

Clumber Forest Plan

10 year plan 2018 – 2028



The mark of
responsible forestry

Forestry Commission
woodlands have
been certified in
accordance with the
rules of the Forest
Stewardship Council.



Contents

Introduction	3
Application for Forest Plan Approval	4
Clumber Forest Plan Management Review	5
UKWAS Compliance Table	5
1.0 Key Characteristics and Survey Data	7
1.1 Location	7
1.2 Geology and Soils.....	7
1.3 Aspect and Landscape.....	7
1.31 Apleyhead.....	7
1.32 Carburton	7
1.33 Clumber	7
1.34 Elkesley	7
1.4 Landscape Character Assessment and Natural Character Area.....	8
1.41 Landscape Character Area (LCA)	8
1.42 National Character Area (NCA)	8
1.5 Hydrology	8
1.6 Archaeology and Heritage.....	8
1.7 Designations, Habitats and Species.....	9
1.71 Designations.....	9
1.72 Species of Note	9
1.73 Invasive Species	9
1.74 Trees of Special Interest	9
1.75 Other Features	9
1.8 Social and Community Interest.....	9
1.9 Access and Tenure.....	9
2.0 Current Woodland Information	10
2.1 Current Species, Age Structure and Yield Class	10
2.11 Current Forest Structure	10
2.12 Current Land Use.....	10
2.13 Current Production Forecast	10
2.14 Current Species (as of 2017).....	11
2.15 Age Structure	11
3.0 Future Management	12

3.1 Felling & Thinning	12
3.2 Natural Regeneration & Restocking	12
3.3 Environmental.....	12
3.31 Retentions.....	12
3.32 Deadwood	13
3.33 Biodiversity	13
3.33 Invasive Species	13
3.4 Open Space	13
3.5 Social	13
3.6 Archaeology and Heritage	14
3.7 Landscape	14
3.8 Other Management	14
3.9 Future Structure and Land Use	15
3.91 - Future Forest Structure (2067).....	15
3.92 - Future Land Use (2067)	
3.93 - Future Species (as of 2067).....	15
4.0 Meeting and Monitoring Objectives	16
5.0 Economic forecast	17
6. Consultation	17
6.1 Statutory Consultees.....	18
6.2 Non-Statutory Consultees.....	18
6.3 Consultation Process	18
7. Maps	19
7.1 Location	19
7.2 Designations	20
7.3 Current Species.....	25
7.4 Recreation & Access.....	30
7.5 Concept Map.....	35
7.6 Silvicultural Systems.....	40
7.7 Felling Map	45
7.8 Future Species	50
7.9 Coppice Management.....	55
8. Relevant Forestry Commission & Government Policies.....	56

Introduction

This plan sets out our management proposals for the next 50 years and facilitates approval for felling and thinning, both conventional and unconventional, for the next 10 years within the Clumber Plan area.

This Forest Plan is guided and directed by a number of policies and strategies, the main points of which are summarised below in the FC England Planning Strategy. Delivering this plan will require the Forestry Commission to be responsive to shifts in our operating environment, and to be increasingly flexible in our approach in order to sustain this responsiveness over decades to come.

This plan contains areas of high importance for Economy, Wildlife and People and will set out how the Clumber area will continue to deliver for these priorities in the next 10 years and beyond.

Terms of Reference for Clumber Forest Plan

FEE National Strategic Goal	District Themes	Objective
Economy	Timber production	<p>Maintain a structured programme of thinning to achieve the maximum sustainable cut whilst focussing on crop improvement.</p> <p>Select suitable species and appropriate Silvicultural techniques to regenerate commercially productive but more structurally and species diverse and resilient forests.</p>
Environment	SSSI Invasive Species Species and habitat	<p>Consider the needs of SSSIs on neighbouring land.</p> <p>Take into account aims of the district Invasive Species Strategy.</p> <p>Identify key species and habitats and make appropriate provision for their requirements.</p>
People	Landscape Formal Public Access Informal Public Access	<p>Diversify species composition and structure, and plan sympathetically designed and appropriately scaled interventions to improve and maintain the visual integration of the forest into the wider landscape.</p> <p>Give consideration to the level of visitor pressure within the Clumber Park area.</p> <p>Recognise the location and scale of demand in making appropriate provision for public access, where there is open access woodland or public rights of way.</p>

Application for Forest Plan Approval

1. Plan area identification

Forest District: Central England Forest District
 Beat: Sherwood North Beat
 Name: Clumber Forest Plan
 Nearest Town: Worksop
 Total Plan Area: 1089 hectares
 OS Grid Ref: SK 6073 7547
 Local Planning Authority: Nottinghamshire –Bassetlaw District

2. Designations


Notable plant, reptile, and mammal species. Historic Parkland.

3. Date of commencement of plan

As soon as possible after the approval date.

4. Planned operations within 10 year period of the plan

Area (ha)	Conifers	Broadleaves	Total
Felling	104.4	24.1	128.5
Restocking	93.4	21.4	114.8
Underplanting	-	-	207.0
Thinning	-	-	1988.2


Signed.....

Forest Management Director (FE)

Date
 18th May 2018



Field Manager (FS)

18th May 2018

Clumber Forest Plan Management Review

This section is a brief review previous forest plans and their objectives. The new plan will replace two existing plans; Clumber & Carburton MID003/(01) and Elkesley & Apleyhead MID/036/(02) both of which ran from 2002 to 2012 with a five year extension to 2017. The new plan will run for 10 years with a mid-term review at the 5 year point and will cover all four areas within the old plans; Apleyhead, Carburton, Clumber and Elkesley.

The proposed plan will adhere to UKFS (UK Forest Standard) and UKWAS (UK Woodland Assurance Standard) guidance, as well as working toward delivering results in areas identified by statutory and local consultees.

The previous plan achieved its objectives and has assured sustainable management. The Clumber area is important for all three district priorities (Economy, Environment and People). The new plan will need to continue to provide a sustainable supply of timber, environmental benefits such as invasive species removal and habitat creation/improvement as well as providing space and benefits for people.

New challenges have arisen since the creation of the previous plan, such as the impact of Dothistroma Needle Blight (DNB). The new plan will need to outline our response to this, with methods including species change and underplanting. This work has already started within Clumber and Carburton and the new plan will outline our approach going forward for all the woods in the plan.

UKWAS Compliance Table

	Forest Plan Area	Forest Plan Percentage	Forest District Area	Forest District Percentage
Total Area	1089ha	100%	28,121ha	3.9%
Total Wooded Area	968ha	88.9%	23,820ha	4.1%
Natural Reserves – Plantation (1%)	0ha	0%	171ha	0%
Natural Reserves – Semi-Natural (5%)	0ha	0%	342ha	0%
Long-Term Retentions and Low Impact Silvicultural Systems (>1%)	350.1ha	32.1%	14,609ha	2.4%
Area of conservation value (>15%) including designations, PAWS, AW, ASNW, NR, LTR and LISS	350.1ha	32.1%	15,122ha	2.3%

FC Management Objectives

Economic - produce sustainable timber yields, encourage and support new and existing business activity associated to the public forest estate and to make the economic potential of our forests and woodlands more resilient in the face of a changing climate. Growing and diversifying our income from a wide range of sustainable activity on the estate, including non-forestry activities.

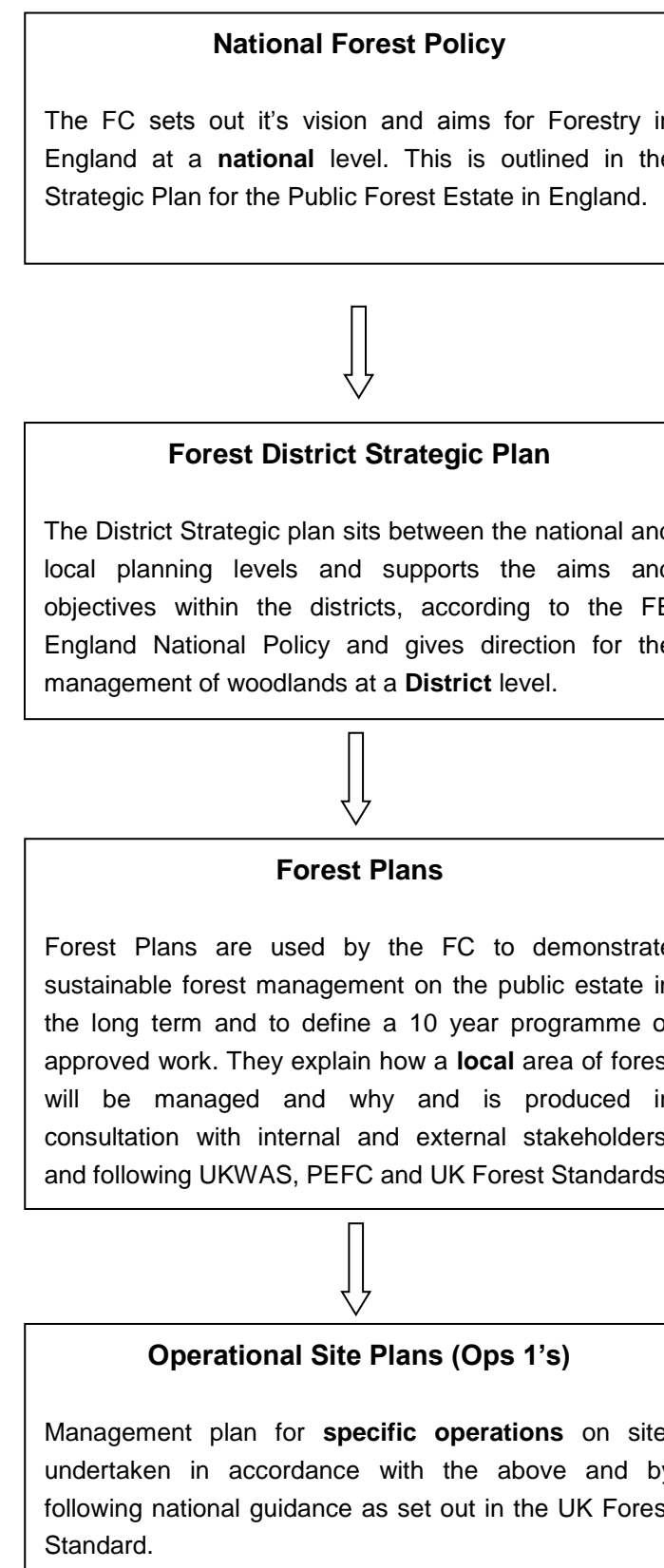


Environmental - To increase where possible the environmental contribution made by the Estate to the range of ecosystem services delivered and to protect and enhance its overall biodiversity and heritage value at both the landscape and local level.



People - Enable everyone, everywhere to connect with the nations' trees and forests so that they understand their importance and act positively to safeguard forests for the future.

Forestry Commission England's Planning Strategy



1.0 Key Characteristics and Survey Data

1.1 Location

- See Location map
- All of the woodlands lie within 7.5 miles of Worksop.
- OS Grid References:

	Apleyhead	Carburton	Clumber	Elkesley
Access Point	SK 6476 7743	SK 6092 7230	Various	SK 6692 7494 or SK 6490 7495
Centre of Wood	SK 6507 7709	SK 6092 7230	SK 6073 7547	SK 6703 7516
Area	51 ha	290 ha	522 ha	181 ha

1.2 Geology and Soils

- All of the woodland within the plan area sits on freely draining slightly acid sandy soils; with the exception of some parts of Elkesley, which are on naturally wet very acid sandy and loamy soils.

1.3 Aspect and Landscape

- The plan consists of seven distinct blocks of woodland, all situated around Clumber Park and the River Poulter.
- The sites all take the form of conifer plantations, mixed with areas of broadleaves, designed rides and open space.
- All the woods are between 20m and 70m above sea level.

1.31 Apleyhead

- Apleyhead is visible from the A1 and the A614.
- It is also opposite one of the main entrances to Clumber Park.

1.32 Carburton

- Carburton is visible from the A616. The B6034 Ollerton Road passes through the middle of the block and the Norton/Carburton road passes along the northern edge of the block.
- The internal network of rides creates an intrinsic plantation internal landscape.

1.33 Clumber

- The Clumber blocks have a lot of internal landscapes and they provide the backdrop for some of the main routes into Clumber Park, both current and historic. The block encircle the National Trust managed Clumber Park, containing the historic lake and parkland.
- There are high levels of access from members of the public within the Clumber area. Member of the public enjoy these areas and major internal landscape changes could be unpopular.

- There are also external views from the A614 and B6034.

1.34 Elkesley

- Elkesley is visible from the A614, Elkesley village and from points in the surrounding landscape.
- The Robin Hood way passes through the middle of this block. This crosses the River Poulter in two places. These crossing consist of a single bridge and a bridge & ford, which are nice internal viewpoints.
- The natural river valley created by the River Poulter creates a rolling landscape in places and some nice riverside views.

1.4 Landscape Character Assessment and Natural Character Area

1.41 Landscape Character Area (LCA)

- The plan lies within Bassetlaw District Councils Sherwood LCA, this mentions:

"There are significant variations in the distribution and pattern of woodland across the region. These variations are one of the most important factors in determining its landscape character. The area between the Maun Valley and Worksop represents the most densely wooded area of the County. This contains the remnants of the historic Sherwood Forest, the emparked lands of the Dukeries, the broad-leaved estate lands and the coniferous infill plantations established in the last 60 years."

1.42 National Character Area (NCA)

- The plan falls within the Sherwood NCA. Natural England mentions:

"Woodland is a distinctive feature of the area with a mosaic of broadleaved, mixed and coniferous woodlands, including ancient oak wood pasture and parkland, and pine plantations. Wooded horizons frame extensive areas of open arable farmland with large, geometric fields contained by low, often treeless, hawthorn hedges."

"Large-scale planting of conifers occurred during the first half of the 20th century and provide a strong contrast to native woodland elsewhere. There is generally less woodland cover in the north than in other places. Views throughout the area are often bounded by woodland on all sides, giving a sense of enclosure and tranquillity."

1.5 Hydrology

- All of the woods have a network of drainage ditches, as well as ponds and natural links to local hydrology.
- The clumber blocks surround the national trust managed Clumber Park, which contains the Clumber Lake.
- Carburton sits above the River Poulter, which also runs through the middle of Elkesley.
- The local area receives an average of 888mm of rainfall per year and it rains on average 135 days per year (according to long term Met Office statistics).

1.6 Archaeology and Heritage

- The historic land management of this area has been dominated by the Clumber, Thoresby & Welbeck estates and the parkland landscapes they created.
- The majority of Clumber is designated as a historic park and garden by Historic England. This covers the remaining features of the Clumber estate, house, gardens and parkland.
- Within Carburton, Budby Corner there is the remains of a cottage garden. This was attached to a Clumber estate house which was demolished in the 1980s. The Apple tree orchard within this is also designated as a conservation feature.

1.7 Designations, Habitats and Species

1.71 Designations

- None of the sites are designated, however land bordering the clumber blocks is designated Site of Special Scientific Interest (SSSI). The Clumber SSSI is designated for being: "One of the largest areas of mixed habitat in Nottinghamshire, Clumber Park supports extensive areas of lowland acid grassland, heath and mature deciduous woodland characteristic of the English North Midlands. An exceptionally rich beetle fauna is associated with mature timber and dead wood habitats and the park is notable for its breeding bird communities."
- The plan area contains no Ancient Semi-Natural Woodland (ASNW) or Plantation Ancient Woodland (PAWS).

1.72 Species of Note

- Goshawk, Buzzard, Woodlark & Nightjar.
- Smooth Newt & Great Crested Newt.
- There are a number of Badger setts.
- Slow Worm & Common Lizard.

1.73 Invasive Species

- Rhododendron
- Himalayan Balsam
- Laurel
- False Acacia

1.74 Trees of Special Interest

- Small Leaved Lime, Carburton
- Mature Beech, Carburton, old hedgerow trees.

- 1800s Corsican Pine, Carburton
- Yew Trees, Thoresby Border
- Cedar of Lebanon, Thoresby Border
- Chestnut Tree, Pimpers Alley

1.75 Other Features

- A number of ponds.
- Apple tree orchard, Budby Corner (see Section 1.6)
- Botanically rich Heather rides.

1.8 Social and Community Interest

- Clumber Park is a very popular National Trust property with a high number of visitors. The Forestry Commission woodland blocks surrounding Clumber Park are well visited by people venturing beyond the park and those travelling to it.
- A National Trust cycle route that passes through our woodland as well as a Sustrans cycle route. There are various Public Rights of Way and large areas of our estate are designated as open access. This makes all of the blocks that have public access popular for a number of recreation activities; including walking, cycling and riding.
- Apleyhead has an active archery group, based within the wood. There is also a caravan site within Clumber Park which borders our woods.

1.9 Access and Tenure

- Apleyhead is owned freehold whilst the rest of the plan area is leasehold.
- Elkesley and Carburton have no public access other than existing Public Rights of Way. The rest of the plan area is open access.

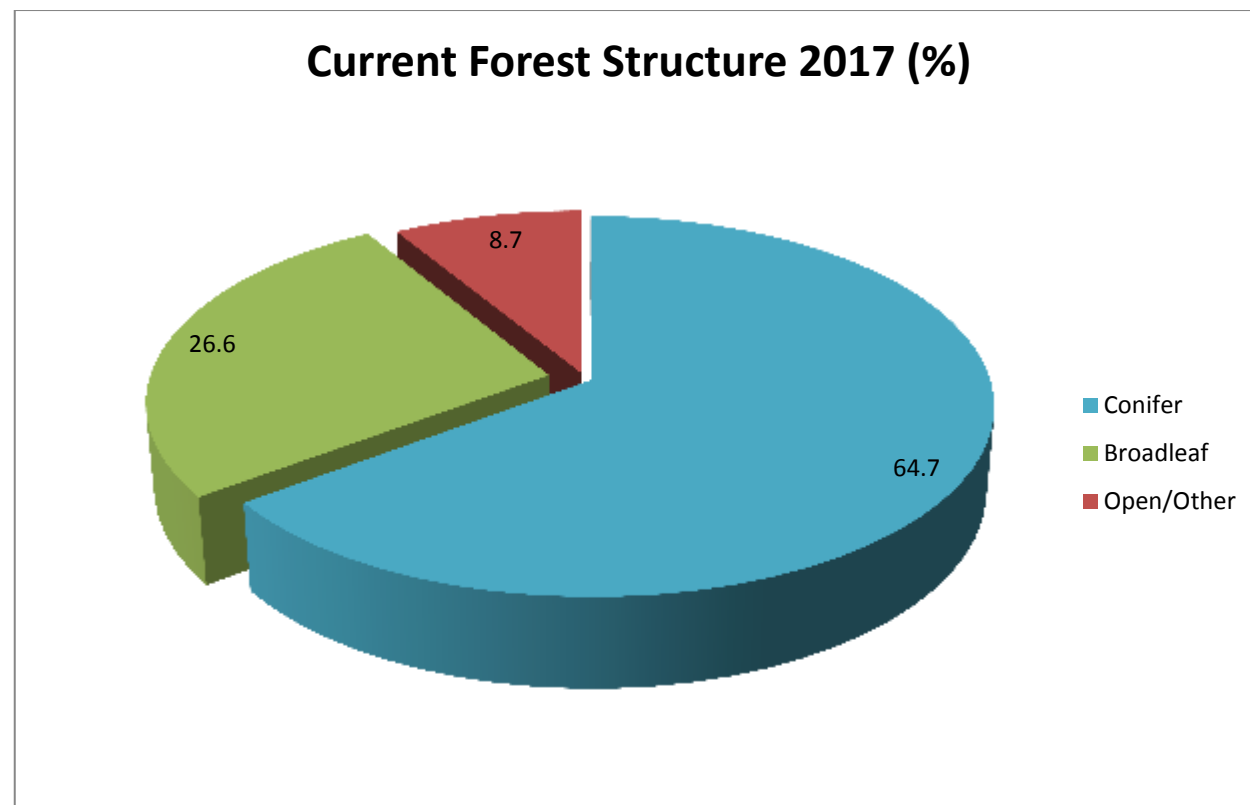
2.0 Current Woodland Information

2.1 Current Species, Age Structure and Yield Class

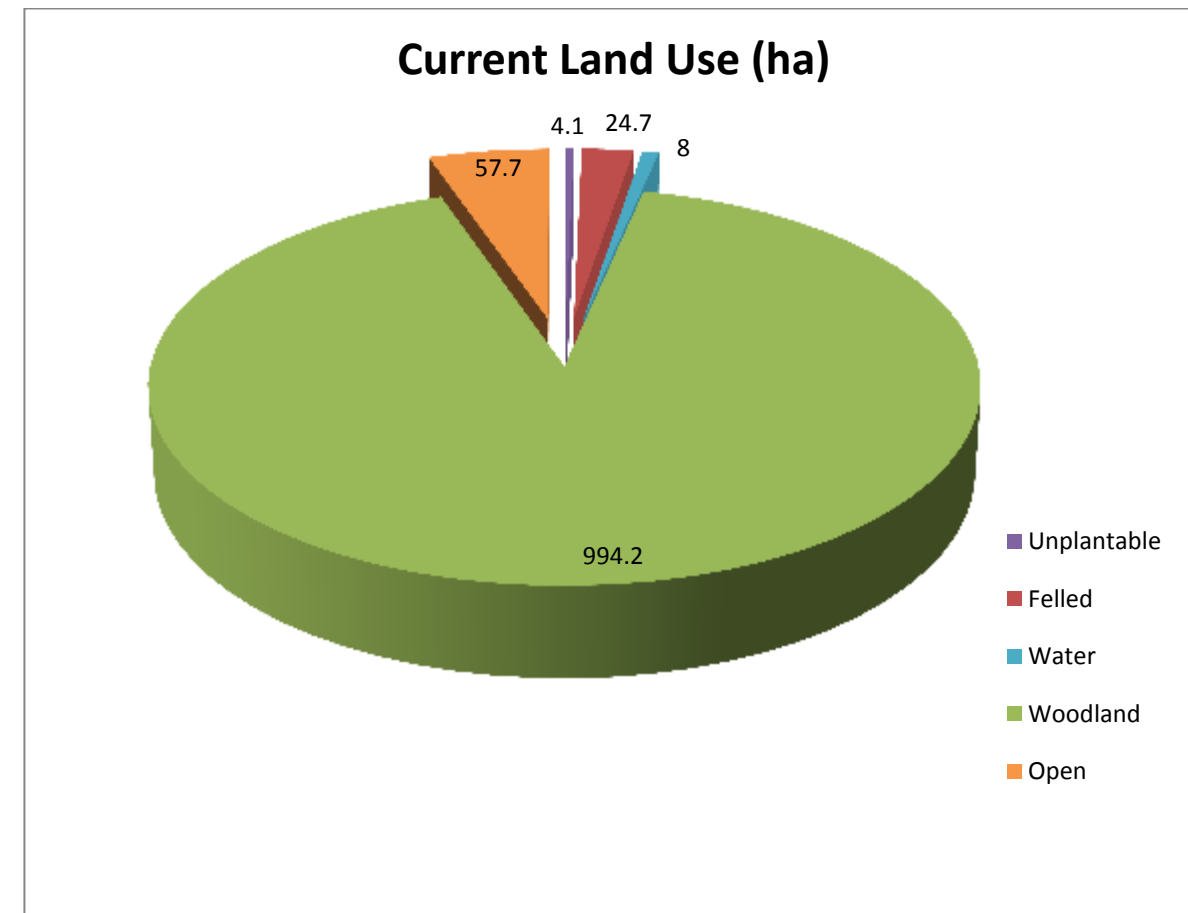
The area covered by the Forest Plan amounts to 1088.7 ha of which 994 ha is woodland. Of the planted area, 64.7% is conifer and 26.6% is broadleaved woodland (See Fig.2). 57.8 ha of the plan area is currently open space; this element will increase and decrease rotationally due to usual clearfelling, thinning and restocking operations and natural regeneration. The woodland will be managed sustainably in line with UKWAS and UKFS guidance.

