peatland edge planting model will be used for restocking. Planting will be at 500 trees per hectare and will be clumped, feathering back into the crop behind. This will give a gradiated cover more akin to natural bog woodland. This should also improve the habitat for wildlife using these areas, such as Black Grouse.

Peatland restoration

Where afforested peatland habitats within the forest are classed as 'a presumption to restore' according to the FC Practice Guide – Deciding future management options for afforested deep peatland crops will be removed from deep peat sites, justification for this management prescription is given Appendix 7 – Woodland removal proposal. As much of the timber as possible will be removed from the site in accordance with waste management regulations. With stunted or failed crops removal may pose a large enough financial obstacle that restoration could not be carried out; in these situations crops will be mulched. In these cases plant material will not be removed from the site as it will be required to improve ground holding, enabling access for the machinery carrying out the restoration works. Drainage and plough furrows will also be blocked to encourage pooling once more. This will be carried out at the same time as mulching operations, in order to make use of the access created be the fresh plant material left by the mulching operations.

Loch nan Losgann Restoration

The restoration of the loch has already been started by the Aigas Field Centre. Responsibility for the planning, monitoring and operational aspects of the restoration of the aquatic zone of the loch have been handed over to the Aigas Field Centre, with ACF retaining responsibility for the management of the surrounding riparian zone.

A table showing species distribution in 5, 10, 15 & 20 years is shown in Appendix 4

D.2.4 Protection & Maintenance

As an approved Long Term Forest Plan is one of the eligibility criteria for applying for a contract to carry out a Deer Management Plan through SRDP, ACF will submit an application for a DMP as soon as this plan is approved. We will aim to have this Deer Management Plan completed and active

within one year of approval of the forest plan. The development and subsequent implementation of the Deer Management Plan will allow us to lower Deer numbers to a point where rapid re-establishment of both soft conifer and broadleaved species can be successful, both through planting and natural regeneration.

ACF have now appointment a stalker, Nick Richards of Forest to Fork from Culbokie, Dingwall, on a yearly contract. Nick is starting the deer control again that has been neglected for a number of years. He holds all relevant qualification to carry out the deer control, including tickets to operate Argo cat and Quad bikes, which he uses for extraction when required, maintains all necessary records of deer culls, reporting them to SNH. Nick is the only person authorised to carry out deer control in Aigas Forest by ACF, no other authorisations will be given, other than to pre-approved persons working with Nick. Once the Deer Management Plan has been approved all deer control will be carried out in accordance to it. All deer control, planning and monitoring will be carried out in line with the Wild Deer Best Practice Partnerships current best practice guidance.

The whole of Aigas Forest along with our neighbours ground has inadvertently been deer fenced by other landowners from roadside to roadside, shown in the 'Aigas Community Forest Zones Map in section C.1.5., and as mentioned above in Section C.2.2.6. It is anticipated that the first tranches of restocking within the first phase will now need to be deer fenced. We will use the data collected for deer control and monitoring to decide whether subsequent restocks will require deer fencing or not. Once the deer numbers are under control the fences will be removed. If deer fencing is ever required where Black Grouse are present the deer fences will be bird marked.

Stock fences between neighbouring grazing land and the forest will be kept stock proof through collaboration with neighbours.

Brown hares are present in the area, though they are not thought to be present in high enough numbers to pose a significant threat to the forest. Regeneration and restocking will be monitored to assess all herbivore damage including deer and hare damage.

Effective control measures will be put in place to ensure successful establishment with minimum damage levels in restocking areas, particularly with regard to soft conifer and broadleaved species. Specific stocking densities will be maintained through beat-up as required.

D.2.5 Public Access

Although the provision of car parking facilities, paths and mountain bike trails will be touched on in this document where it affects forest management, a detailed access and recreation plan will also be developed to deal with this in more detail.