Section 2.11 shows the breakdown of current species by area and 2.12 shows current land use by area. Section 2.15 shows the current age structure of the trees in the plan area.

2.11 Current Forest Structure



2.12 Current Land Use



2.13 Current Production Forecast

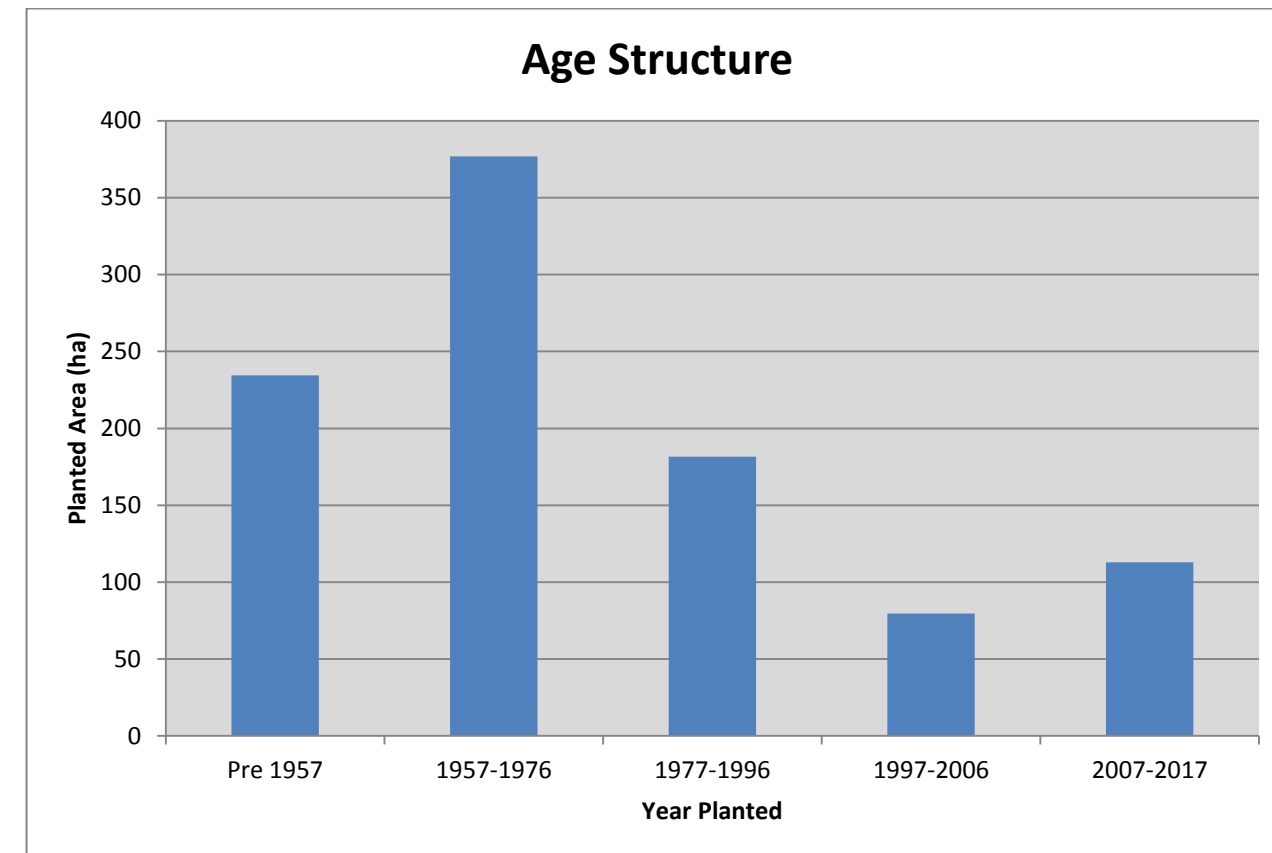
	Forecast Period	All Species	All Conifers	All Broadleaves
Volume to 7cm	2017-2021	11369	10469	901
	2022-2026	7474	6923	551
	2027-2031	9835	8450	1385
	2032-2036	6536	5813	723
	2037-2099	7174	5946	1228

Note: values given are for m³ per year for each year of that period.

2.14 Current Species (as of 2017)

Species	Area (ha)	Percentage of Total Area
Conifer		
Corsican Pine	438.9	40.3%
Scots Pine	213.5	19.6%
Larch	20.8	1.9%
Norway Spruce	9.3	0.9%
Other Conifer	22.0	2.0%
Total Conifer	704.5 ha	64.7%
Broadleaf		
Birch	154.3	14.2%
Oak	53.6	4.9%
Sweet Chestnut	34.6	3.2%
Beech	12.6	1.2%
Sycamore	12.2	1.1%
Other Broadleaf	22.3	2.0%
Total Broadleaf	289.6 ha	26.6%
Other		
Open	57.8	5.3%
Felled	24.7	2.3%
Open Water	8.0	0.7%
Unplantable	4.1	0.4%
Total Other	94.6 ha	8.7%
Total Area	1088.7ha	100.0%

2.15 Age Structure



- The "Age Structure" graph above shows how much area was planted in which time period. The age structure is relatively even, but there is a large amount of pine planted between 1957 & 1976 reaching the end of its rotation.

3.0 Future Management

Of the 1088.7 ha plan area:

3.1 Felling & Thinning

- The clear-fell and restock element of the Forest Plan will amount to 128.5 ha over the next 10 years. Restocking will be achieved by planting with Conifers or Broadleaves; other than areas which will become open space.
- The remainder of the woodland will be managed through thinning or continuous cover systems. This could include stripfelling and underplanting with alternative conifers.
- Throughout the plan all compartments will be thinned on a five year rotation totalling 2117.4ha. In some areas this will be a thinning biased towards achieving volume whilst in others it will be biased towards the crown, improving canopy structure. This will improve the quality of existing trees whilst opening up canopy gaps for succession of understory trees or for us to undertake underplanting with alternative conifers.

3.2 Natural Regeneration & Restocking

- The aim is to achieve restocking by a mixture of planting and natural regeneration as appropriate; because of this proportions of species have been estimated. On a coupe by coupe basis, the decision may be taken to opt for planting rather than natural regeneration, if that offers the most effective means of achieving the plan objectives. This gives us the flexibility to counter threats such as pests and diseases; as viable regeneration may not lead to canopy cover in the future.
- Natural regeneration may be used in some areas instead of restocking/planting. If suitable regeneration is not achieved by year five; beat up, supplementary planting or full restocking with appropriate species will be implemented as appropriate to ensure woodland cover is

restored. As felling is happening in stages within the wood, it will be possible to use the results of regeneration in previous felling coupes to influence whether supplementary planting or complete restocking is required from the outset in future nearby coupes. This will allow us to manage restocking on areas where the water table rising after felling could hinder attempts to restock. The use of Continuous Cover Forestry (CCF) in some areas, as opposed to clearfell, will also help mitigate against this.

- Some areas at the edges of the plantation will be converted to Broadleaf or Broadleaf Conifer mix over the next 50 years. These will be managed on a Continuous Cover basis. They will provide unchanging external views, as opposed to the clearfell and restock of pure conifer crops.
- The proportion of Broadleaf will increase from 26.6% in 2017 to 35.3% in 2067. This comes from species changes and converting edges to broadleaves.
- Restock Species will include established conifers such as Scots Pine, Alternative Conifers and Broadleaves.
- Underplanting and species choice will follow establish practice within the Forest Plan area and methods used in other forests. For further information see the Forestry Commission Successful Underplanting Guidance listed in Section 8.

3.3 Environmental

3.31 Retentions

- Areas of long term retention have been identified throughout the plan area, totalling 4.3ha. These will be retained beyond their normal economic life to provide veteran trees and biological benefits to habitats and species.

3.32 Deadwood

- Deadwood will be retained where appropriate, working towards the Forestry Commission's policy on retention and creation; which is set out in the Forestry Commission's Practice Guide – Managing deadwood in forests and woodlands. One way of achieving this would be leaving brush on site from felling, thinning and coppicing operations as well as retention of trees of special interest (TSIs), including veteran trees.
- A recent example of proactive deadwood creation and management has been a thinning for deadwood scheme at Laughton. This has involved under thinning then over thinning an area to create suppressed trees which become deadwood. It is difficult to foresee a scheme of this kind within Clumber due to the high levels of public access, but any opportunities for deadwood creation and retention will be explored.

3.33 Biodiversity

- The Forestry Commission maintains records on biodiversity and these are consulted at the operational planning stage. Important species will be highlighted and protected as part of this. We also welcome records from organisations and groups that can help us improve our understanding of biodiversity within our woodlands.
- The Forestry Commission has its own rigorous policies and standards in addition to the United Kingdom Forest Standard (UKFS); to which management and operations within these woods will adhere.

3.33 Invasive Species

- Management of invasive plant species will continue to be a priority. The work of the community rangers, volunteers and ecology team will continue to make inroads into the control and eradication of Rhododendron, Himalayan Balsam, Laurel and other invasive species within the plan area.

3.4 Open Space

- Open space will be created through ride widening, creation of a deer lawn and transitional open space such as clear fells and coppiced areas. Some of the open space gained from rides will be achieved by accurately mapping existing rides so they can be reclassified as open space. The rest will come from removing edge trees to bring existing rides up to the width where they can be reclassified as open space.
- The amount of open ground within the Forest Plan will increase from 5.3% to 7.9% (85ha). This does not include transitional open space such as clearfells and the area at Budby Corner under coppice rotation which could potentially provide an additional 50ha of transitional open space. The inclusion of this would bring the total open space to 12.4% (135ha) which would exceed the UKFS 10% target.

3.5 Social

- The woodland within the plan remains popular with walkers, dog walkers & horse riders; as well as the sports clubs and groups which run activities and events within the wood.
- We currently feel the level of recreation provision within the wood is appropriate for the level of demand, but we will continue to review this as part of our ongoing management.
- We will continue to promote access where possible; as well as actively engaging and encouraging local groups and individuals where there is mutual benefit from their involvement in these woods.
- Access remains restricted in Carburton & Elkesley due to the terms of our lease agreements.

3.6 Archaeology and Heritage

- The only known current heritage features are the cottage garden at Budby Corner and the historic parks and landscape designation.
- The proposals in the plan remain in keeping with the historic park landscape. The cottage garden at Budby corner forms part of a coppice management area and will be protected within this.
- Heritage features will be considered at the operational planning stage. Specific protection or preservation strategies will be implemented to protect any features which may be adversely affected by operations.
- Heritage features and operations in their vicinity will be managed in line with Forestry Commission and UKFS policy. If there are any new finds of importance, the County Archaeologist will be informed.

3.7 Landscape

- The blocks of woodland which make up the clumber plan are not a dominant feature in the local landscape. However they are spread widely and have a high level of public access, making internal landscapes important. Felling has been planned to provide economic and environmental benefits, but in a way that minimises impact in areas with high visitor pressure.
- The woods are very typical of the local landscape character in their current form and future management will seek to enhance and preserve this status.
- There are some external views from the surrounding landscape and nearby roads. Clearfell coupes on the edge of the plantation will be small scale or well planned to avoid dramatic view changes.
- Clearfell coupes within the woodland have been planned to avoid adjacent coupes being felled in similar felling periods. This should minimise internal landscape changes whilst allowing ongoing timber

production. This will allow gradual changes over time though thinning and under planting.

- Edge areas have been planned as continuous cover broadleaves in some of the larger blocks such as Callaughton and in some places within blocks. This will give a continuous soft edge and screen clearfells both within and outside the woodland.

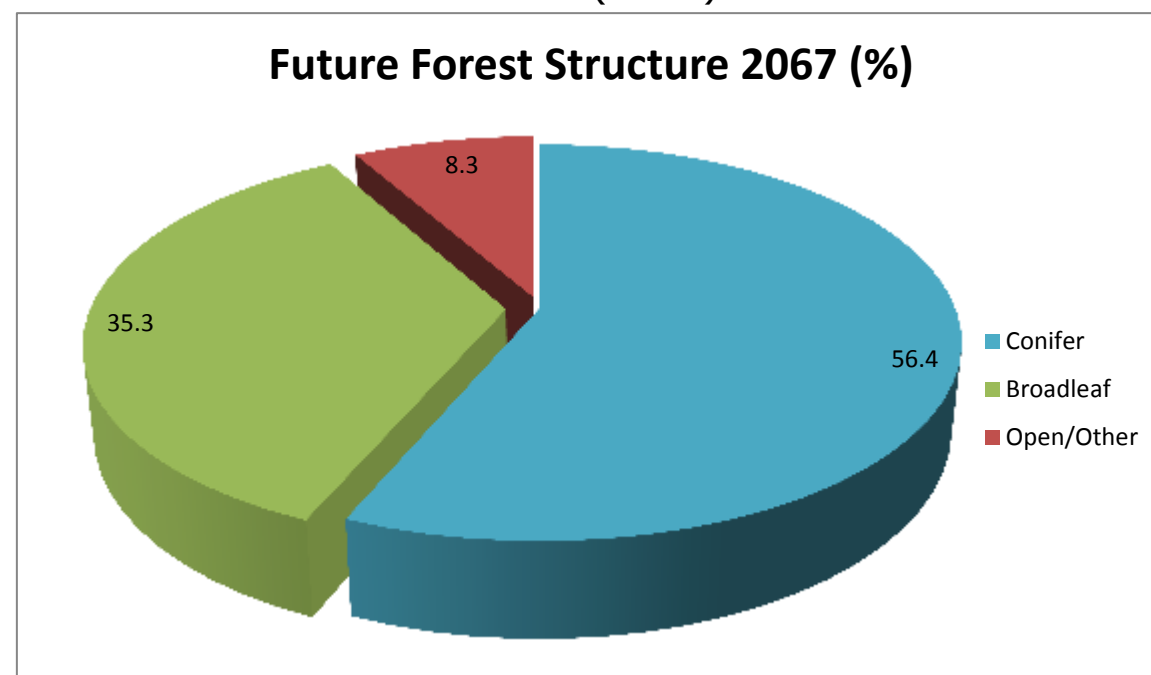
3.8 Other Management

- 207ha will be underplanted over the next ten years. This will be under thinned conifer crops or in stripfells and will be mostly conifer; or a mixture of conifer and broadleaves. Additional areas for underplanting may be identified during the plan period.
- The woodlands will be managed using a variety of Silvicultural systems to allow for the production of commercial conifer and broadleaved species. All forest operations will be carried out in accordance with current best practice and will be assessed at the Operational Planning stage. Operations comply with UK Woodland Assurance Scheme (UKWAS), UK Forest Standard (UKFS) and Forest District Strategic Plan to ensure that the woodlands are managed sustainably.

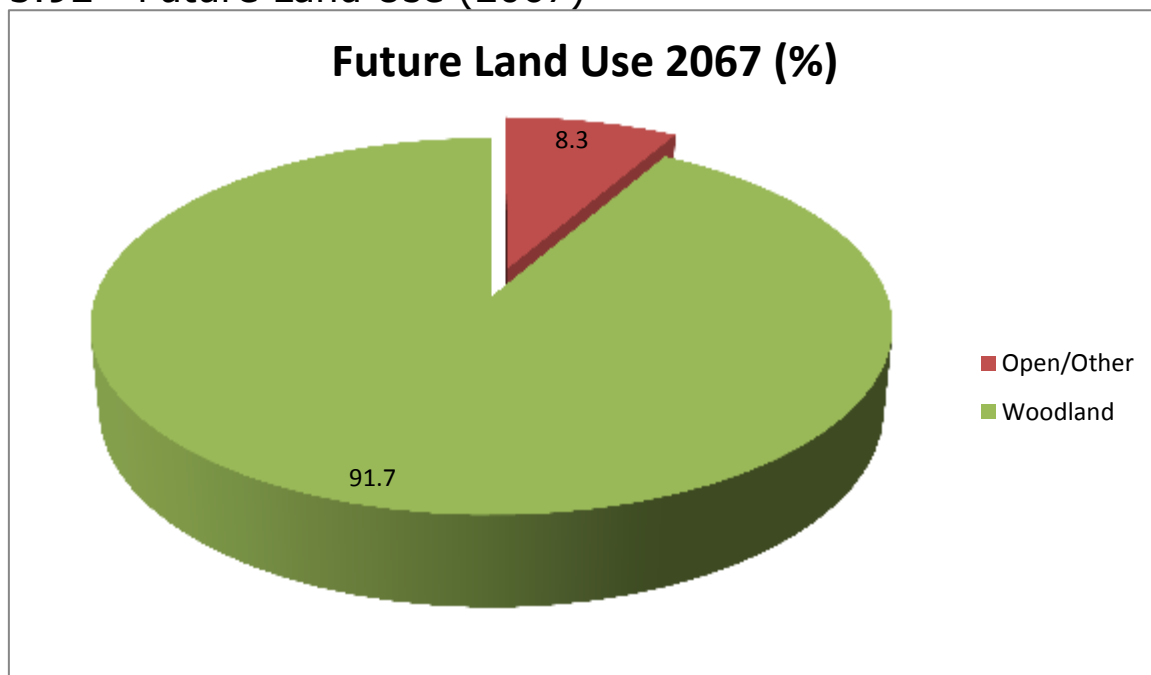
3.9 Future Structure and Land Use

3.91, 3.92 & 3.93 show a breakdown of future forest structure:

3.91 - Future Forest Structure (2067)



3.92 - Future Land Use (2067)



3.93 - Future Species (as of 2067)

Species	Area (ha)	Percentage of Total Area
Conifer		
Overstorey mixtures of Corsican & Scots Pine. Underplanted areas with alternative conifers Clearfell restocks with alternative conifers.		
Total Conifer	614.5	56.4%
Broadleaf		
Mostly Birch on Clearfells with Oak and Sweet Chestnut to a lesser extent. Shade tolerant broadleaves such as Beech may be used in underplanting areas.		
Total Broadleaf	384.4	35.3%
Open	85.0	7.9%
Other	4.7	0.4%
Total Area	1088.7ha	100%

Section 3.93 Future Species suggests species making up the majority of each coupe based on the species that are currently dominant in each coupe and management proposals such as diversification.

4.0 Meeting and Monitoring Objectives

FEE National Strategic Goal	District Themes	Objective	Proposal	Methods of Monitoring
Economy	Timber production	Maintain a structured programme of thinning to achieve the maximum sustainable cut whilst focussing on crop improvement.	Structured thinning program to continue, this will be supplemented by targeted underplanting to maintain sustainable forests.	Monitored through SCDB, Ops 1 Process and 5 year mid-term Forest Plan review.
Economy	Timber production	Select suitable species and appropriate Silvicultural techniques to regenerate commercially productive but more structurally and species diverse and resilient forests.	The timing, scale and shape of future felling operations have been designed to create a diverse woodland structure. Alternative species and restock methods have been planned to covert clumber to a structurally and species diverse and resilient forest.	Monitored through SCDB, Ops 1 Process and 5 year mid-term Forest Plan review.
Environment	SSSI	Consider the needs of SSSIs on neighbouring land.	Manage adjacent areas as appropriate; consider impacts and relevant policy when planning operations.	Consultation with environment and heritage team as part of the ops 1 process will help improve outcomes for biodiversity.
Environment	Invasive Species	Take into account aims of the district Invasive Species Strategy.	Continue to use financial resources and volunteers to tackle Invasive Species in a planned way.	Species and areas to target to be monitored by Ecology Team, Beat Team & Community Rangers.
Environment	Species and habitat	Identify key species and habitats and make appropriate provision for their requirements.	Consider impacts on key species at operational planning stage. Use results of biological surveys to improve understanding and management.	Consultation with environment and heritage team as part of the ops 1 process will help improve outcomes for biodiversity. New surveys will be reviewed and their results compared with existing data and used to improve management.
People	Landscape	Diversify species composition and structure, and plan sympathetically designed and appropriately scaled interventions to improve and maintain the visual integration of the forest into the wider landscape.	Edge and coupe boundary areas transitioned to broadleaves to provide stability and maintain the visual landscape. Clearfells and interventions planned at a scale to be Silviculturally and economically viable, but to minimise visual and environmental negative impacts.	Monitored through SCDB, Ops 1 Process and 5 year mid-term Forest Plan review.
People	Formal Public Access	Give consideration to the level of visitor pressure within the Clumber Park area.	Current features will be maintained. New features to be added where appropriate.	Beat and RPA teams to monitor in line with operational objectives throughout the plan period.
People	Informal Public Access	Recognise the location and scale of demand in making appropriate provision for public access, where there is open access woodland or public rights of way.	Current features will be maintained. New features to be added where appropriate.	Beat and RPA teams to monitor in line with operational objectives throughout the plan period.

5.0 Economic forecast

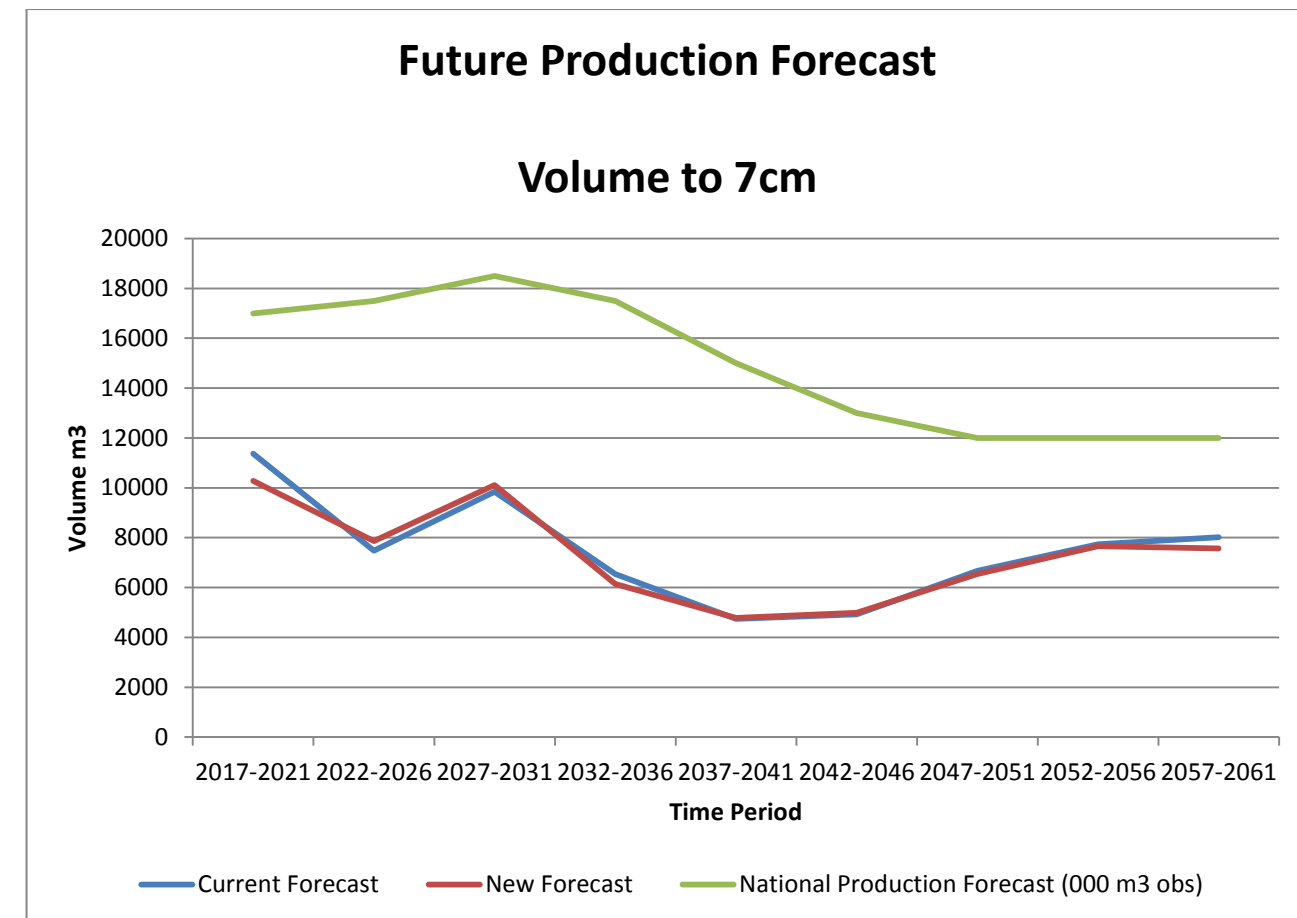
The woodland will continue to be managed sustainably as set out in previous and current objectives relating to Forest Standards. Section 5.11 shows the future production forecast which takes into account Silvicultural systems and felling years. The graph in section 5.12 compares the previous forecast with the future forecast and the forecast for timber production nationally.