A car park will be provided by the main forest entrance at the East end of Working Zone 4, shown in the roading map, Map 8. The existing walking trails in the forest will be cleared of windblown trees, and the surfaces improved, as far as is possible and where appropriate. Existing trails will not be re-opened if this is likely to seriously disturb wildlife, be too dangerous an operation, or if the cost of re-opening is prohibitive. Where trails are re-opened and there is a chance of disturbance to wildlife signage will be used to inform the public of times when these trails should be avoided to minimise disturbance.

Improvement of the surfaces of trails will mostly be done with materials that are to hand. Where no materials are available on the site some material will be taken from existing piles present on the

road network in the forest. In some situations sawdust or tree chippings may be used for surfacing. The necessary waste material authorisations will be sought from SEPA before this is carried out. Any extensions to the trail network will be dealt with in the Access and Recreation Plan that is to be developed separately.

A land use agreement will be sought with the Mountain bikers in order to allow them to build their trails in part of the forest to an acceptable specification and within certain limits. This agreement is to be developed with the mountain bikers separate to this forest plan, though through initial discussions it has been agreed that all of their trail building activities will be within working Zones 3 & 4.

D.2.6 Road Operations

The main forest road is still in relatively good condition and will only require a surface scrape, removal of roadside regen, and the disconnection of the related ditches for the water courses to be fit for use as a timber haulage road and meet the FC road specification given in Appendix 8.

Aigas Mains also have a right of access through the forest, for accessing their hill ground in the North. The historic access route for this is marked on the Roading map 8 as 'Aigas mains hill access' there are no resurfacing works planned for this route at present, though windblow will be cleared to allow access along its length.

The forest road will need to be extended to gain access to zone 6 for future timber extraction. This road will follow the Forestry Commission Road Specification given in appendix 8. Materials for this road will be extracted from the line of the road where possible, with the remaining materials being extracted from the existing borrow pits and quarry in zone 3 (combined totalling less than 1 ha) these borrow pits and the quarry are marked in Map 8. Prior notification will be given to Highland Council planning department before the building of the new section of road starts. As prior notification only last 6 months and we do not intend to build the road till phase 2 we do not need to give prior notification at this time.

Two loading bays will also need to be built by the A831 in order to extract timber form zone 7, these are shown in Map 8. Discussion will be held with the Highland Council roads department to agree specification. These loading bays with be temporary and will be reinstated once they are no longer required. Planning permission will be sought before they are built. The creation of the car park will be integral to these proposals as timber lorries will not be allowed to turn into or out of the loading bays, only entering and exiting with the flow of traffic; therefore the car park will be required as a reasonably close safe turning point for the lorries.

All of the above proposals are shown in the roading map 8.

D.2.7 Invasive Species

Invasive species at Aigas Forest are mainly confined to Zone 7, with only very few *Rhododendron ponticum* bushes appearing in Zones 5 and 6 along the road side. In zone 7 there is a approximately 0.3 ha of *Rhododendron ponticum* in total, with approximately a further 0.02 ha of *Gaultheria shallon*.

The *Gaultheria Shallon* will be removed by over spraying with Glyphosate. Lever and Mulch will be used to remove the *Rhododendron ponticum*, thus minimising the use of pesticides in the vicinity of the Beauly river.

D.2.8 Water & Forest operations

As state in various places above, Forest and Water Guidelines will be followed for all operations carried out in Aigas forest. Relevant standards and guidance are listed in Appendix 5, which will also be followed during any forestry operations. Specific examples of how the operations that are most likely to cause issues are given below, along with the mitigation measures to be implemented.

General issues for all operations

During all operations in the forest suitable fuel, chemical and maintenance points will be used. These will be agreed before operations commence and will be a minimum on 25 metres for any water courses. Pollution prevention equipment will also be present during all forestry operations. Any litter will be collected and removed from site as soon as practicable. During prolonged periods of wet weather operations will be stopped if the related run off issues are likely to become an issue, until conditions improve.

Roading and associated ditches

At present there is a large amount of roadside regeneration growing over the verges and ditches at Aigas. These ditches are also still connected to watercourses in some places, and have no silt traps on extended steep sections. The roadside regeneration will be removed from the verges and ditches, with the plant material being removed from these sites and chipped. This chipped plant material may then be used as surfacing on some of the existing paths in Aigas forest. Chippings that are not used in this way will either be stored for later use, or disposed of in a suitable way. An exemption will be applied for before any chipping takes place.