5.11 – Future Production Forecast

	Forecast Period	All Species	All Conifers	All Broadleaves
Volume to 7cm	2017-2021	10277	9611	666
	2022-2026	7857	7146	711
	2027-2031	10115	8756	1358
	2032-2036	6137	5421	716
	2037-2099	7246	6011	1236

Note: values given are for m³ per year for each year of that period.

5.12 Future Production Forecast Graph



6. Consultation

6.1 Statutory Consultees

Nottinghamshire County Council

Natural England

Historic England

6.2 Non-Statutory Consultees

Babworth Parish Council

Bassetlaw District Council

Bothamsall Parish Council

Carburton Parish Council

Carr Family Estates

Clumber & Hardwick Parish Council

D Pickard & Sons Ltd.

Elkesley Parish Council

Martin Robinson & Sons Timber Ltd.

National Trust

Normanton Larches

Thoresby Estate

Tilhill Forestry

Welbeck Estate

Welbeck Parish Council

Worksop Town Council



6.3 Consultation Process

All of the Forestry Commission's woodlands are assessed against the UK Woodland Assurance Scheme (UKWAS) and as a result, Forestry Commission woodlands now carry the Forest Stewardship Council (FSC) stamp of approval.

As part of our commitment to this we undertake a public consultation process. Consultation is the process we use so that local people and relevant organisations and interest groups can be made aware that:

- New or revised management planning documentation is being produced.
- The woodland is being evaluated for certification.

The consultation process will last for a minimum of 30 days. It will include us directly contacting Statutory Consultees and other groups, neighbours or organisations; that we are aware of and that may have an interest in our management of the woodland (Non-Statutory Consultees).

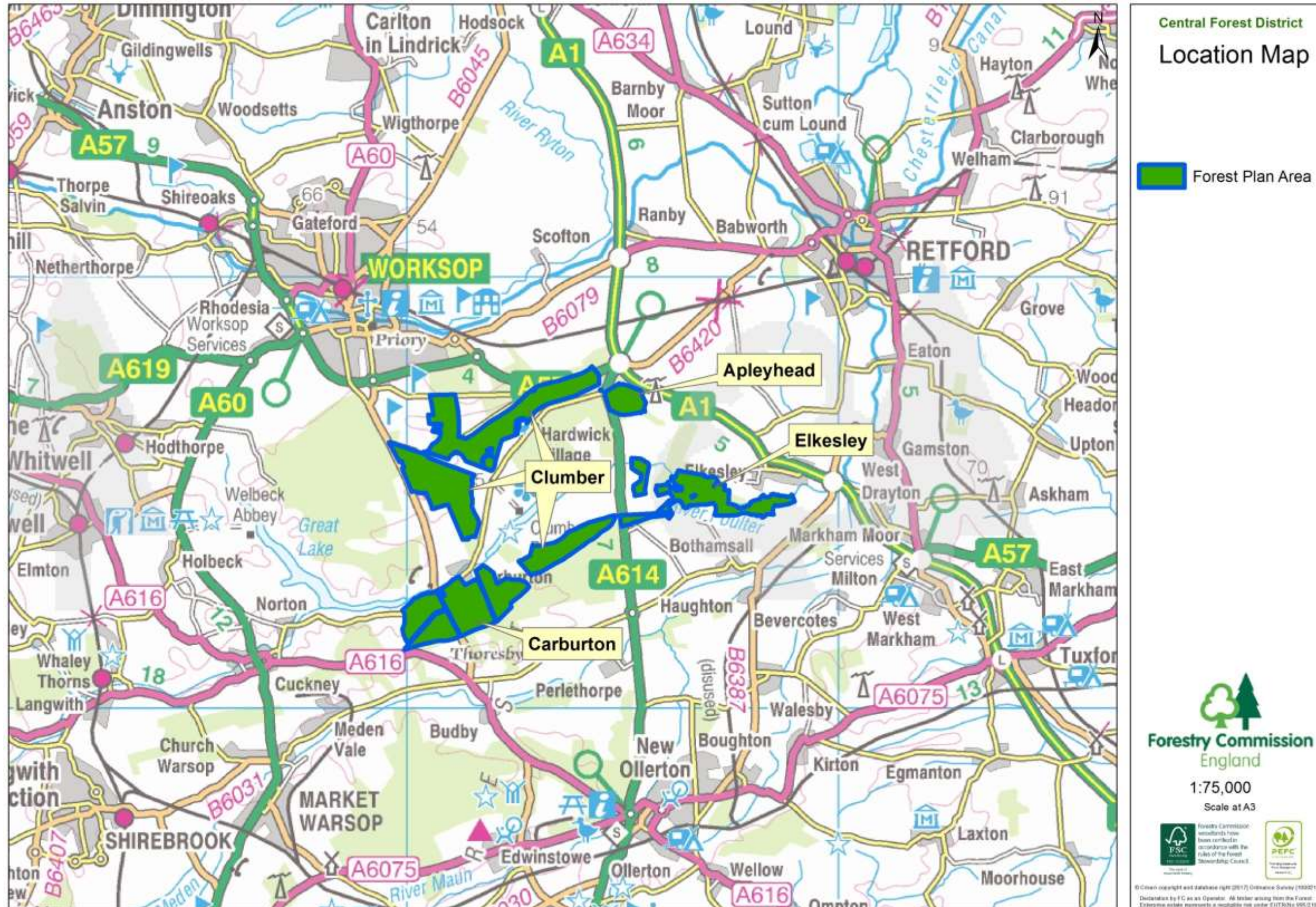
Other interested parties will be directed via on site signage to Worksop Library where copies of the plan will be held. Consultation of the plan will also take place on the Citizenspace website. In woods where there are a relatively high number of visitors; we may also run onsite events to enable us to meet anyone who is interested in our plans or management proposals. These will be advertised by onsite signage.

Once the consultation is complete we will reply to any responses we receive. We shall then submit the plan for approval.

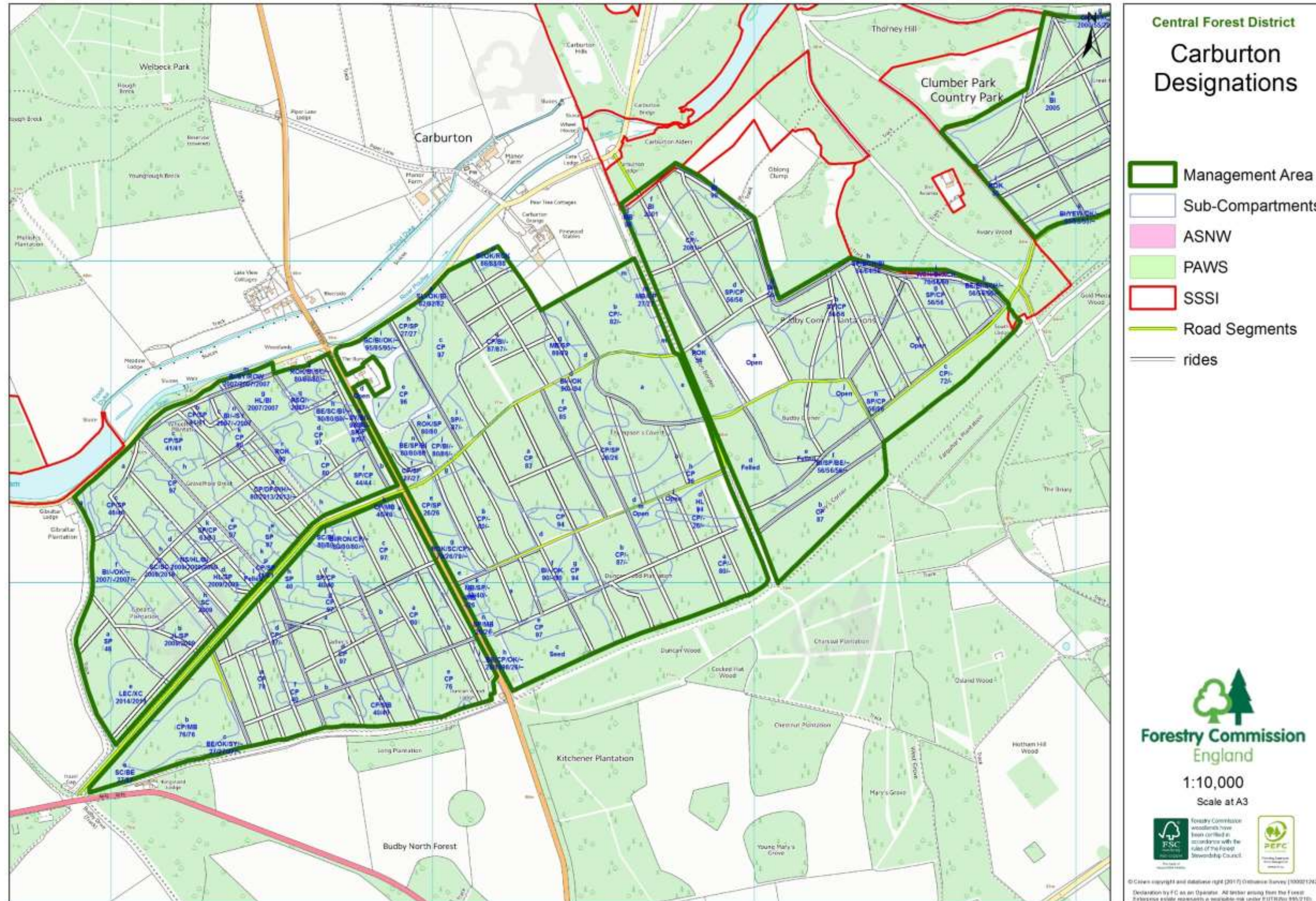
Further information on the UK Woodland Assurance Scheme (UKWAS) can be found here: www.ukwas.org.uk

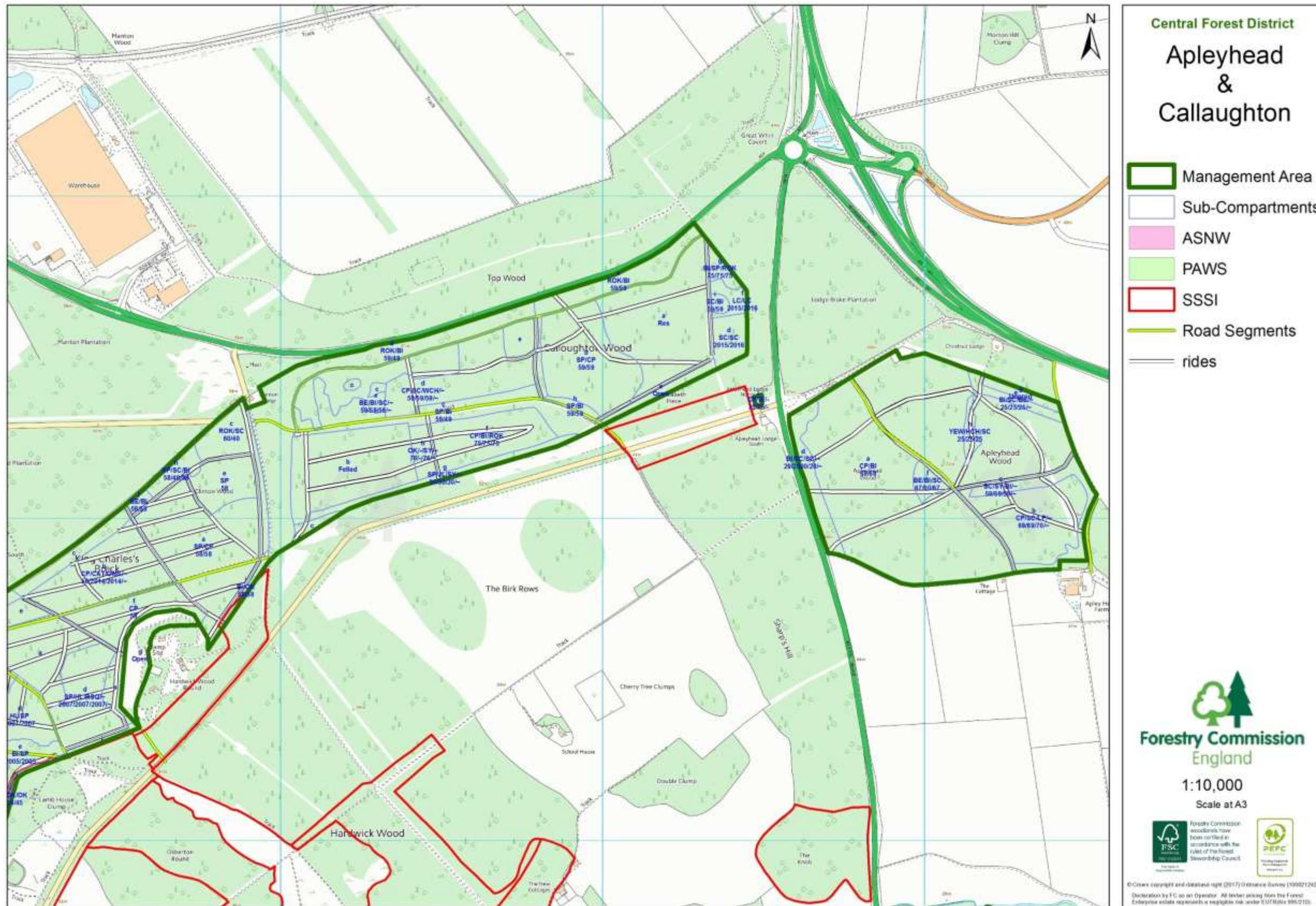
7. Maps

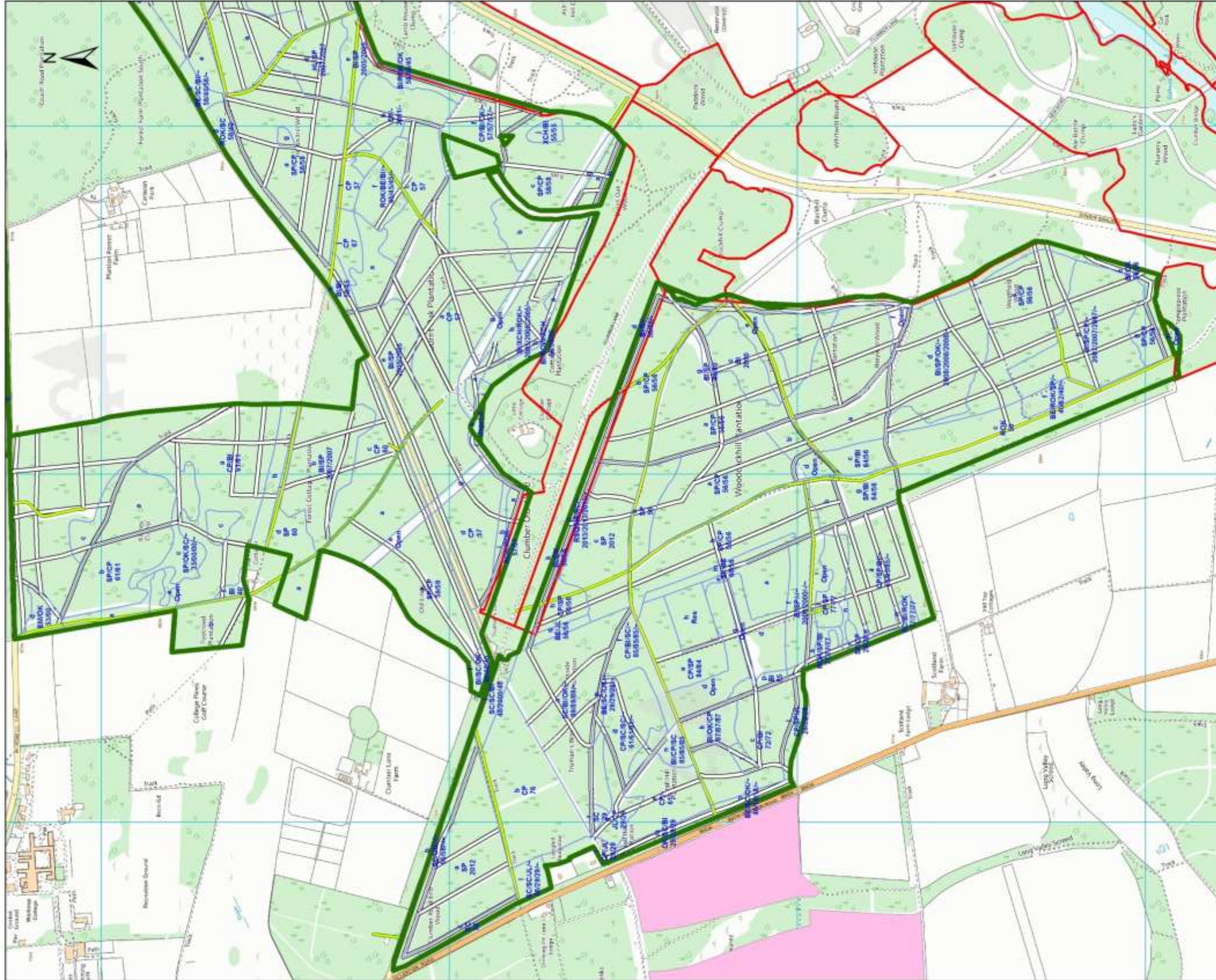
7.1 Location




7.2 Designations













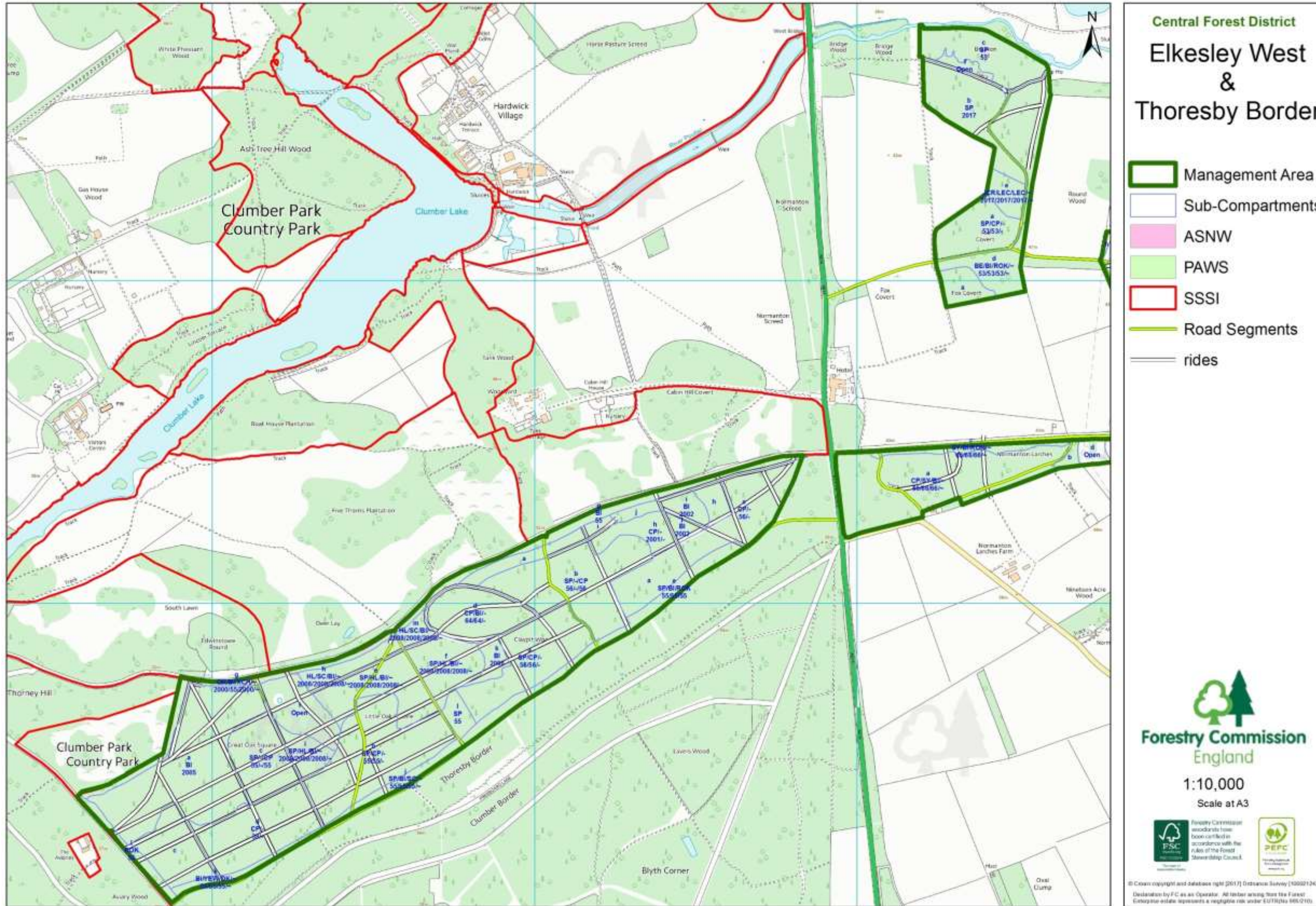


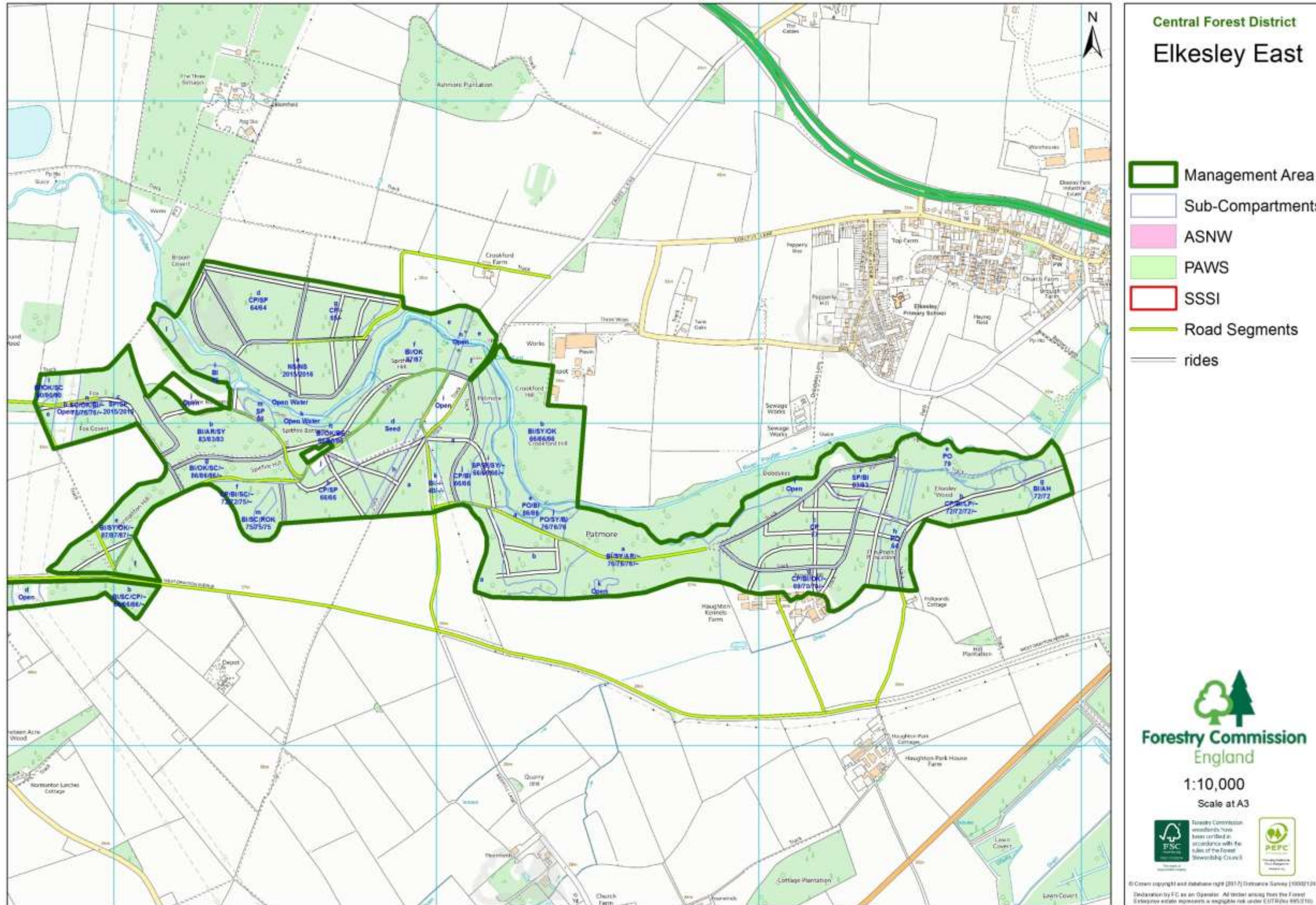


Central Forest District
Kidney Clump
& Pimpers Alley
 Scale at A3
 1:10,000

 Management Area
 SSSI
 Sub-Compartments
 Road Segments
 ASNW
 Rides
 PAWS

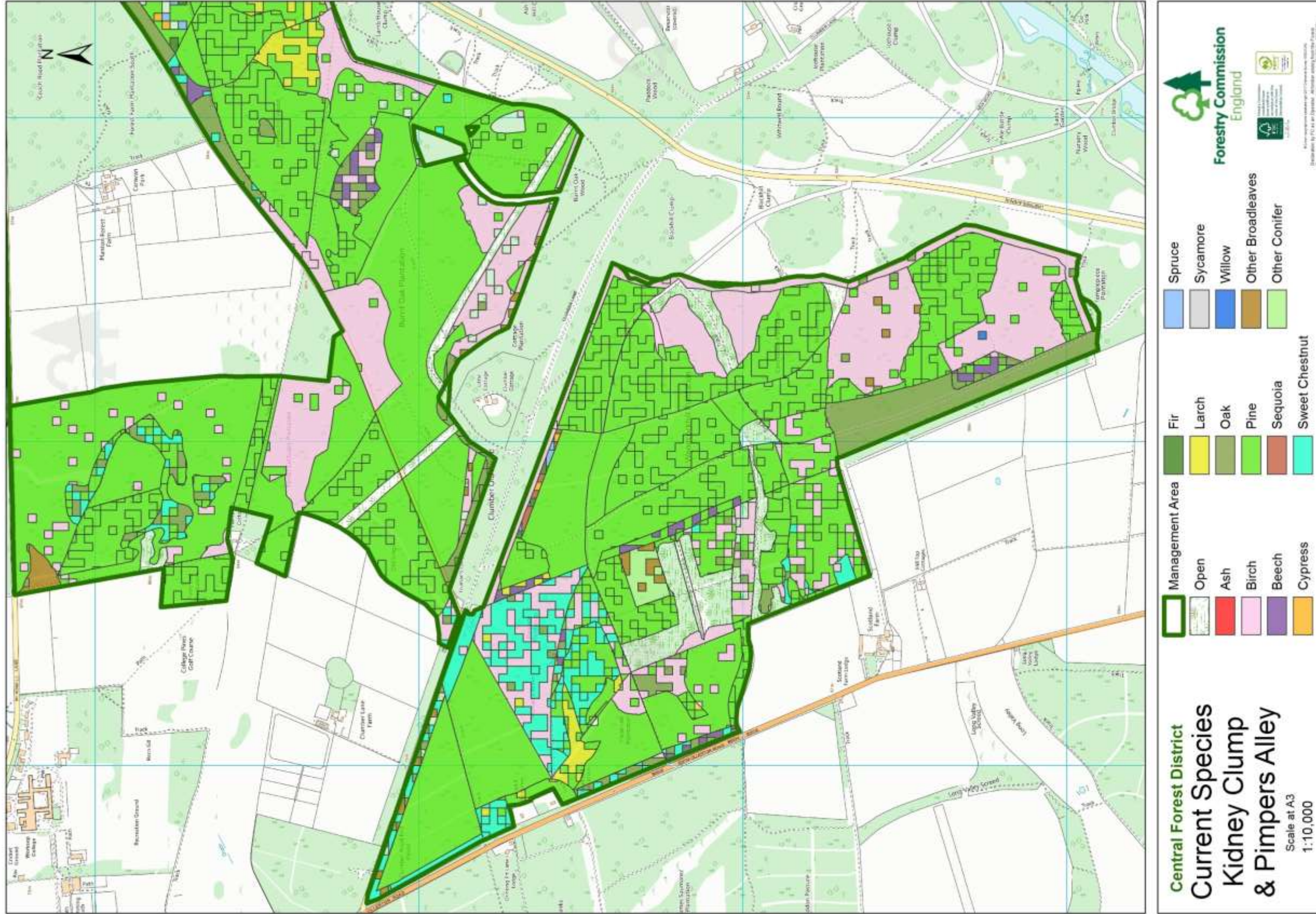


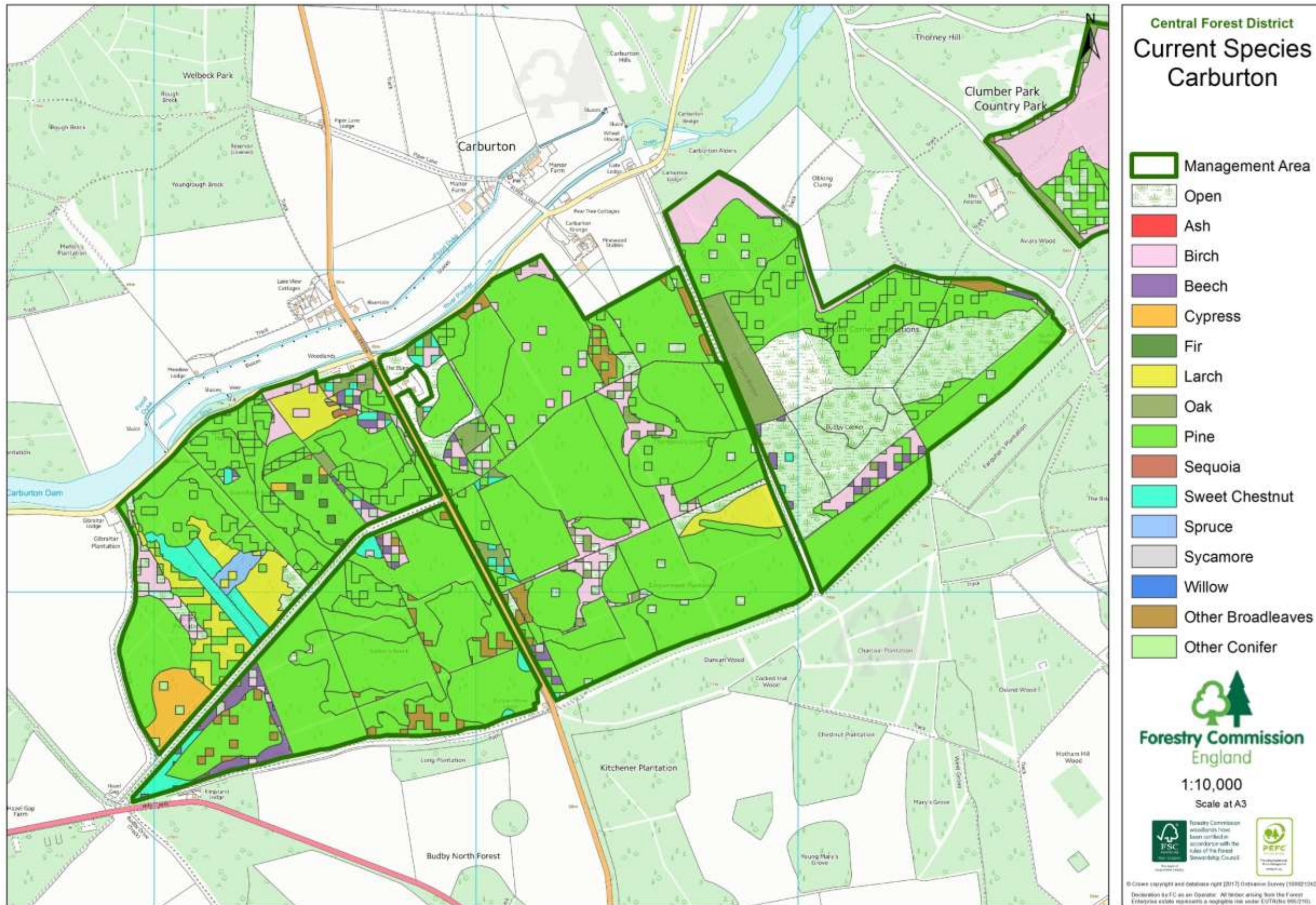


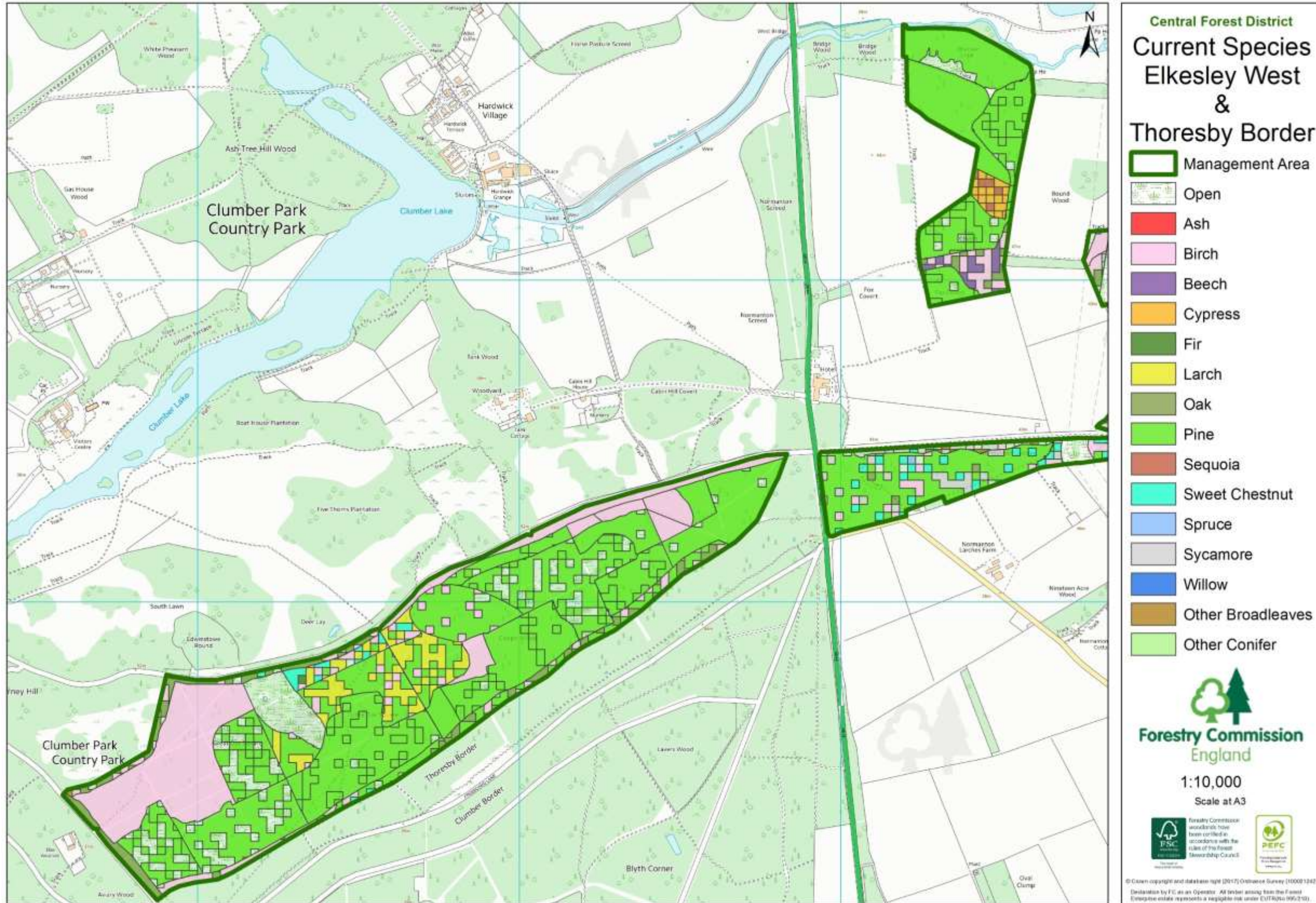


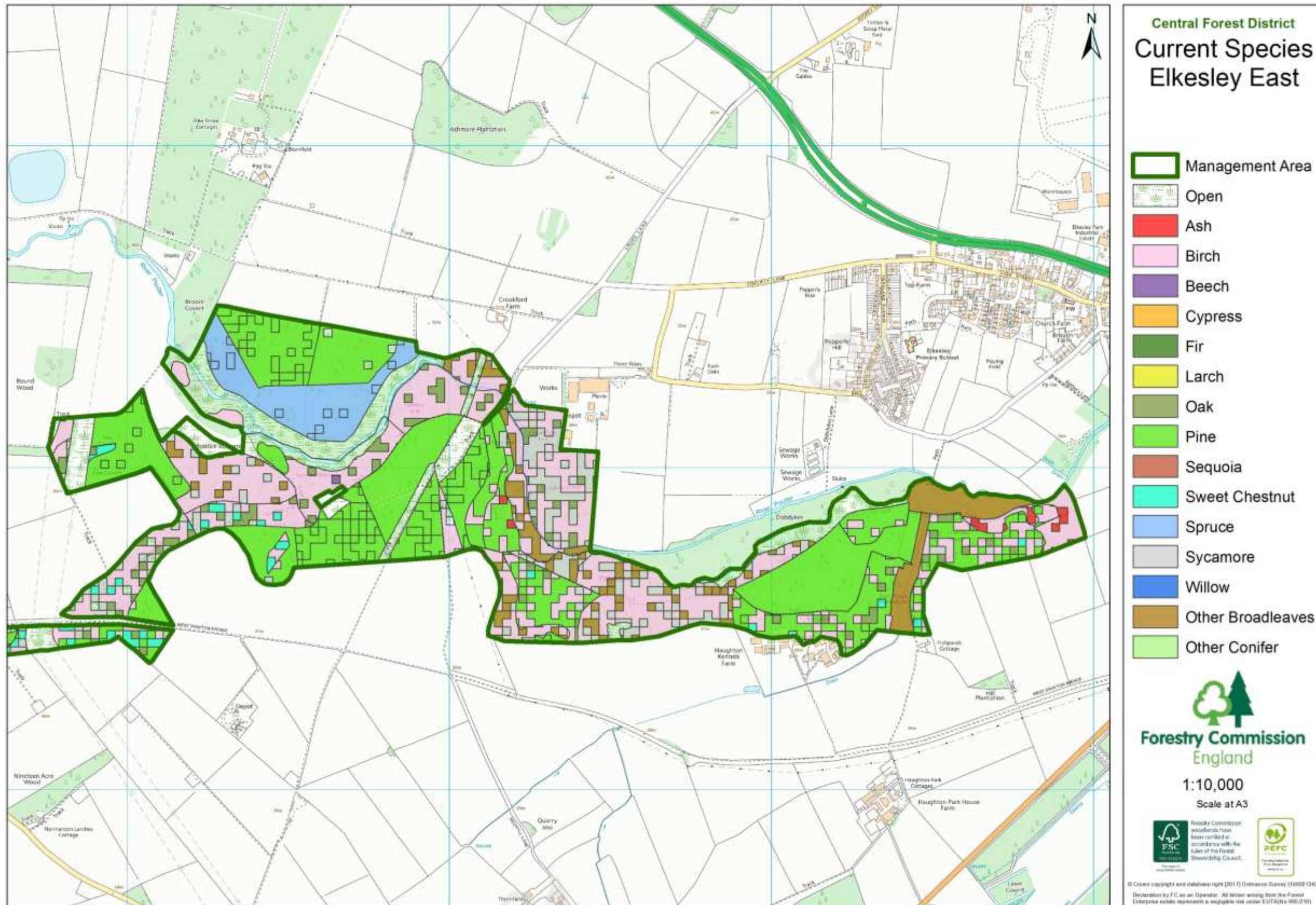
7.3 Current Species