Where the ditches are still connected to water courses they will be disconnected, leaving at least 10 metres between the end of the ditch and the water course, water from disconnected ditches will be diverted through culverts under the road into grass, which it will drain through before entering the water course. Sumps will also be put in place, where they don't already exist, to prevent the blocking of culverts and in steep sections to prevent erosion. The above features will also be designed into the new section of road when it is built.

Forestry drainage

No new drains are to be created during restocking. Existing drains that are still directly connected to water courses will be disconnected before ground preparation is carried out for restocking operations.

Harvesting operations

Drains and water courses will be piped with log bridges built over the pipes during operations, and all lop and top will be kept clear of drains and water course. All drains and water courses will be checked and cleared of any pipes, log bridges and lop and top once they are no longer required for that harvesting operation. Silt traps will also be used as appropriate to further prevent any run off entering water courses.

Riparian management

During harvesting operations the reach of harvesting machinery will be used to keep the machines as far away as possible from the water courses. Where damage is still likely to occur but conifer crops still need to be felled up to the edge of the water course hand cutters will be used to prevent ground damage. Trees will not be felled over watercourses. As stated above, ground preparation is to be either mounding, with the mounds place back in the hole, or by screefing. This applies to riparian areas that are to be restocked as well. Again the reach of machinery will be

used to prevent damage to the water course, where this is not possible ground preparation will be carried out by hand.

At present there are some riparian areas that have deadwood of conifer species lying across the watercourses, but not blocking them. This deadwood is at various stages of decay, from trees that have fallen in the past year, to trees that almost completely degraded. These areas are very rich in bryophytes, as shown in appendix 2. These areas will be left as they are to encourage the continued development of biodiversity in the vicinity.

On Allt Cuil na Caillich there are a number of structure in the water course. One is an old sluice gate, with an associated laid behind. This is set on a branch of the main burn, does not affect the flow, and is an important part of the history of Aigas estate (it used to feed the estate sawmill) as such this will not be removed. There is an old dam for a private water supply that is no longer in use. This could be removed when funds allowed. We will contact SEPA for guidance and authorisations before commencing any works on this structure. There is also an old stone bridge that is part of an old estate track. This bridge is falling into a state of disrepair and will require some reinstatement works to conserve it. Again this will be dependent on funds and we will contact SEPA for guidance and authorisations before any work commences.

Peatland restoration

A full proposal for peatland restoration is given in Appendix 7, and mentioned above in section D.2.3.3. During all peatland restoration operations the general measures regarding all forestry operations mentioned above will be put in place. Where crops have grown well enough to be harvested economically they will be with as much plant material as possible being removed from the site. Some brash however may need to be left to aid flotation of machinery, both harvesting machinery and machinery carrying out subsequent drain blocking operations.

Where the crops are stunted and harvesting would not be economical the existing crops will be mulched, with the mulch being left of site, again as a floatation aid for machinery carrying out the mulching and drain blocking operations.