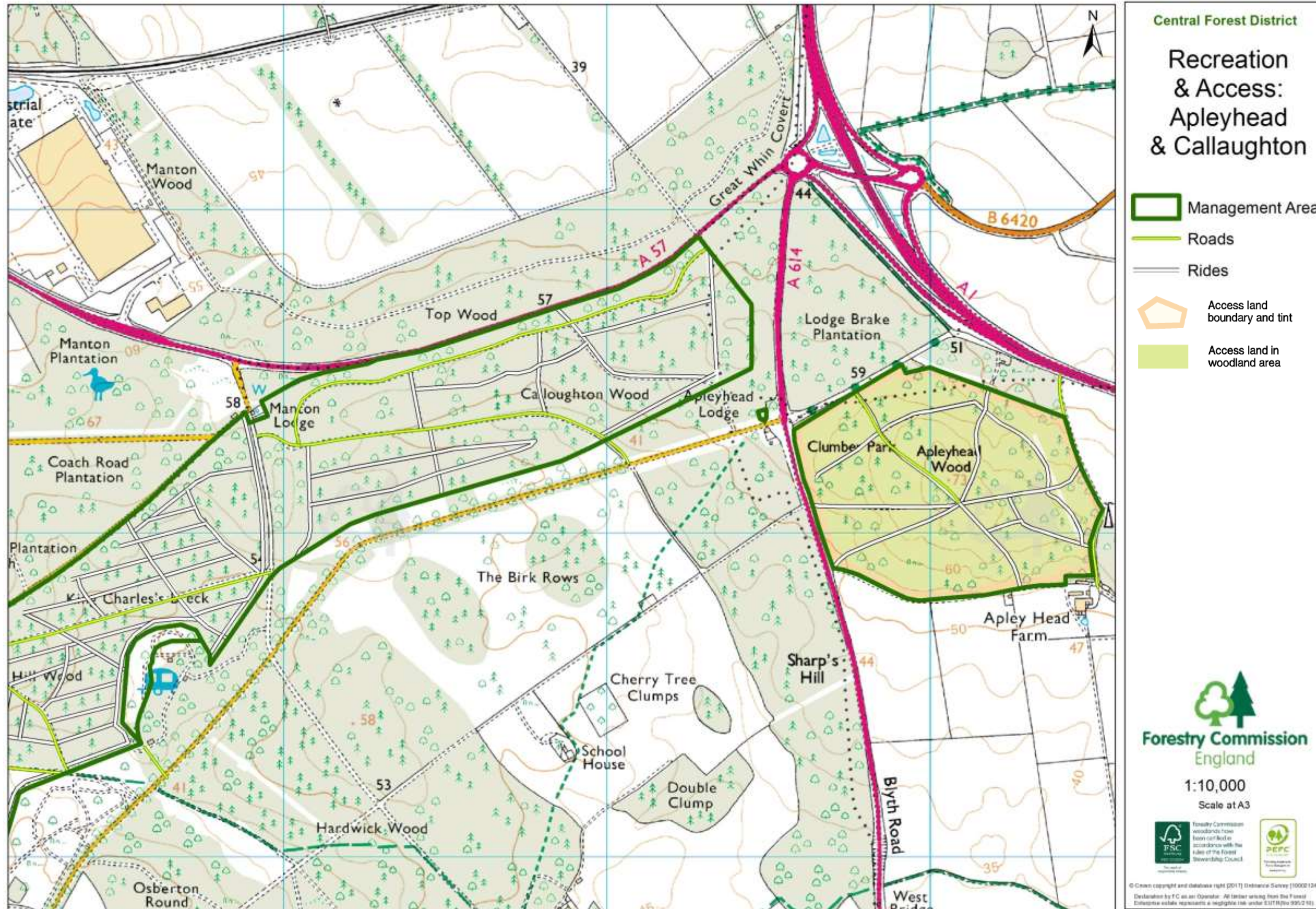


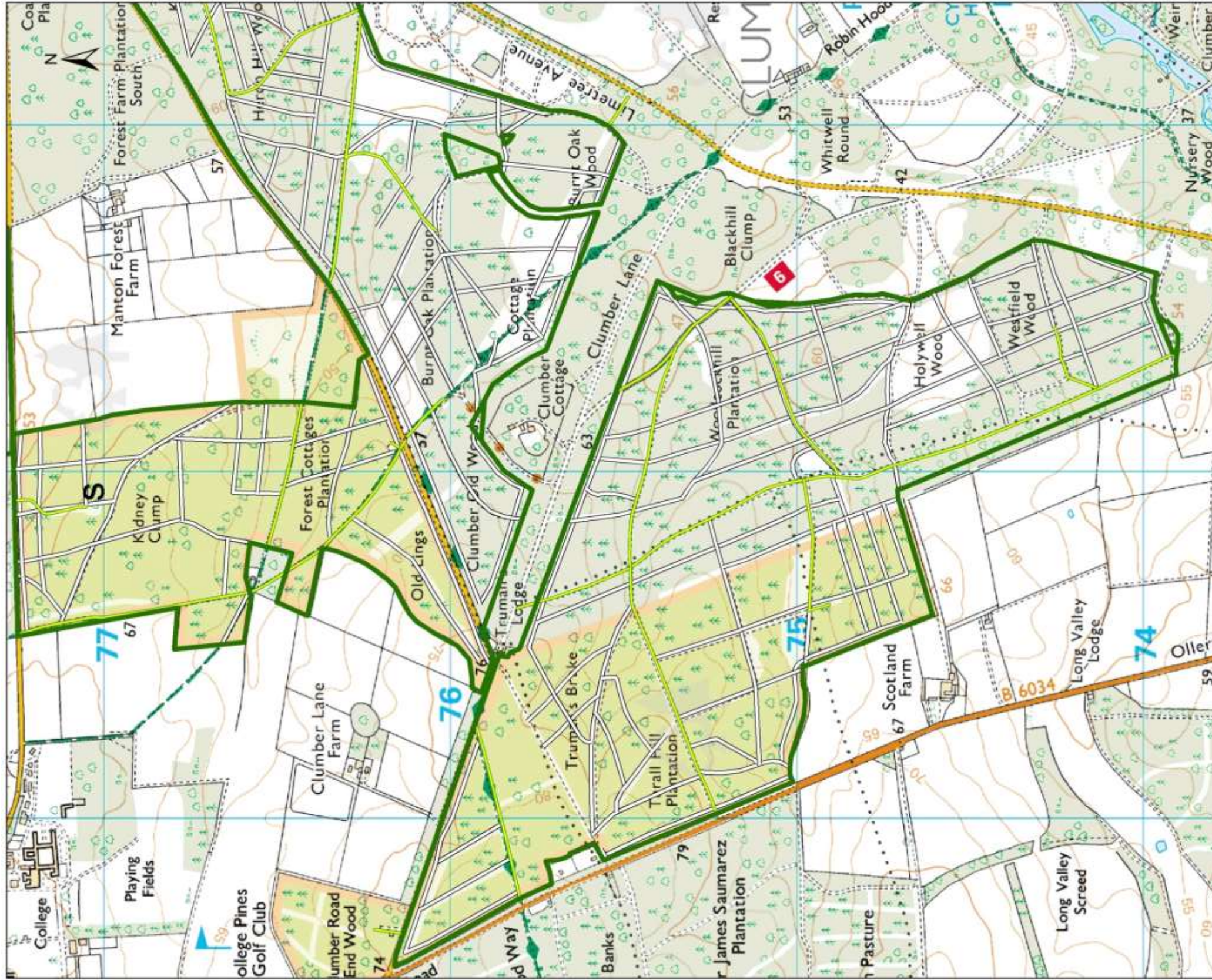






7.4 Recreation & Access





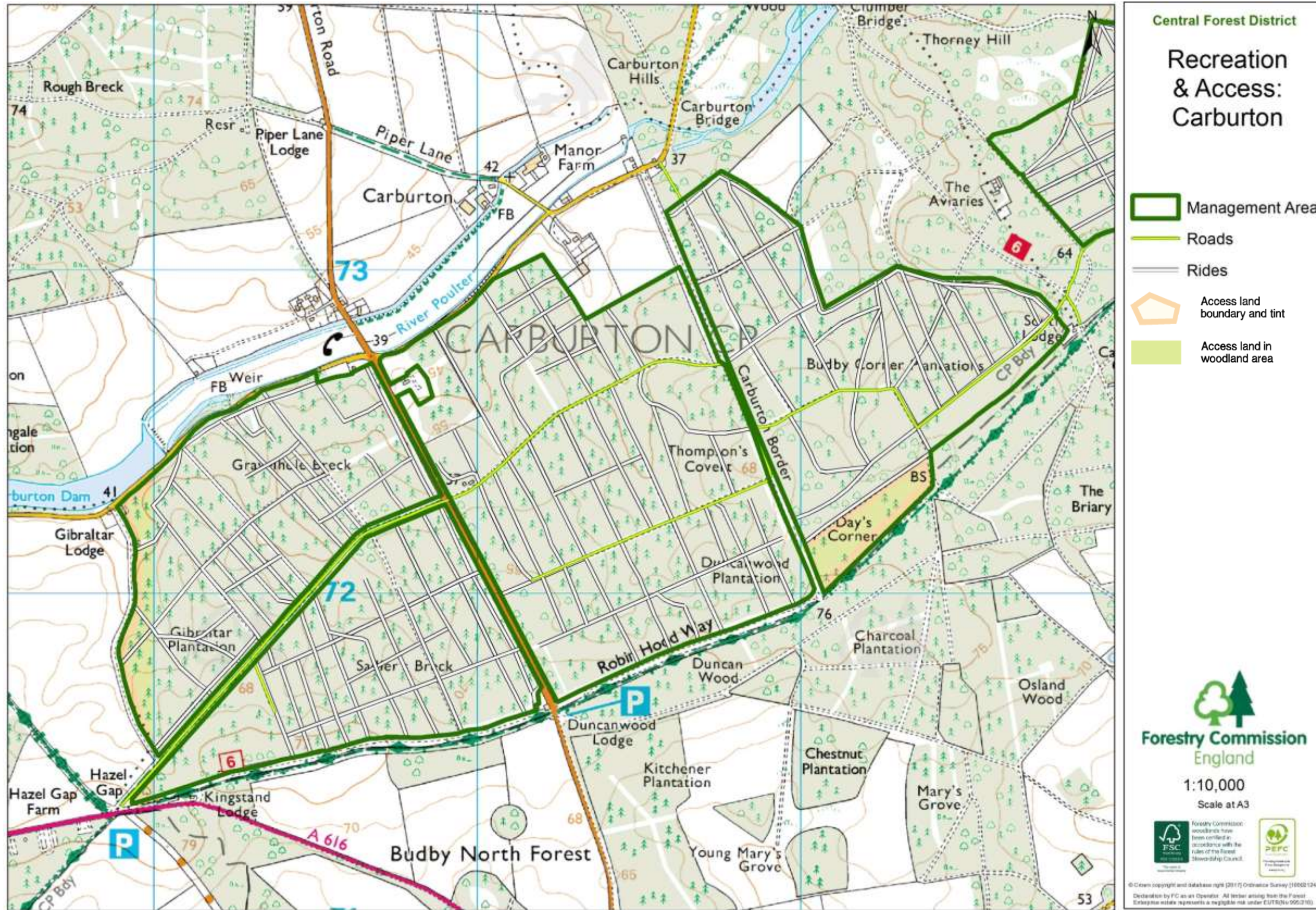
Forestry Commission
England

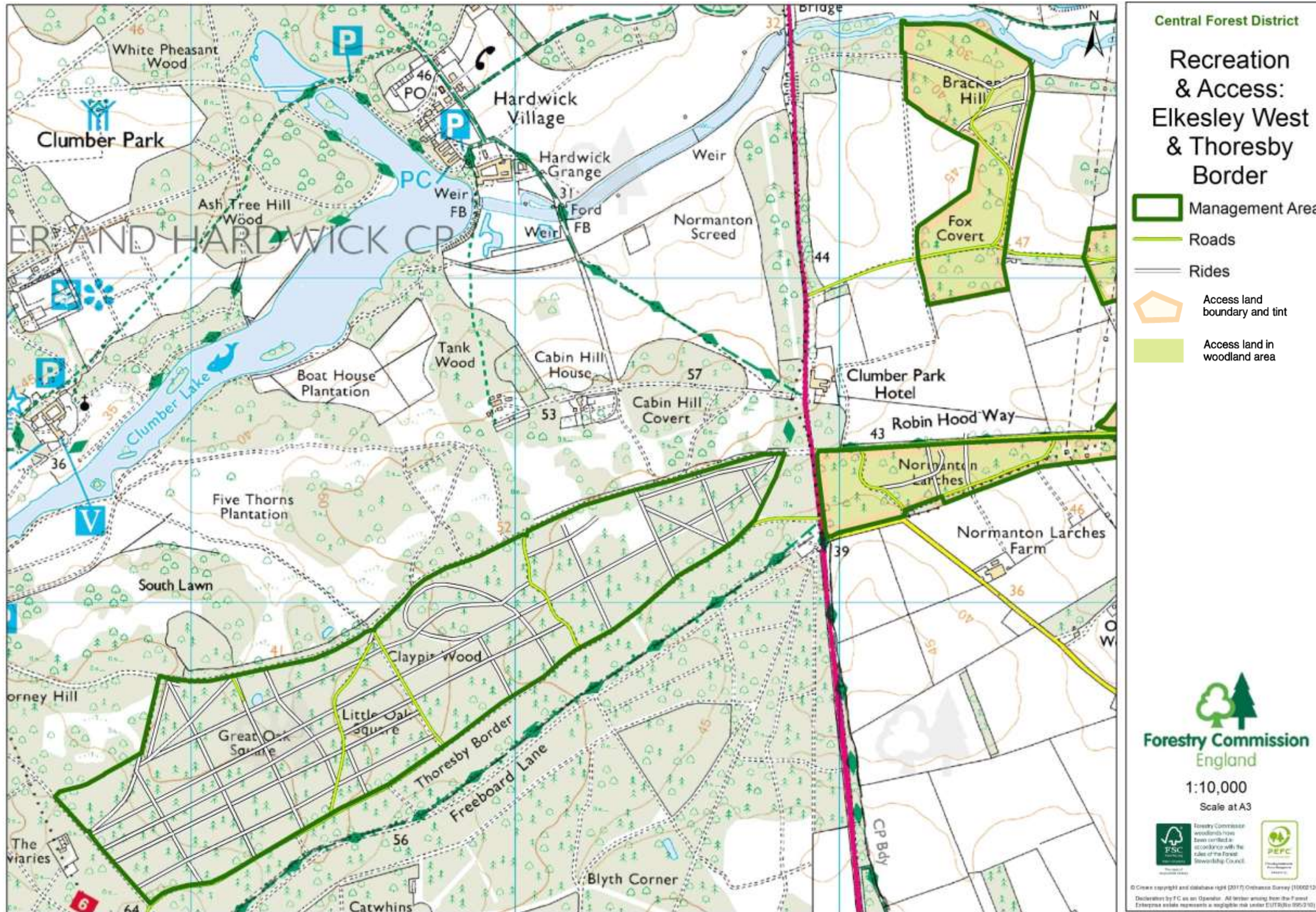
**Central Forest District
Recreation & Access:
Kidney Clump &
Pimpers Alley**

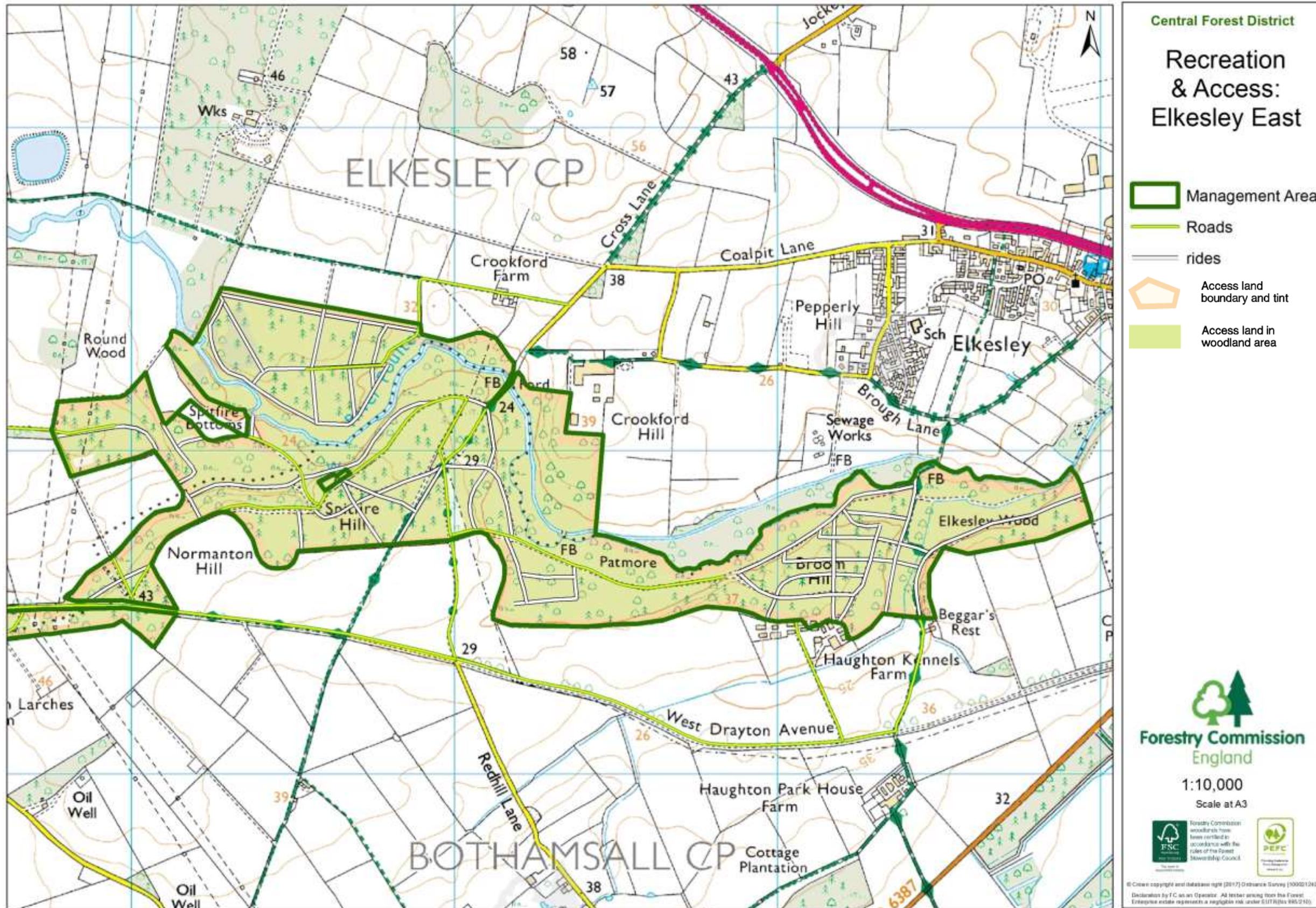
Scale at A3
1:10,000

- Management Area
- Roads
- Rides
- Access land boundary and tint
- Access land in woodland area

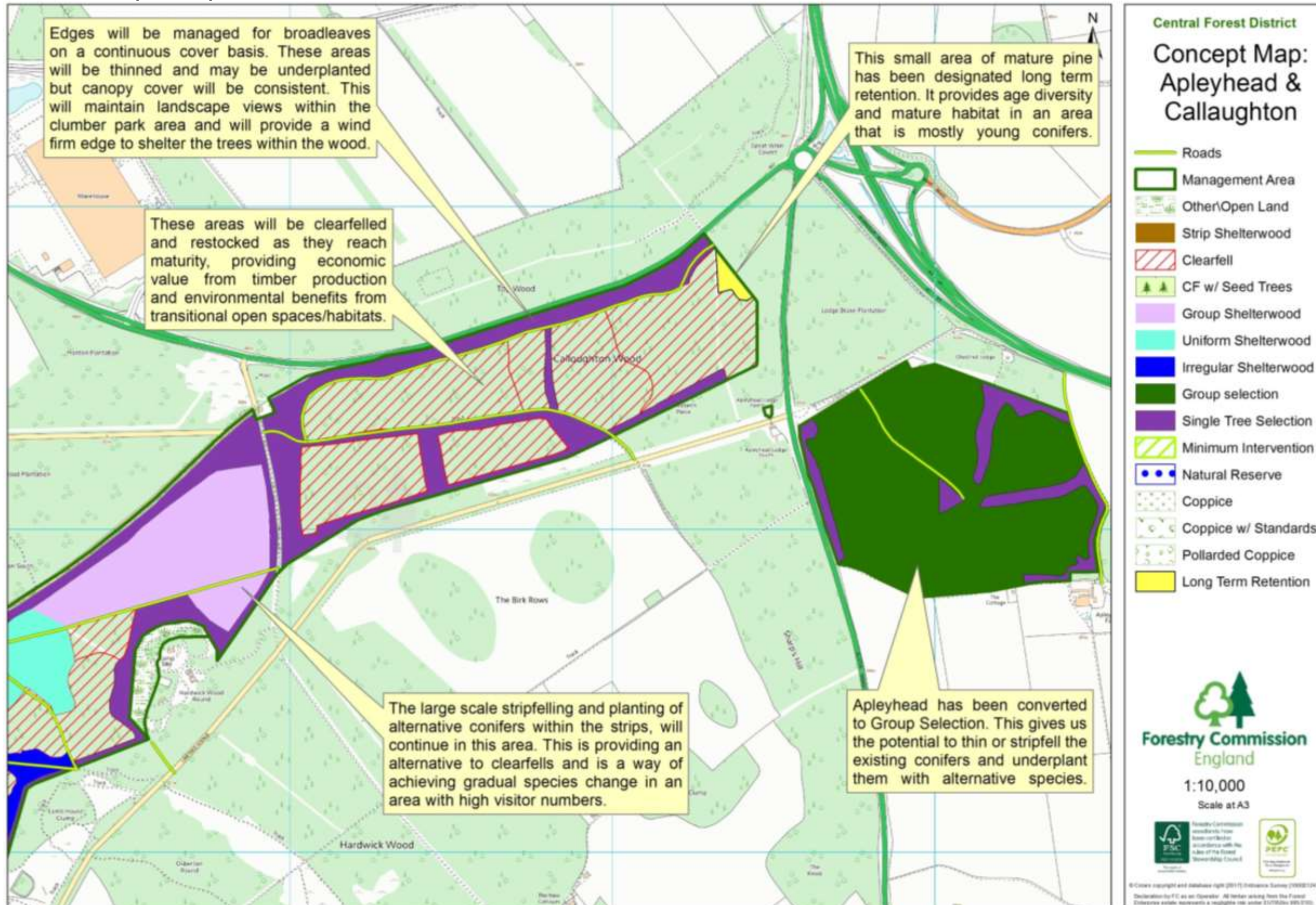
Forestry Commission England logo and other small icons are also present.

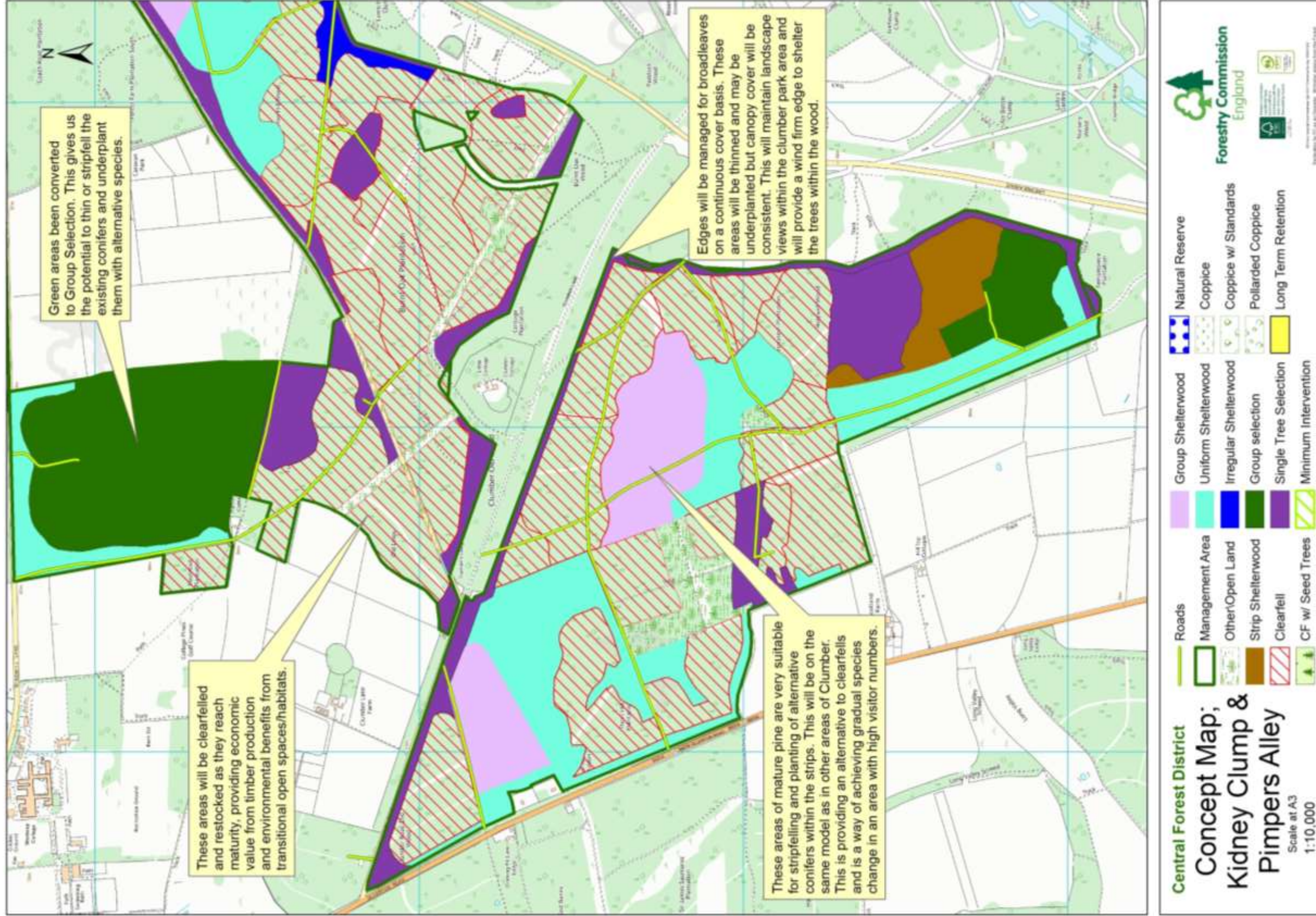


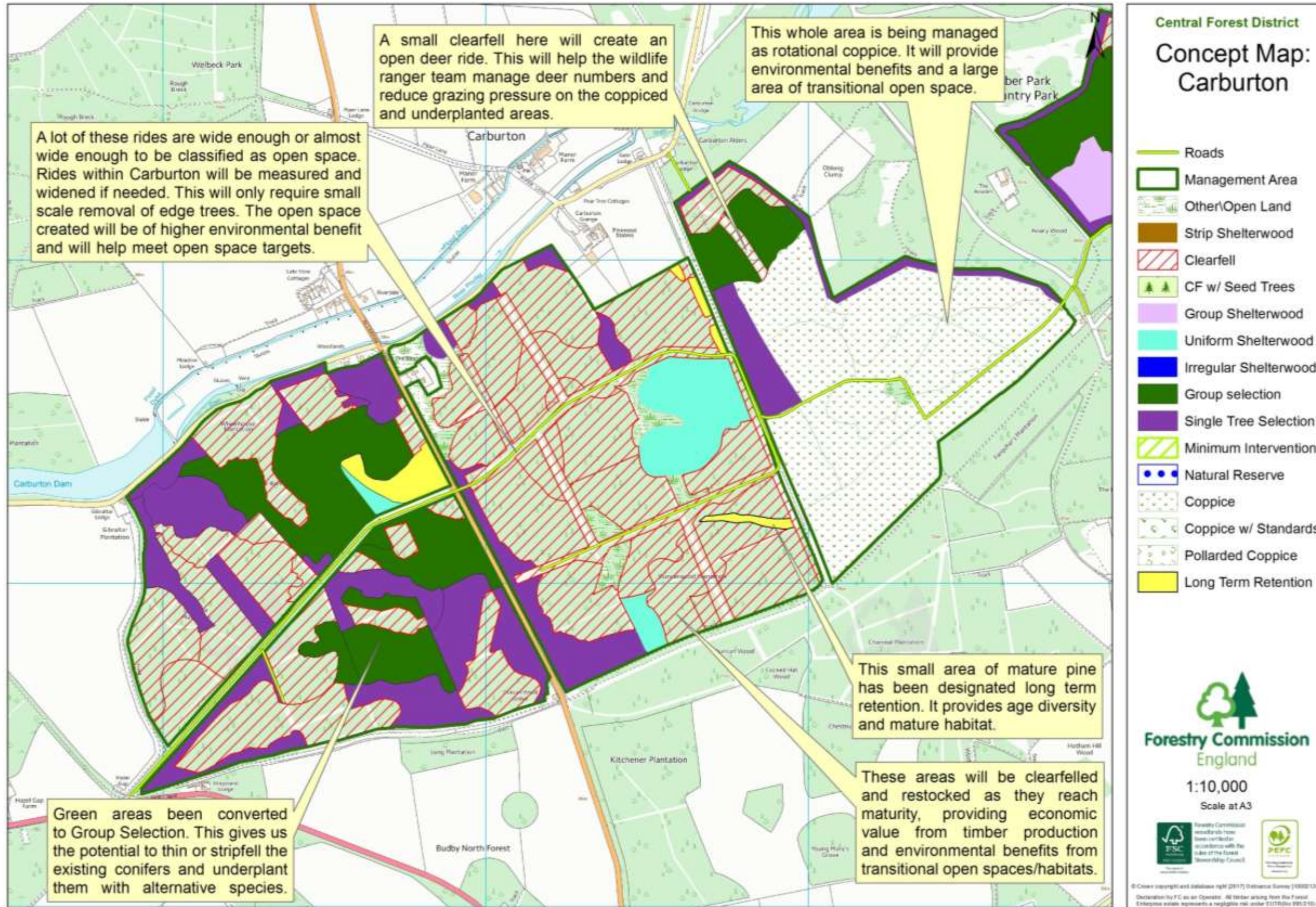


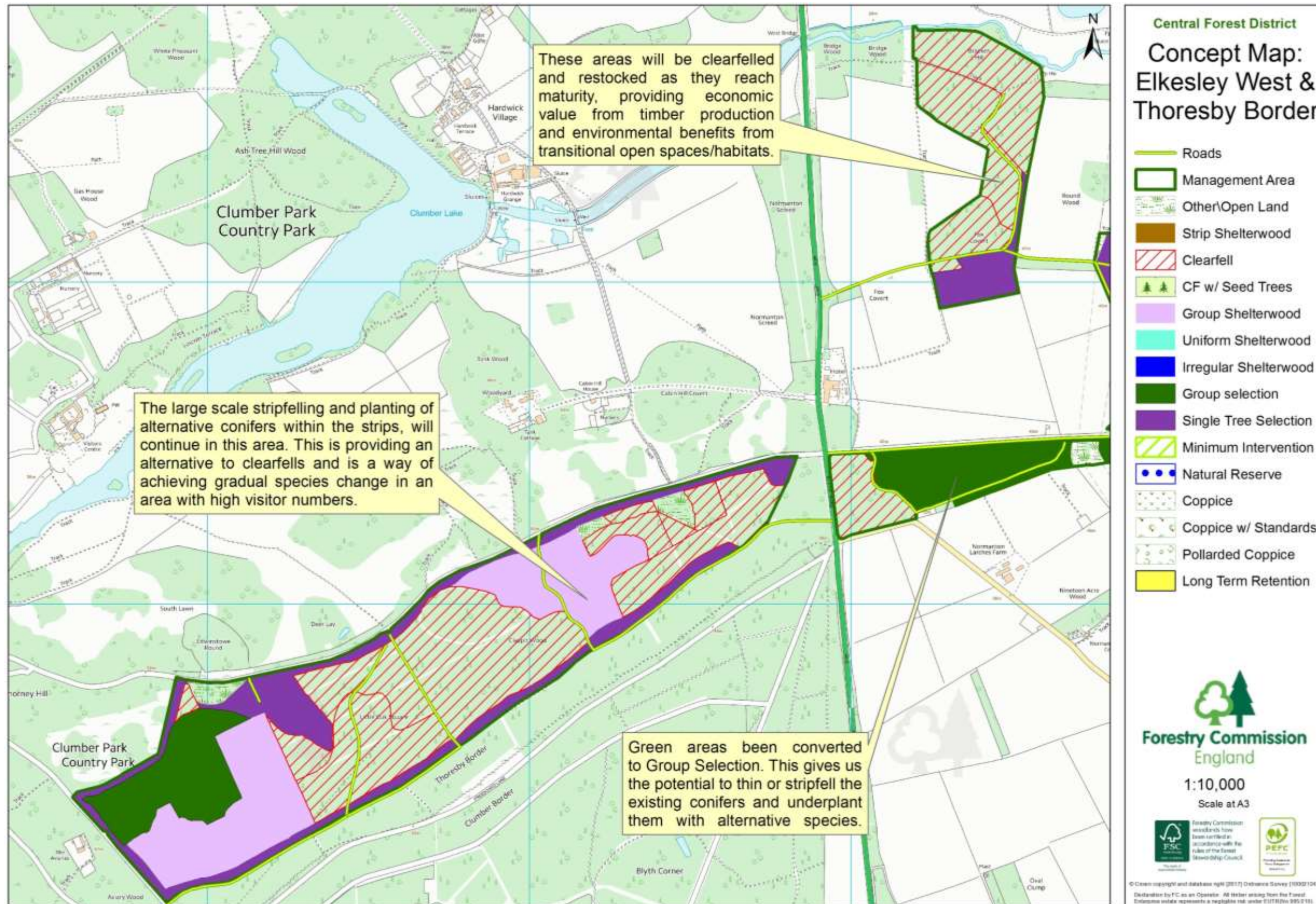


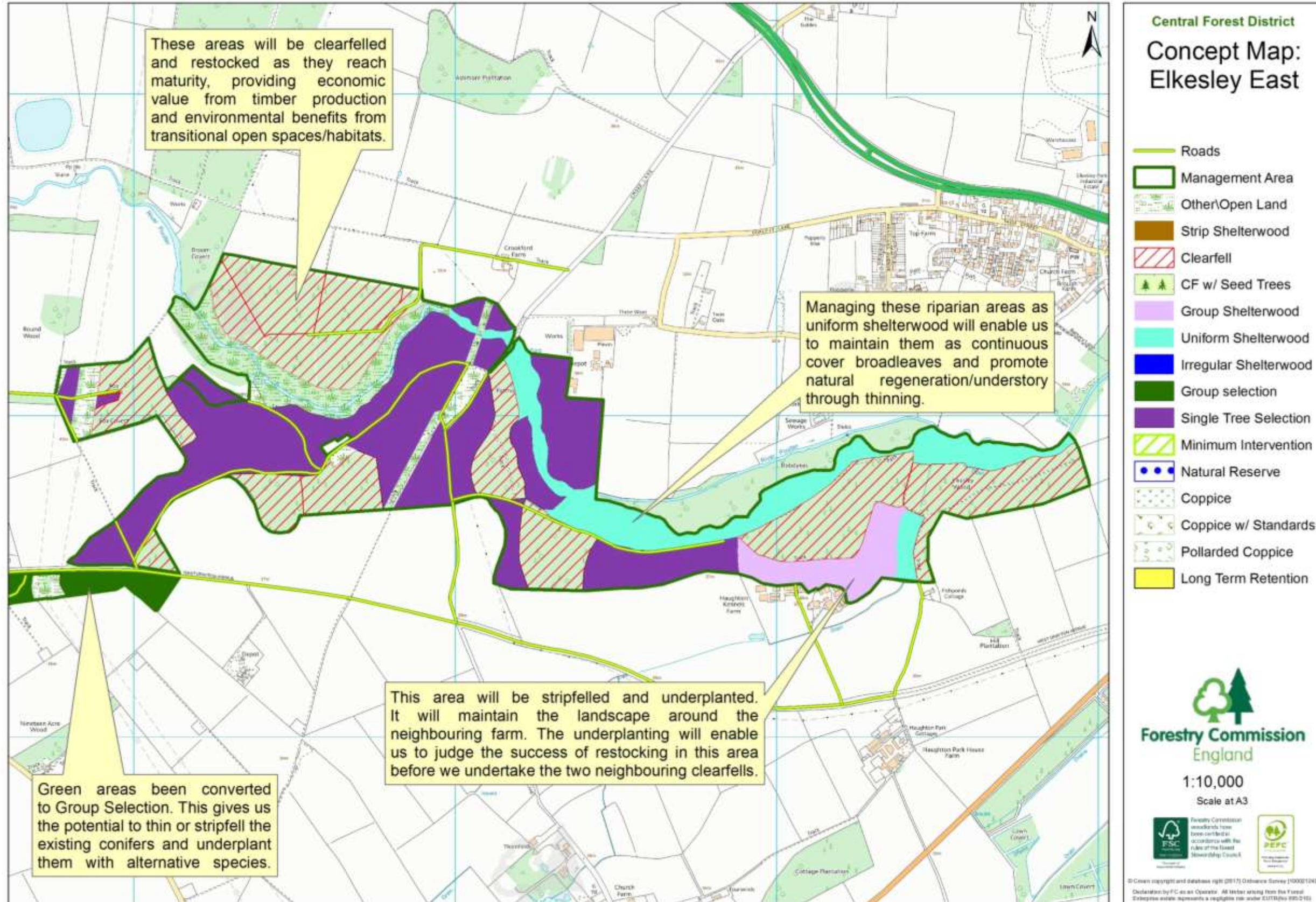
7.5 Concept Map



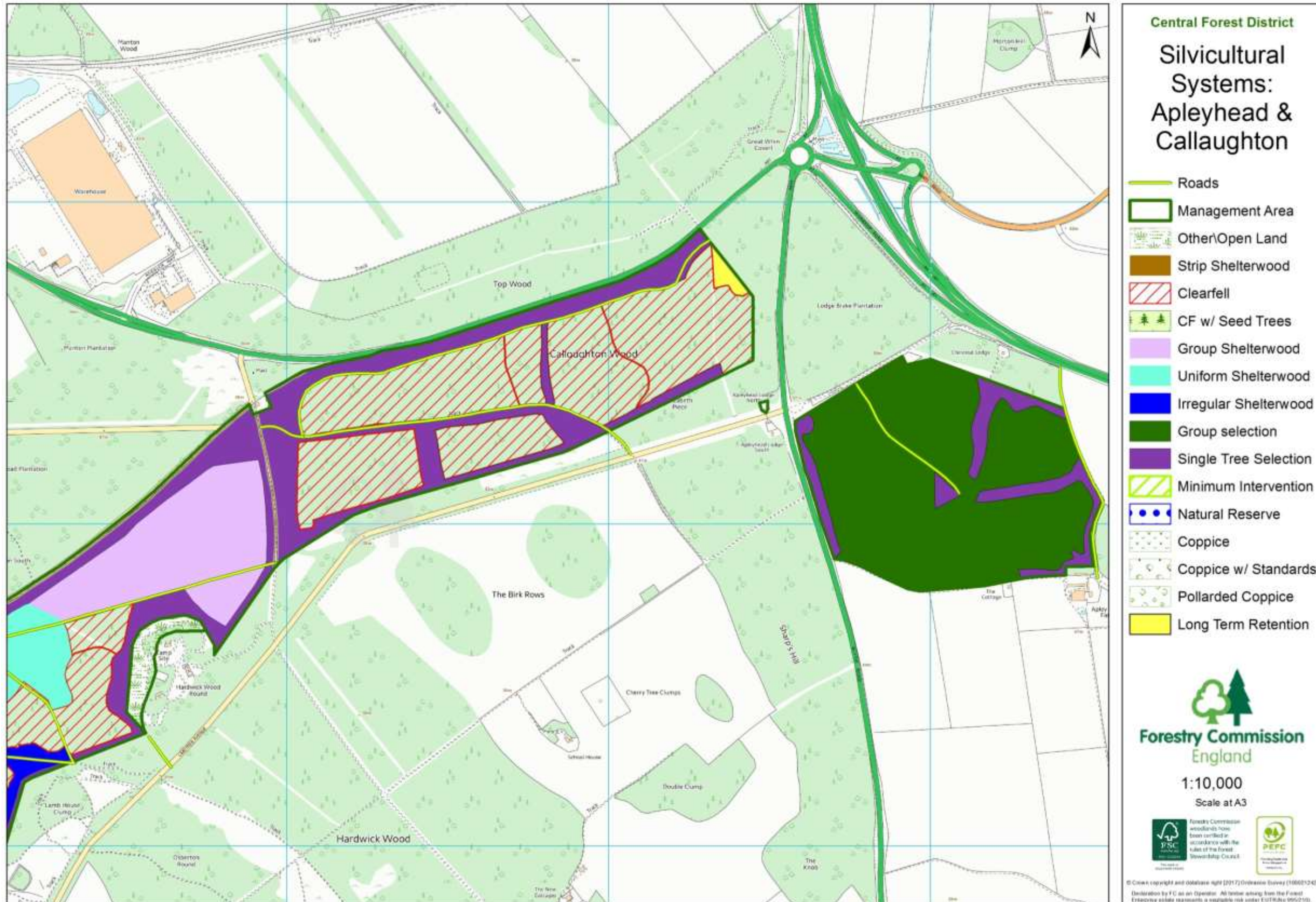


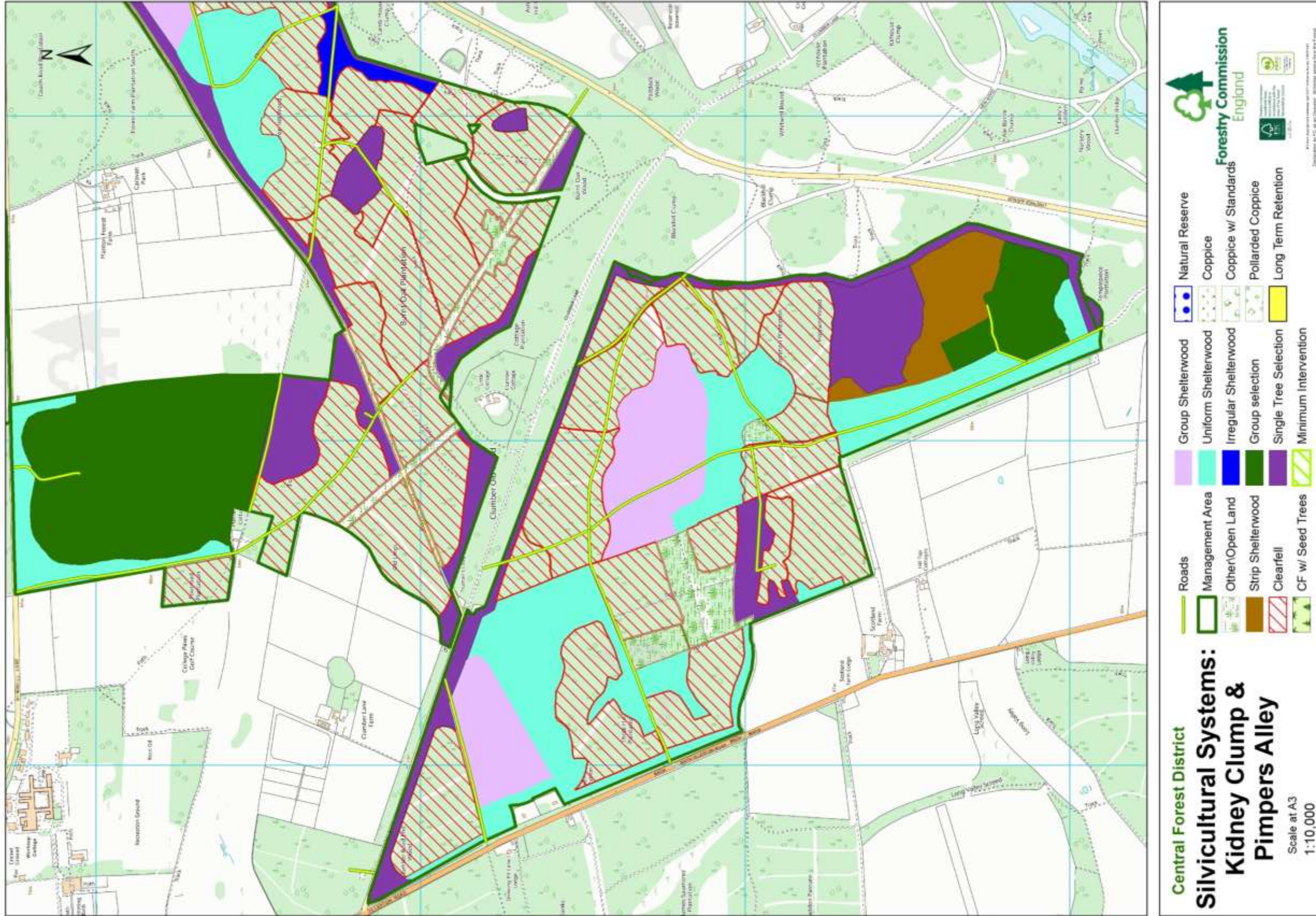


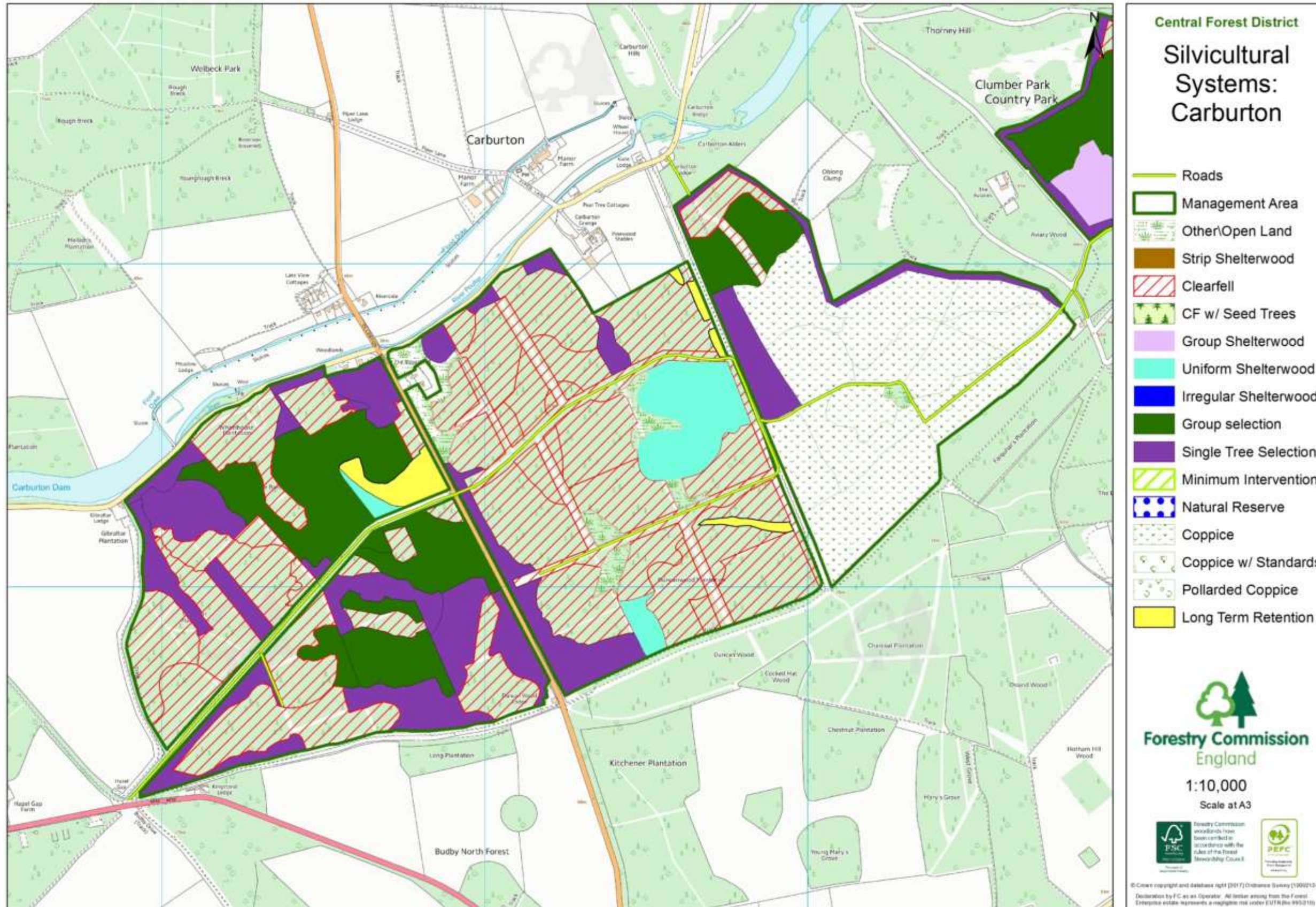


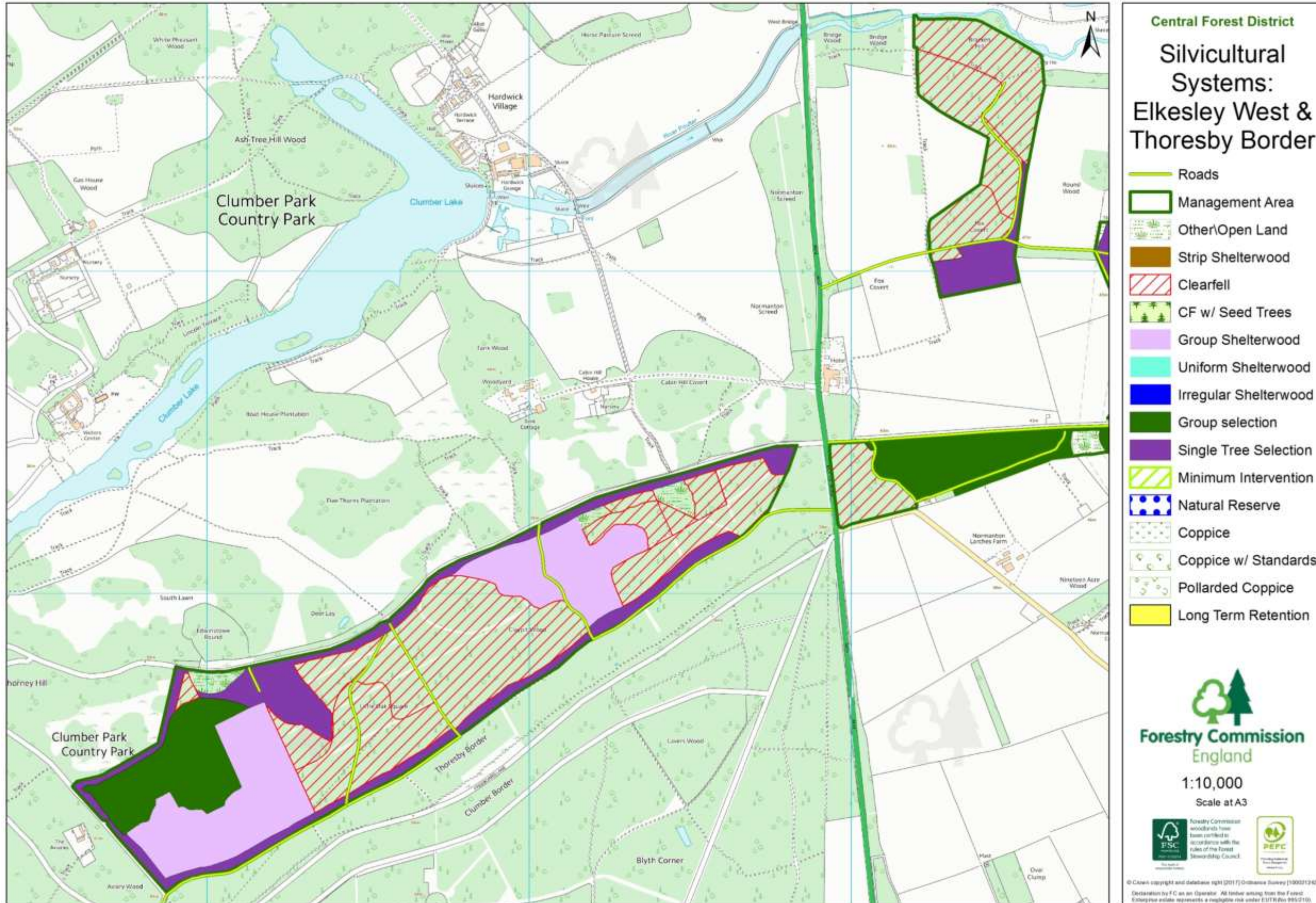


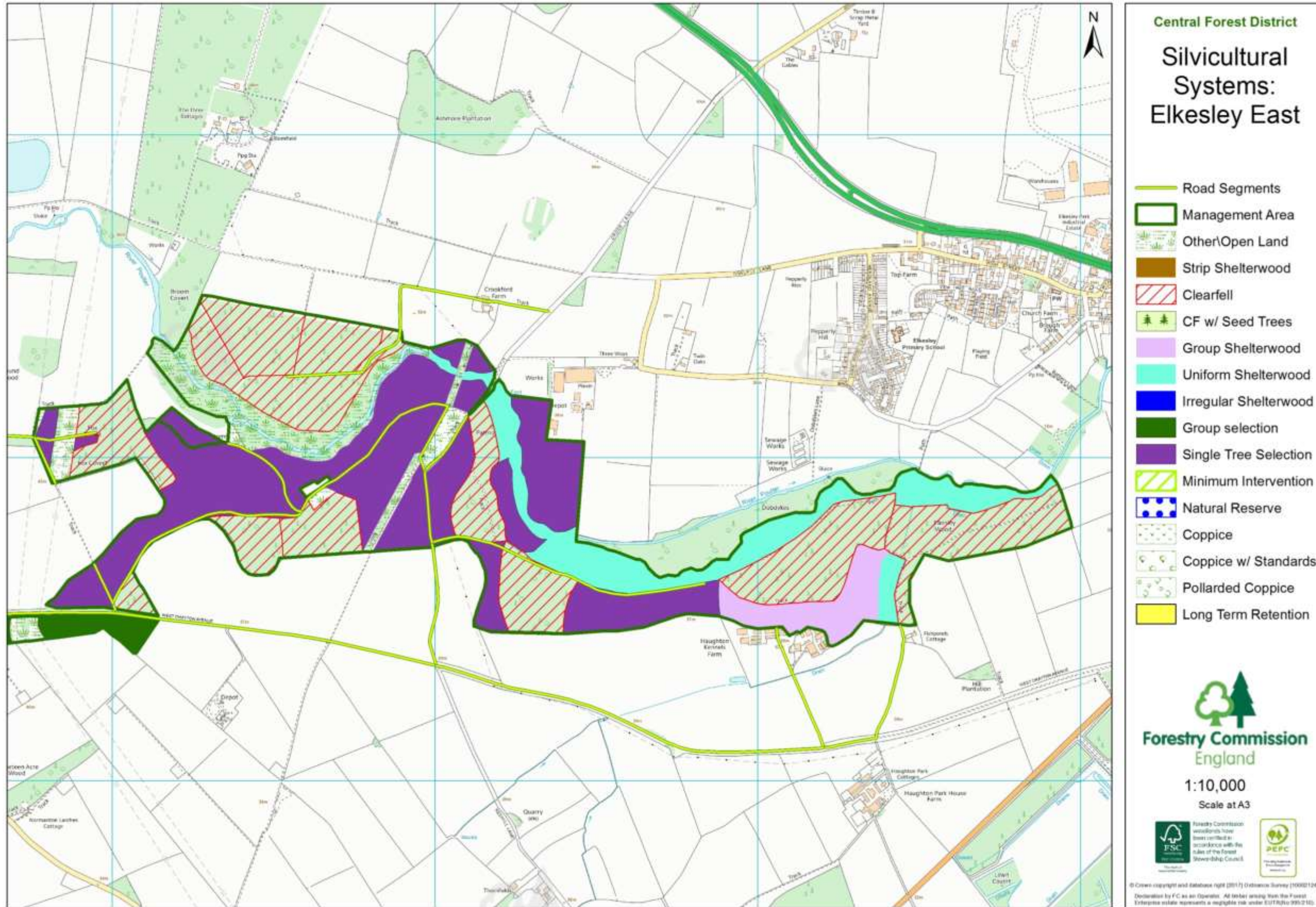
7.6 Silvicultural Systems











Central Forest District
Silvicultural Systems:
Elkesley East

- Road Segments
- Management Area
- Other/Open Land
- Strip Shelterwood
- Clearfell
- CF w/ Seed Trees
- Group Shelterwood
- Uniform Shelterwood
- Irregular Shelterwood
- Group selection
- Single Tree Selection
- Minimum Intervention
- Natural Reserve
- Coppice
- Coppice w/ Standards
- Pollarded Coppice
- Long Term Retention

Forestry Commission
England

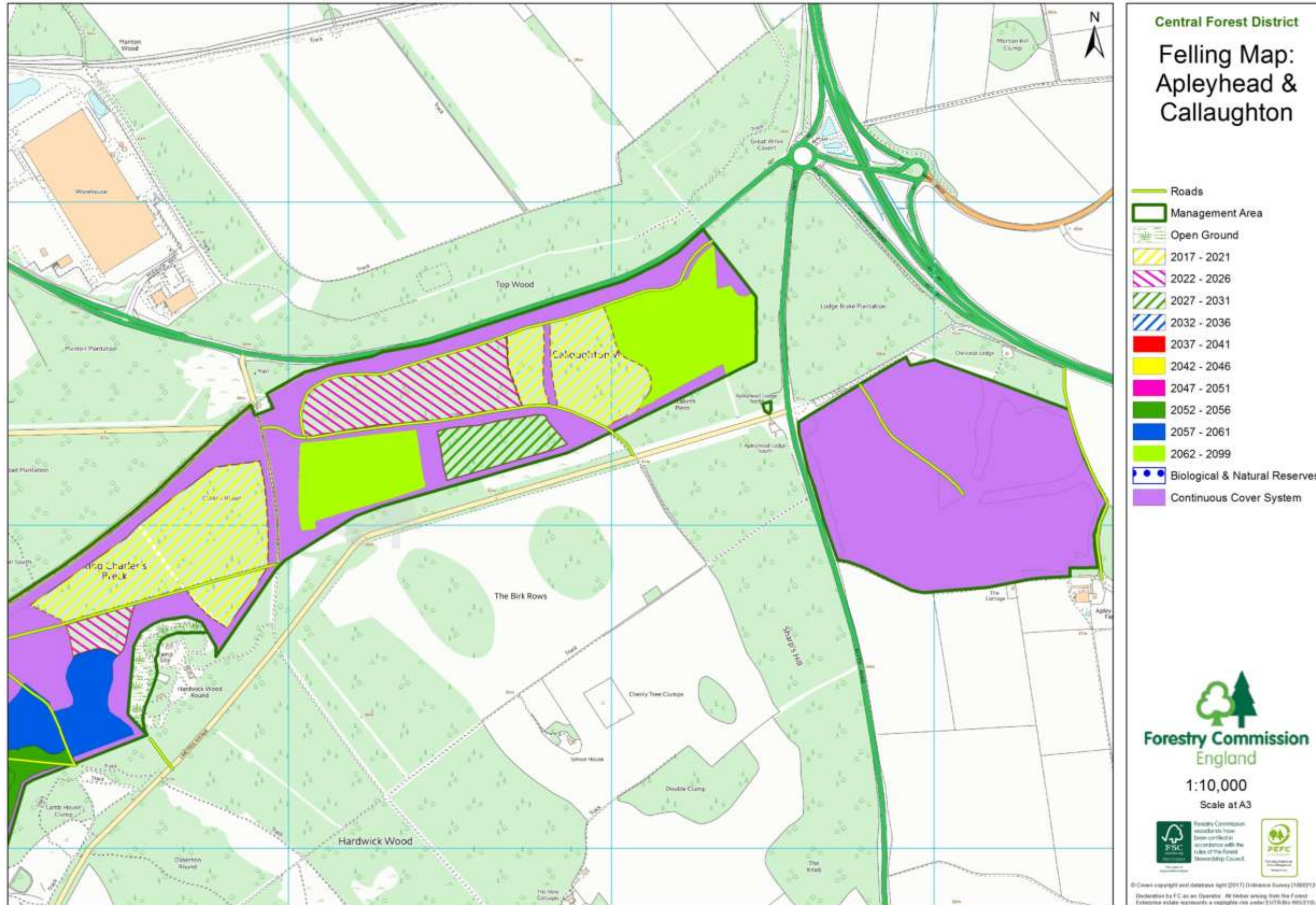