E PRODUCTION FORECAST

Coupe Data						Stand Data						Restructuring areas by successor crop types (ha)						
Coupe Reference	Period 1		Period 2		Planned Felling Year	Species	Planting year	General Yield Class	WHC	Previously Thinned	Net Area (ha)	Sitka Spruce	Other Conifer	Mixed Broadleaves	Native Broadleaves	Caledonian Scots Pine	Natural Regeneration	Other Land
	Fell/Thin Period	Intervention Type	Fell/Thin Period	Intervention Type														
2a1	2016-2021	Thin			2017	SP	1956	12	3	y	7.27							
2a2	2016-2021	Thin			2017	SP	1956	4	3	y	1.22							
2a3	2016-2021	Thin			2017	SP	1956	6	3	y	1.26							
2b1	2016-2021	Thin			2017	JL	1956	6	3	y	0.91							
2b2	2016-2021	Thin			2017	JL	1956	6	3	y	0.59							
2b3	2016-2021	Thin			2017	JL	1956	6	3	y	0.34							
3a1	2016-2021	Thin			2017	SP	1963	10	3	y	8.48							
4a1	2016-2021	Thin			2017	SP	1958	8	3	y	8.35							
4a2	2016-2021	Thin			2017	SP	1958	8	3	y	2.06							
5a1	2016-2021	Thin			2017	SP	1958	10	3	y	11.04							
5a2	2016-2021	Thin			2017	SP	1935	6	3	y	1.15							
5a3	2016-2021	Thin			2017	SP	1935	6	3	y	0.59							
5b3	2016-2021	Thin			2019	LP	1958	10	3	y	0.22							
5c1	2016-2021	Thin			2017	JL	1958	8	3	y	1.83							
5c2	2016-2021	Thin			2017	JL	1958	8	3	y	0.43							
6c1	2016-2021	Thin			2017	SP	1964	10	3	y	1.88							
8a1	2016-2021	Thin			2019	SP	1935	8	3	y	3.67							
9a1	2016-2021	Thin			2019	SP	1957	8	3	y	14.76							
9a2	2016-2021	Thin			2019	SP	1957	6	3	y	0.67							
9a3	2016-2021	Thin			2019	SP	1935	4	3	y	0.49							
9d1	2016-2021	Thin			2019	JL	1957	6	3	y	0.62							
10a1	2016-2021	Thin			2021	SP	1958	10	3	y	10.22							
10a2	2016-2021	Thin			2021	SP	1964	8	3	y	1.54							
10a4	2016-2021	Thin			2021	SP	1964	8	3	y	0.12							
11a1	2016-2021	Thin			2021	SP	1964	8	3	y	5.38							
11a2	2016-2021	Thin			2021	SP	1964	8	3	y	0.54							
11b1	2016-2021	Thin			2021	DF	1964	16	3	y	4.19							
12b1	2016-2021	Thin			2021	SP	1965	10	3	y	4.86							
12b2	2016-2021	Thin			2021	SS	1965	6	3	y	0.23							
12c3	2016-2021	Thin			2021	NS	1965	16	3	y	0.72							
12d1	2016-2021	Thin			2021	HL	1965	10	3	y	0.67							
13a1	2016-2021	Thin			2021	SP	1952	12	3	y	4.84							
13c1	2016-2021	Thin			2021	DF	1965	12	3	y	0.50							
14x1	2016-2021	Thin			2017	GF	1966	12	3	y	0.38							
16a1	2016-2021	Thin			2021	SP	1966	10	3	y	7.05							
3d1	2016-2021	Fell			2019	SS	1963	16	3	n	0.81				0.36			0.45
4b1	2016-2021	Fell			2019	LP	1956	8	3	n	2.10							2.10
4b2	2016-2021	Fell			2019	LP	1956	8	3	n	0.88				0.40			0.48
4b3	2016-2021	Fell			2021	LP	1956	8	3	y	0.17							0.17
4b4	2016-2021	Fell			2021	LP	1956	8	3	y	0.16							0.16
4b5	2016-2021	Fell			2021	LP	1956	8	3	y	0.16							0.16
4b6	2016-2021	Fell			2021	LP	1956	8	3	y	0.14							0.14
5d1	2016-2021	Fell			2017	SS	1958	14	3	n	0.94				1.45			
	2016-2021	Fell			2017	JL	1958	8	3	n	0.51							
5 e1	2016-2021	Fell			2017	DF	1958	10	3	n	0.22				0.22			
6a2	2016-2021	Fell			2019	SS	1964	20	3	n	1.13		1.13		0.57			
	2016-2021	Fell			2019	DF	1964	16	3	n	0.57							
7a6	2016-2021	Fell			2017	NS	1965	18	3	n	0.21				0.21			
7b1	2016-2021	Fell			2019	SS	1966	20	3	n	1.70		1.28		0.42			

7c1	2016-2021	Fell			2017	JL	1928	10	3	n	1.09				1.09			
	2016-2021	Fell			2017	NS	1965	20	3	n	0.15				0.15			
8c1	2016-2021	Fell			2017	LP	1967	10	3	n	0.64				0.35	0.13		0.44
	2016-2021	Fell			2017	SS	1967	20	3	n	0.18							
	2016-2021	Fell			2017	SP	1967	12	3	n	0.10							
10c1	2016-2021	Fell			2017	DF	1965	16	3	n	0.88				1.47			
	2016-2021	Fell			2017	SS	1965	18	3	n	0.59							
11a3	2016-2021	Fell			2017	SP	1964	8	3	n	0.12				0.12			
11b2	2016-2021	Fell			2017	DF	1964	16	3	n	0.36				0.36			
14b1	2016-2021	Fell			2021	SS	1966	20	3	n	0.85				1.41			
	2016-2021	Fell			2021	DF	1966	12	3	n	0.35							
	2016-2021	Fell			2021	JL	1966	10	3	n	0.21							
14b2	2016-2021	Fell			2021	SS	1966	20	3	n	0.50				0.62			
	2016-2021	Fell			2021	JL	1966	10	3	n	0.12							
15a2	2016-2021	Fell			2021	DF	1966	20	3	n	0.79				0.79			
15b4	2016-2021	Fell			2021	NS	1966	22	3	n	0.26				0.26			
15c1	2016-2021	Fell			2021	SS	1966	24	3	n	0.47		0.35		0.12			
16b3	2016-2021	Fell			2021	DF	1966	14	3	n	0.40		0.31		0.10			
16c2	2016-2021	Fell			2021	SS	1966	18	3	n	1.26		0.94		0.32			
2a1			2022-2026	Thin	2023	SP	1956	12	3	y	7.27							
2a2			2022-2026	Thin	2023	SP	1956	4	3	y	1.22							
2a3			2022-2026	Thin	2023	SP	1956	6	3	y	1.26							
2b1			2022-2026	Thin	2023	JL	1956	6	3	y	0.91							
2b2			2022-2026	Thin	2023	JL	1956	6	3	y	0.59							
2b3			2022-2026	Thin	2023	JL	1956	6	3	y	0.34							
3a1			2022-2026	Thin	2023	SP	1963	10	3	y	8.48							
4a1			2022-2026	Thin	2023	SP	1958	8	3	y	8.35							
4a2			2022-2026	Thin	2023	SP	1958	8	3	y	2.06							
5a1			2022-2026	Thin	2023	SP	1958	10	3	y	11.04							
5a2			2022-2026	Thin	2023	SP	1935	6	3	y	1.15							
5a3			2022-2026	Thin	2023	SP	1935	6	3	y	0.59							
5b3			2022-2026	Thin	2023	LP	1958	10	3	y	0.22							
5c1			2022-2026	Thin	2023	JL	1958	8	3	y	1.83							
5c2			2022-2026	Thin	2023	JL	1958	8	3	y	0.43							
6c1			2022-2026	Thin	2023	SP	1964	10	3	y	1.88							
8a1			2022-2026	Thin	2023	SP	1935	8	3	y	3.67							
9a1			2022-2026	Thin	2023	SP	1957	8	3	y	14.76							
9a2			2022-2026	Thin	2023	SP	1957	6	3	y	0.67							
9a3			2022-2026	Thin	2023	SP	1935	4	3	y	0.49							
9d1			2022-2026	Thin	2023	JL	1957	6	3	y	0.62							
10a1			2022-2026	Thin	2025	SP	1958	10	3	y	10.22							
10a2			2022-2026	Thin	2025	SP	1964	8	3	y	1.54							
10a4			2022-2026	Thin	2025	SP	1964	8	3	y	0.12							
11a1			2022-2026	Thin	2025	SP	1964	8	3	y	5.38							
11a2			2022-2026	Thin	2025	SP	1964	8	3	y	0.54							
11b1			2022-2026	Thin	2025	DF	1964	16	3	y	4.19							
12b1			2022-2026	Thin	2025	SP	1965	10	3	y	4.86							
12b2			2022-2026	Thin	2025	SS	1965	6	3	y	0.23							
12c3			2022-2026	Thin	2025	NS	1965	16	3	y	0.72							
12d1			2022-2026	Thin	2023	HL	1965	10	3	y	0.67							
13a1			2022-2026	Thin	2025	SP	1952	12	3	y	4.84							
13c1			2022-2026	Thin	2025	DF	1965	12	3	y	0.50							
14x1			2022-2026	Thin	2023	GF	1966	12	3	y	0.38							
16a1			2022-2026	Thin	2025	SP	1966	10	3	y	7.05							