1:10,000
Scale at A3

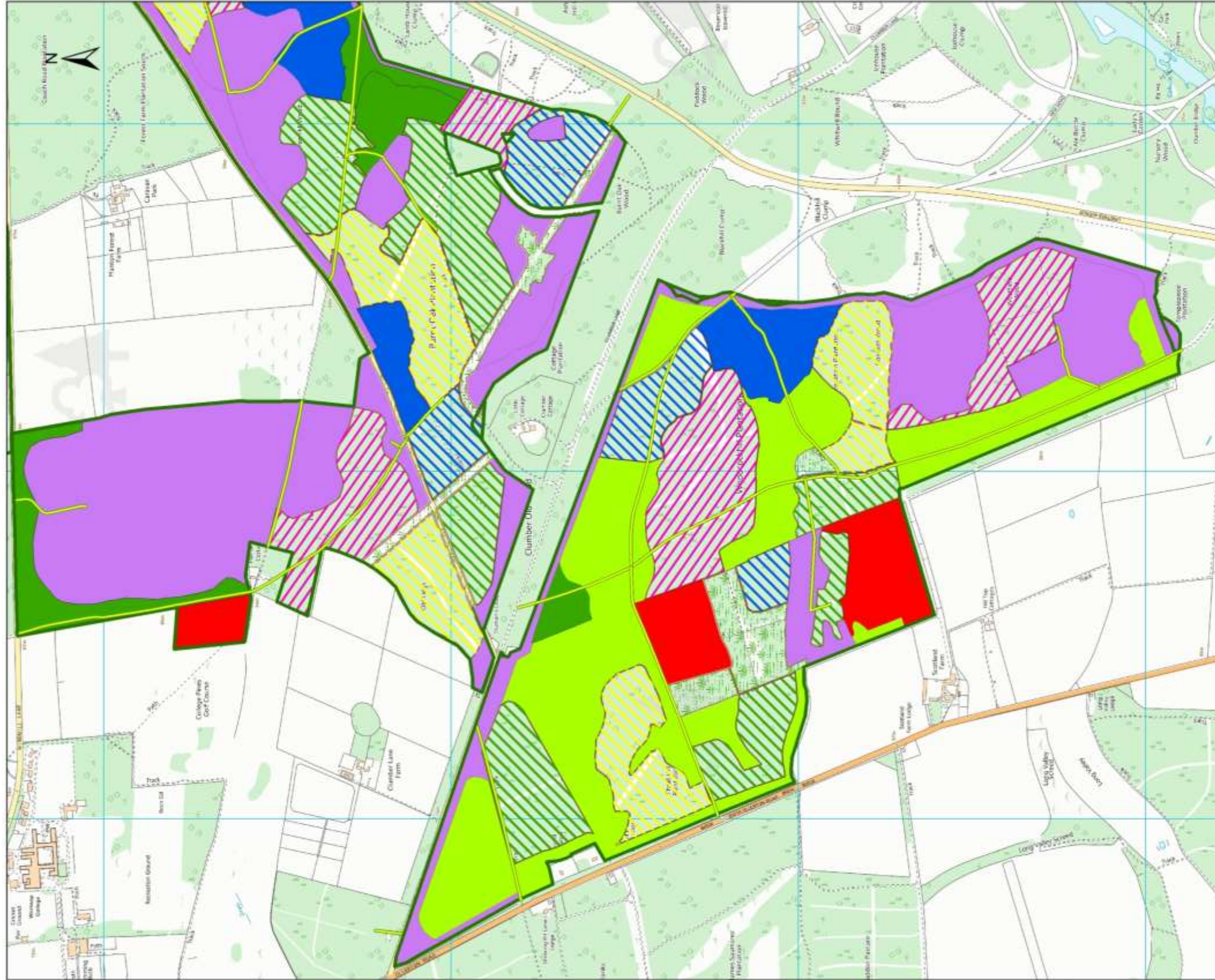
Forestry Commission
conditions have
been verified in
accordance with the
rules of the Forest
Stewardship Council

PEPC
Partnership
Production
Council

© Crown copyright and database right (2017) Ordnance Survey (100012442)
Developed by F.C. as an Operator. All timber arising from the Forest
Enterprise estate represents a negligible risk under EUTR/RE (95/2/10).

7.7 Felling Map



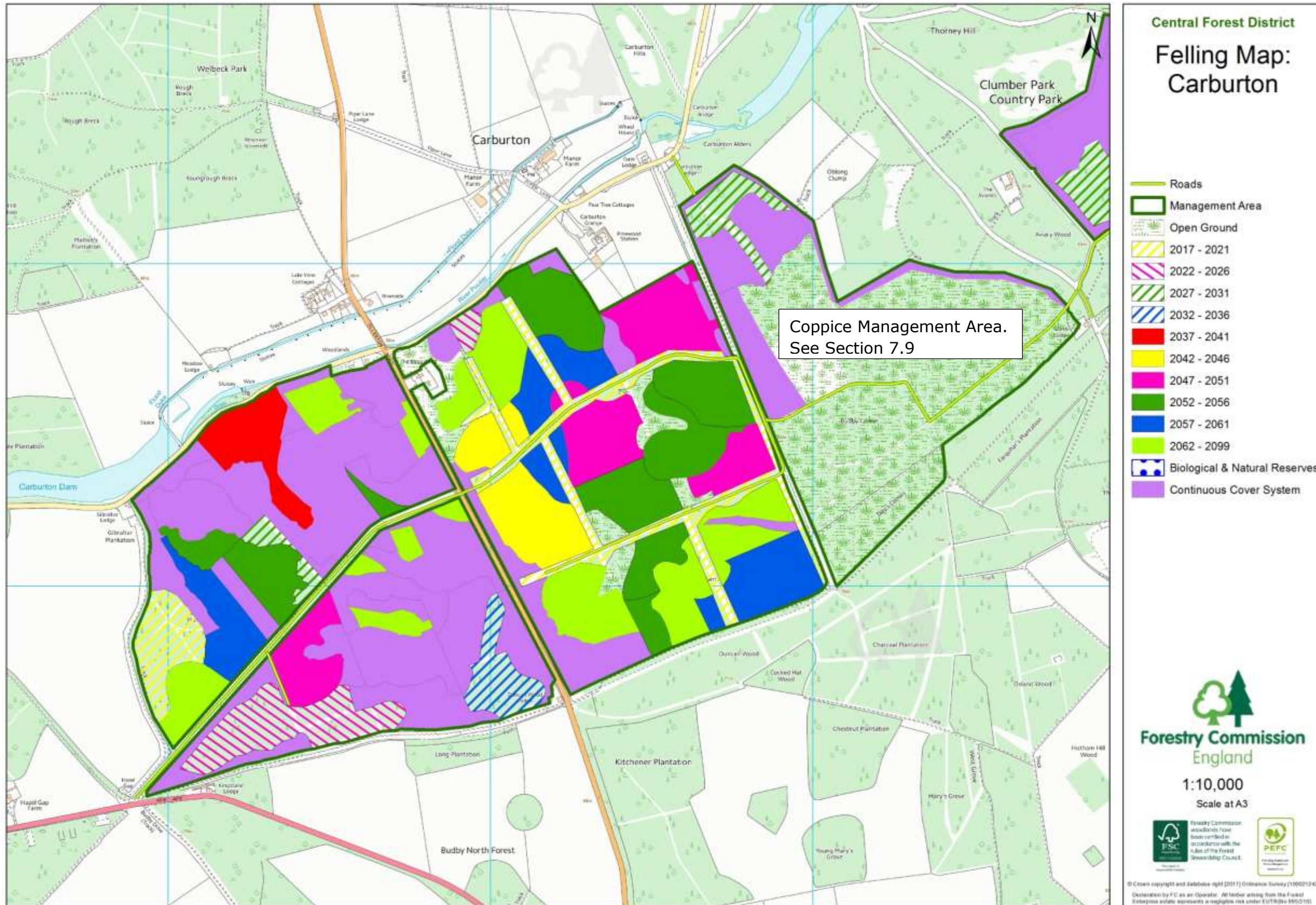


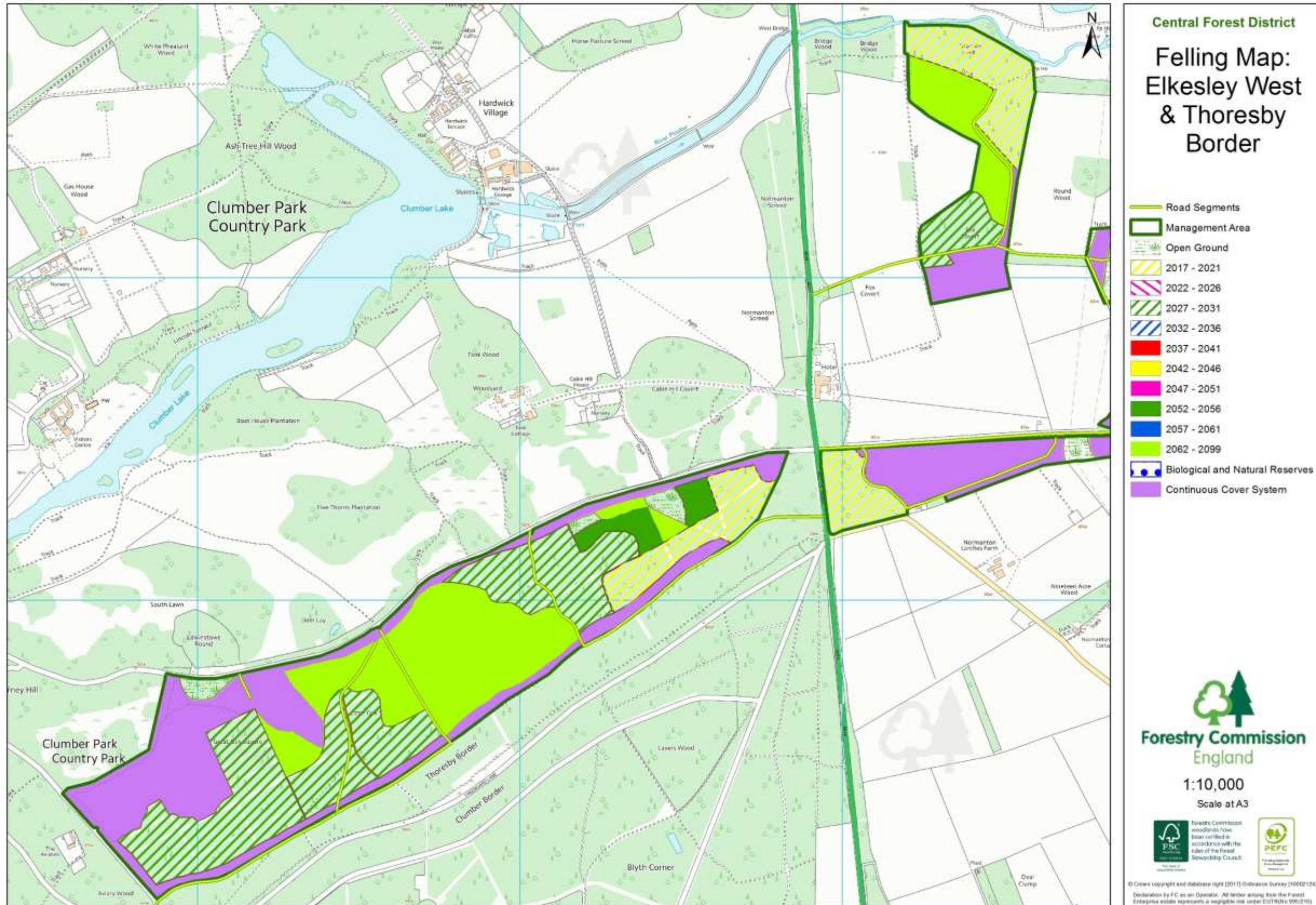
Central Forest District
**Felling Map:
Kidney Clump &
Pimpers Alley**
Scale at A3
1:10,000

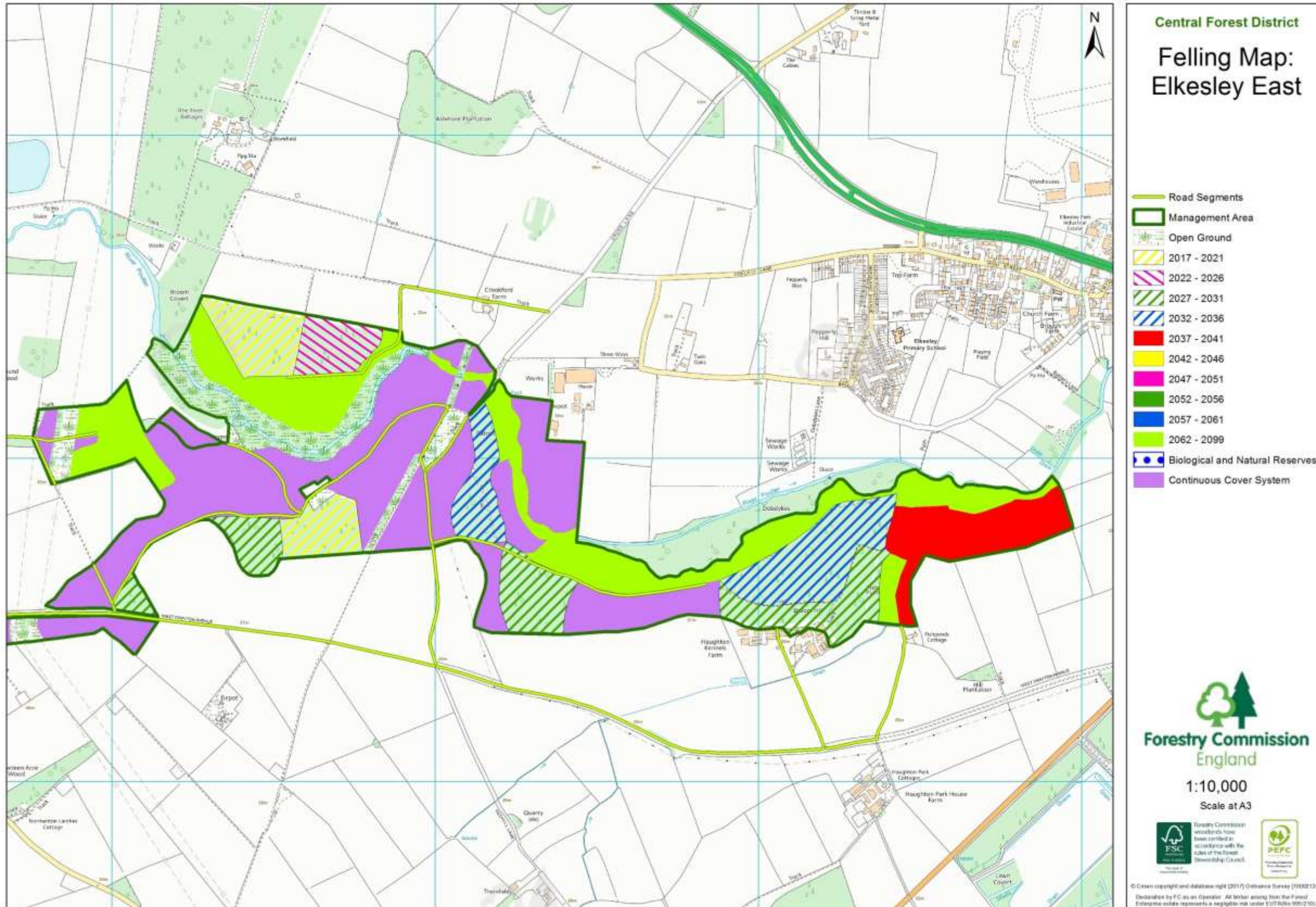
Forestry Commission
England

Roads	2027 - 2031	2052 - 2056
Management Area	2032 - 2036	2057 - 2061
Open Ground	2037 - 2041	2062 - 2099
2017 - 2021	2042 - 2046	Biological & Natural Reserves
2022 - 2026	2047 - 2051	Continuous Cover System

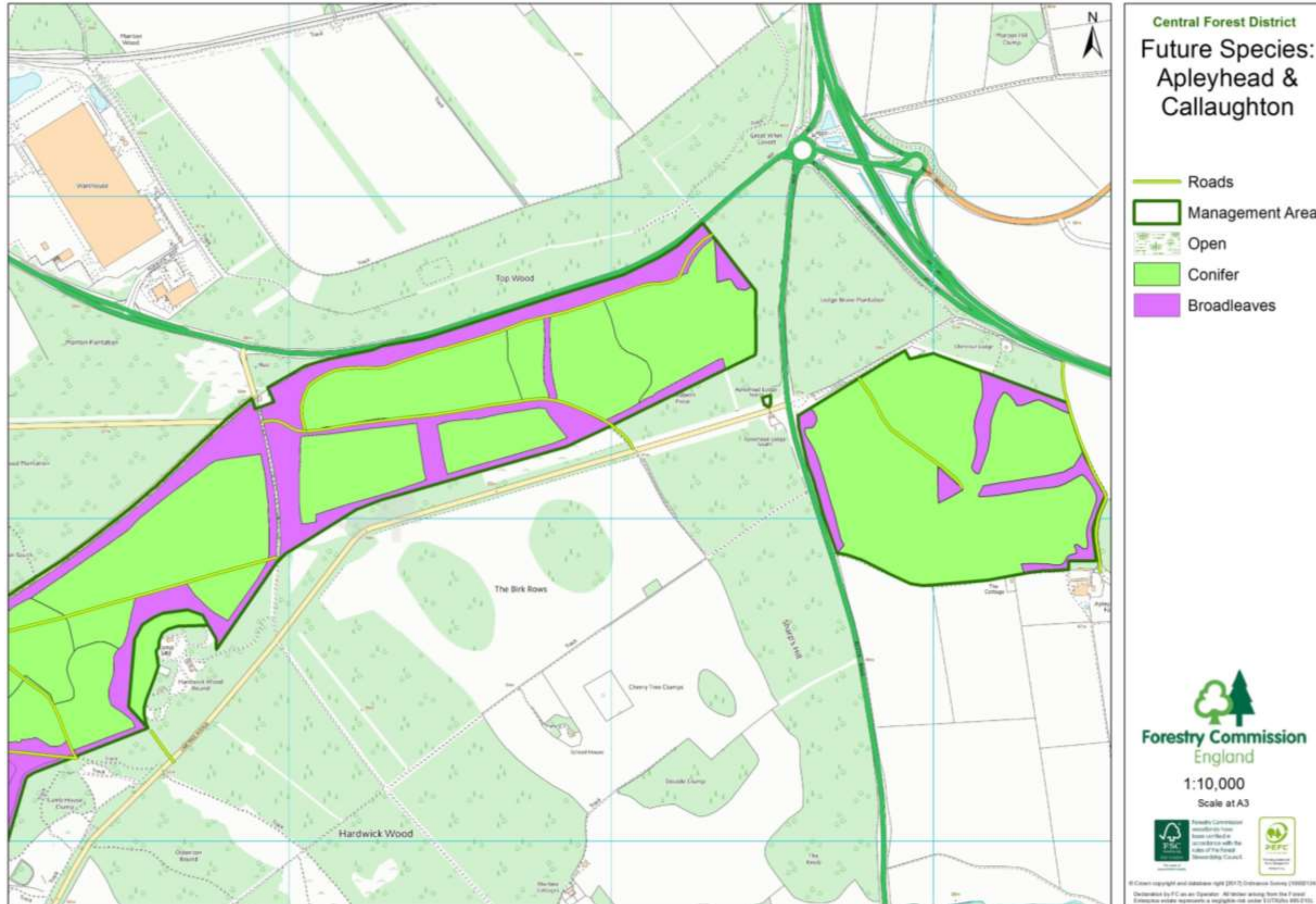
© Crown Copyright and the Forestry Commission 2017. All Rights Reserved. This map is a representation of the current state of the forest and is not a guarantee of any future actions or results. The Forestry Commission is not liable for any loss or damage arising from the use of this map.

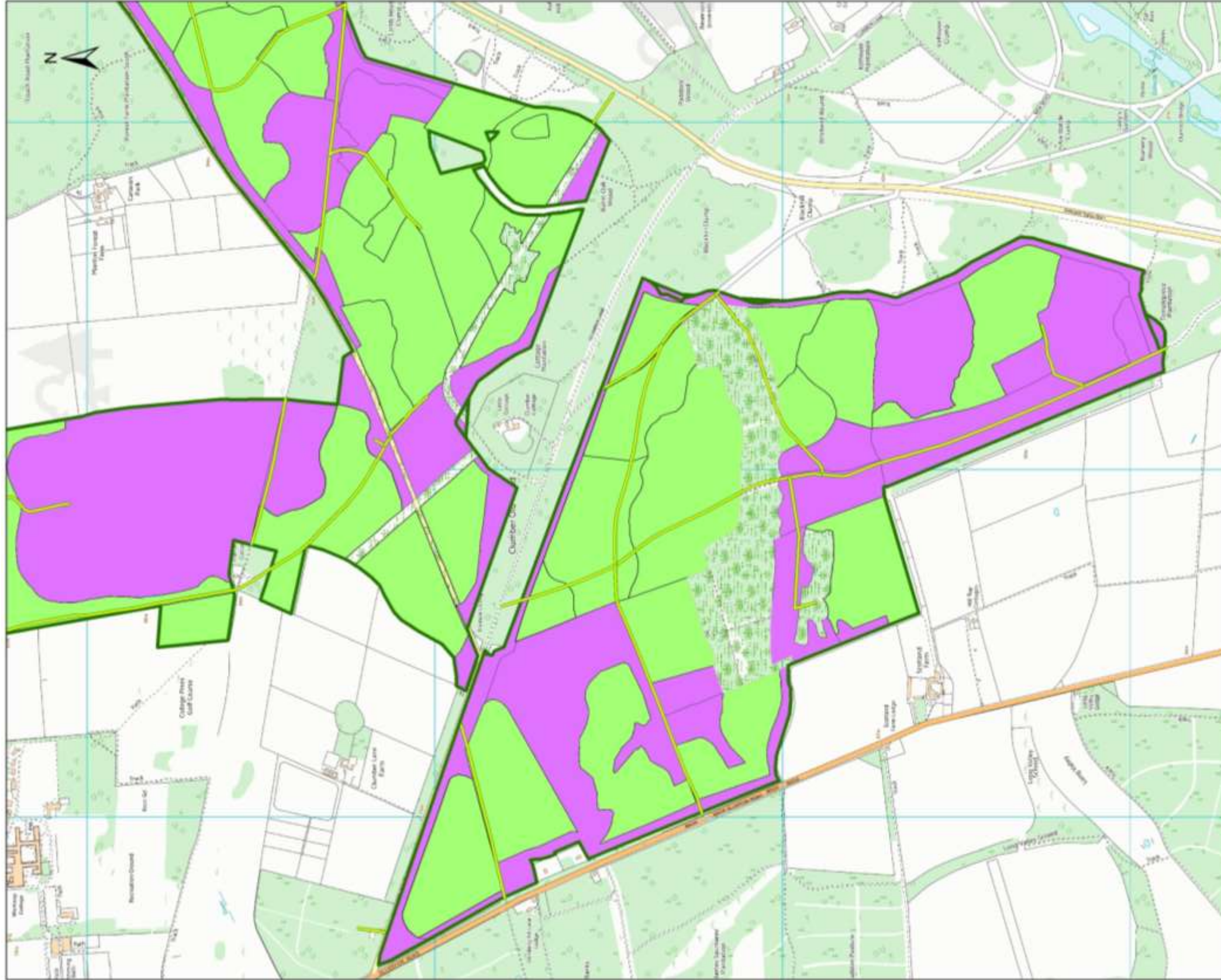







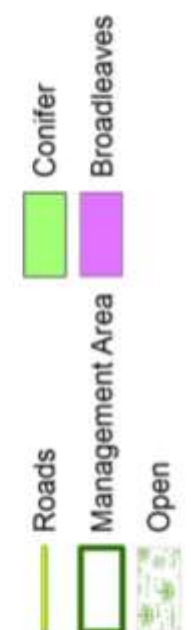
7.8 Future Species






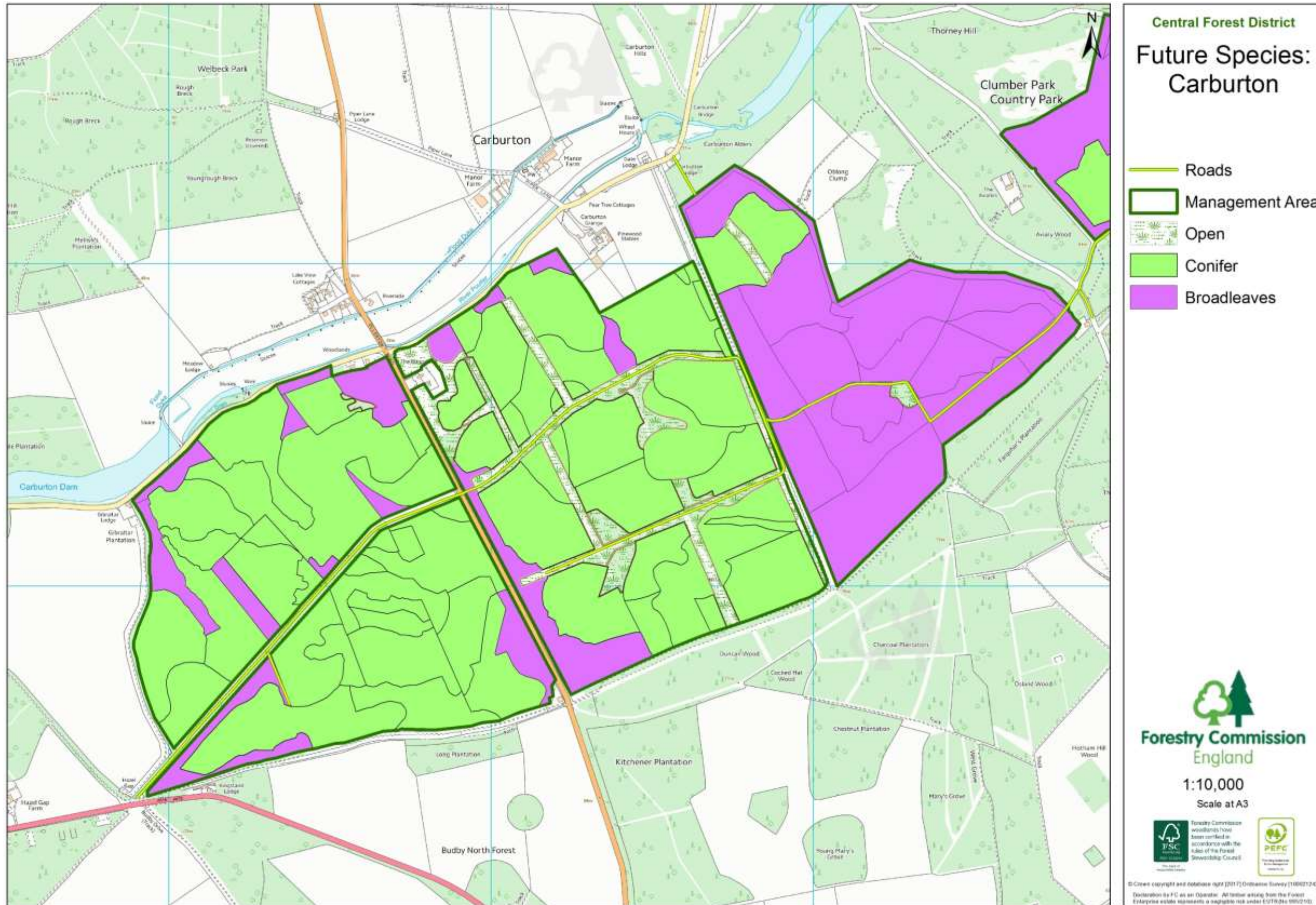


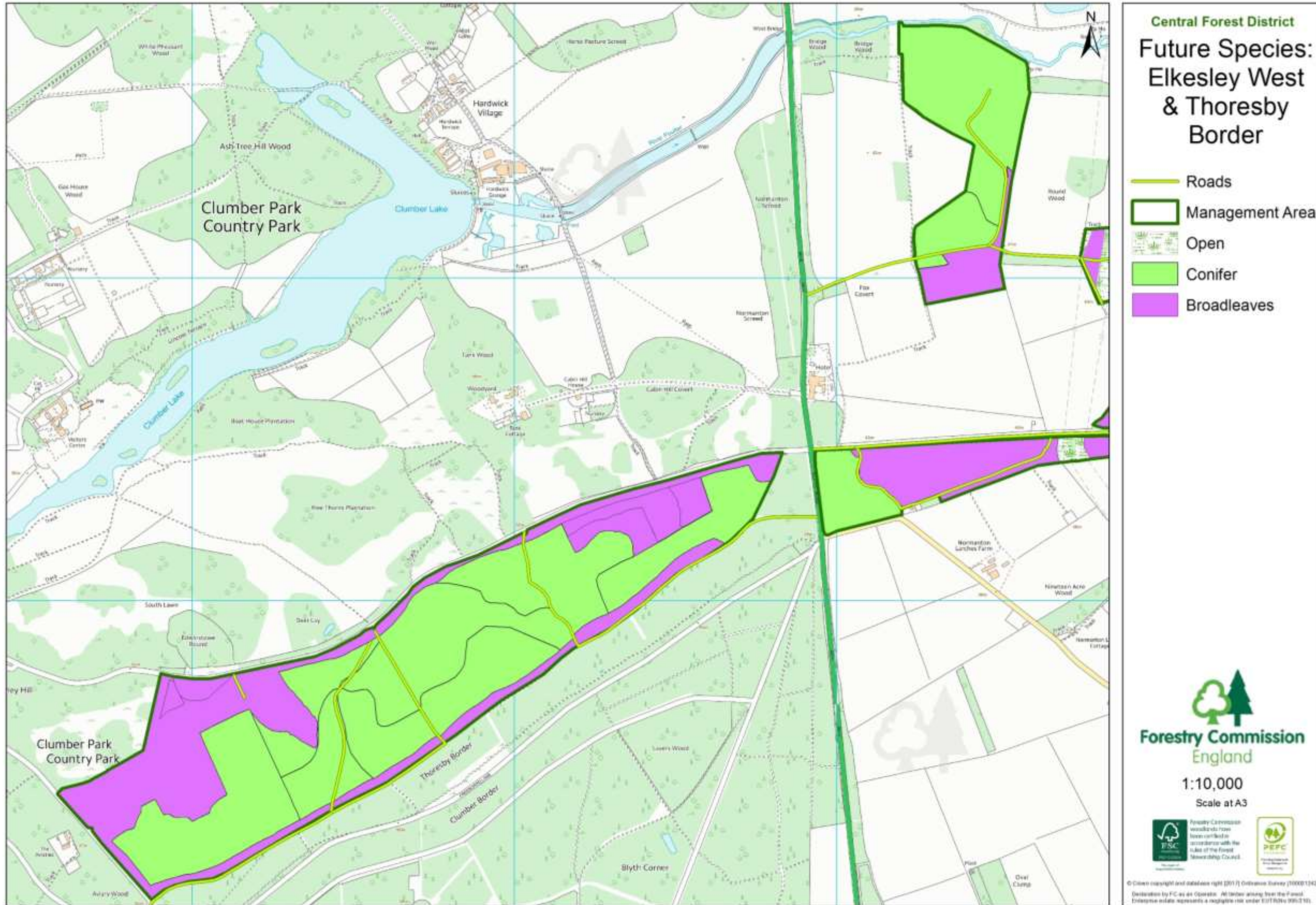
Central Forest District
Future Species:
Kidney Clump &
Pimper's Alley

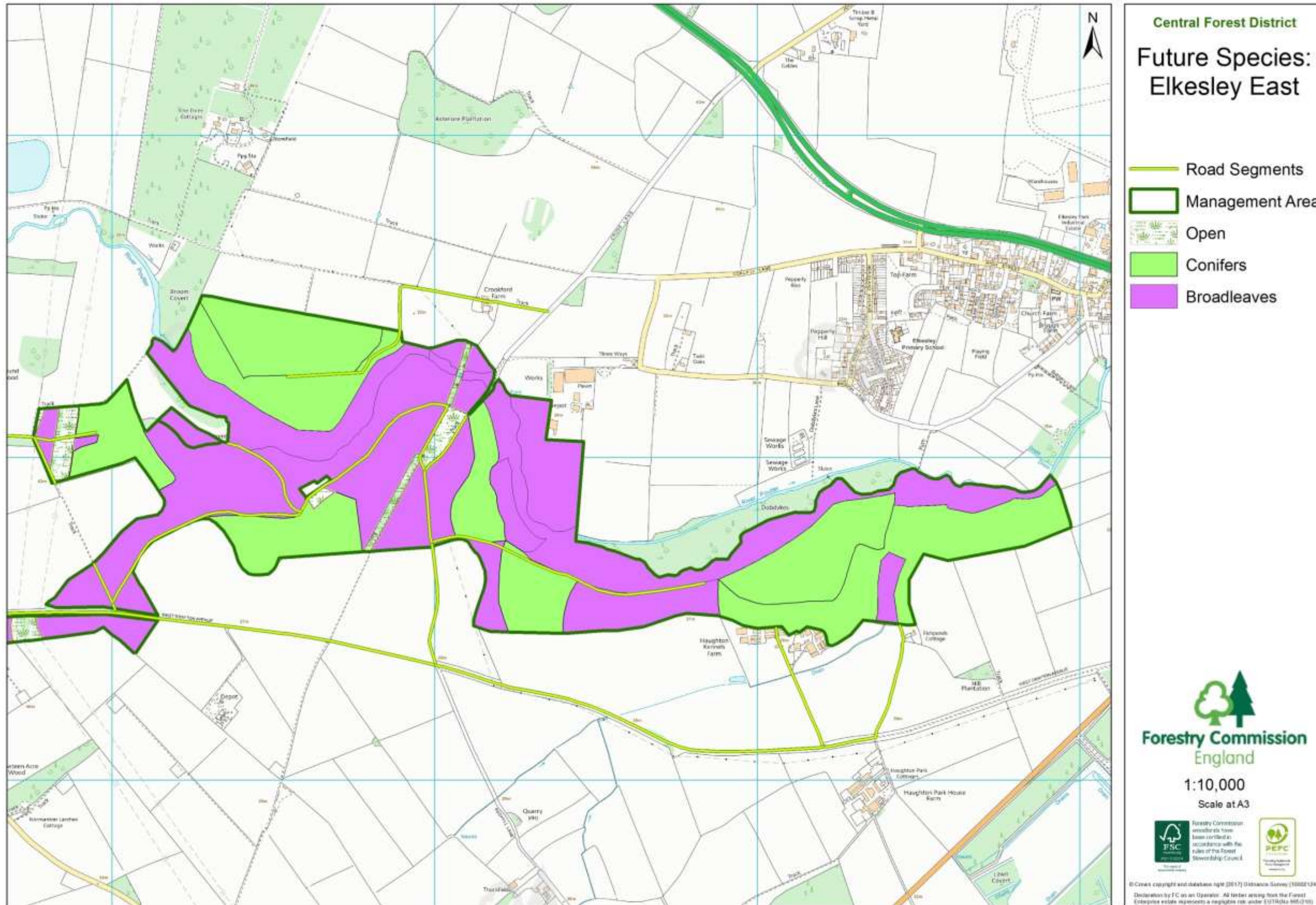


Scale at A3
 1:10,000

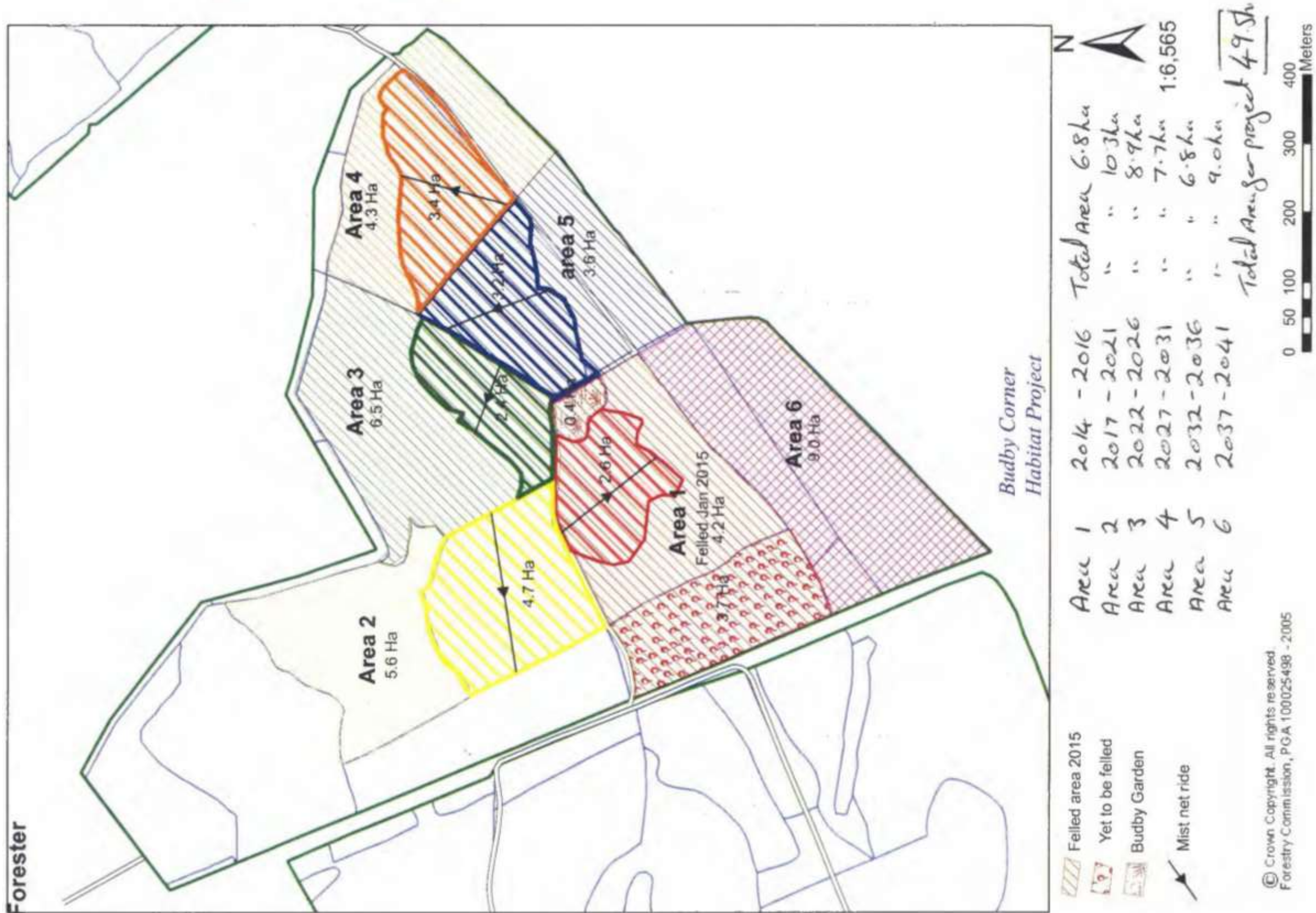








7.9 Coppice Management



8. Relevant Forestry Commission & Government Policies

- Bassetlaw District Council, 2009. "Bassetlaw Landscape Character Assessment"
Available at: <http://www.bassetlaw.gov.uk/everything-else/planning-building/planning-policy/core-strategy-development-management-policies/core-strategy/landscape-character-assessments-study.aspx>
- Natural England, 2014. "National Character Area profile: 49. Sherwood"
Available at: <http://publications.naturalengland.org.uk/publication/1401066>
- Forestry Commission, 2014. Central England Forest District Strategic Plan 2014-2020.
- Forestry Commission, 2016. Silvicultural Guide: Successful Underplanting.

End of Document