2b4			2022-2026	Fell	2023	JL	1956	6	3	n	0.32						0.32
2b5			2022-2026	Fell	2023	JL	1956	6	3	n	0.18						0.18
2c1			2022-2026	Fell	2023	LP	1956	8	3	n	1.16						1.16
5b1			2022-2026	Fell	2023	LP	1958	10	3	n	4.17				1.88		2.29
7b3			2022-2026	Fell	2023	SS	1966	20	3	n	0.12		0.12				
8b1			2022-2026	Fell	2023	SS	1967	20	3	n	1.22		0.98		0.24		
8b2			2022-2026	Fell	2023	SS	1967	20	3	n	0.61		0.49		0.12		
8b3			2022-2026	Fell	2023	SS	1967	20	3	n	0.20				0.20		
8b4			2022-2026	Fell	2023	SS	1967	20	3	n	0.18						0.18
8b5			2022-2026	Fell	2023	SS	1967	20	3	n	0.13						0.13
8d2			2022-2026	Fell	2023	NS	1967	16	3	n	0.39				0.15	0.24	
9c2			2022-2026	Fell	2023	SS	1957	12	3	n	0.49		0.39		0.10		
10b1			2022-2026	Fell	2025	LP	1958	8	3	n	4.31				1.94		2.37
10d1			2022-2026	Fell	2025	SS	1958	16	3	n	0.59						0.59
12a4			2022-2026	Fell	2025	DF	1965	16	3	n	0.71				0.84		
			2022-2026	Fell	2025	SS	1965	16	3	n	0.13						
12c1			2022-2026	Fell	2025	NS	1965	16	3	n	1.16				1.55		
			2022-2026	Fell	2025	SS	1965	14	3	n	0.16						
			2022-2026	Fell	2025	JL	1965	12	3	n	0.23						
16b1			2022-2026	Fell	2025	DF	1966	14	3	n	5.06		4.05		1.01		
16c1			2022-2026	Fell	2025	SS	1966	18	3	n	2.13		1.71		0.42		
16c3			2022-2026	Fell	2025	SS	1966	18	3	n	0.38		0.28		0.10		
16c4			2022-2026	Fell	2025	SS	1966	18	3	n	0.36		0.28		0.10		

Tolerance Table

	Coupe Boundaries	**Timing of restock**	**Change of Species**	**Windthrow clearance**	**Road line alterations**	**Open space (subject to max of 20%)**
Notification only to FC	≤ 5% or 0.5Ha whichever is less	All sites will be restocked within 5 years of felling. FC will be notified if over 5 years.	Change of species within group (Productive Broadleaves, Native Broadleaves, Conifers)	≤ 0.5Ha	Creation of turning points	≤ 5% or 0.5Ha whichever is less
Approval by exchange of letters and Map(s)	0.5-2Ha or 10% of coupe whichever is less	Change from planting to natural regeneration	Change from conifers, or productive broadleaves to native broadleaves	Sensitive areas 0.5-2Ha Less sensitive areas ≤5Ha Where crop is 40%+ affected	Additional felling of trees not agreed in plan. Deviation of line by >60m	Any reduction in area. Increase of 0.5-2Ha or 10% whichever is less
Approval by formal plan ammendment	>2Ha or 10%	Restocking not carried out in plan period	Change in native species selection or change from Native Braodleaves to Conifer or productive Broadleaves group	>5Ha	As above depending on site sensitivity	Any reduction in planned open space. Any significant establishment in designed open space.