



EAST OF ENGLAND REGION

RENDLESHAM FOREST DESIGN PLAN

LOCAL PLANNING AUTHORITY:

SUFFOLK COUNTY COUNCIL

SUFFOLK COASTAL DISTRICT COUNCIL

Total Plan Area: 1425 hectares

June 2008

CONTENTS PAGE

	<u>PAGE NO</u>
1. INTRODUCTION	3
2. BACKGROUND AND SURVEY	3/5
3. DESIGN CONCEPT	5
4. SPECIES AND FELLING AREA	6/7
5. PLAN APPRAISAL	7/8
6. MONITORING	8
7. PLAN REVIEW	8
8. APPROVAL	9

APPENDIX 1 - Tolerance Table
APPENDIX 2 - Felling Map
APPENDIX 3 - Restock Map

1. INTRODUCTION

The Forest Design Plan (FDP) is a long term planning tool that enables forest managers to show how the implementation of policy and strategy will shape the development of a specific woodland or forest block. It is both a business planning tool that defines the area that will be felled in any 5 year period (and consequently the timber available for sale) and a statement of how other less commercial factors will be incorporated in to the management process.

Although the plan looks forward 60 years or more, it is revised on a 5 year cycle, which allow for amendments to be made as appropriate. The FDP is a live plan and revisions are necessary to take in to account factors such as catastrophic wind blow, a change in tree species or growth rates, a conservation issue or a recreation development. The FDP is a public document and stakeholders can provide feedback and comment during the consultation process.

This particular Forest Design Plan shows how management operations will influence the structure and development of Rendlesham Forest.

The FDP process has changed in a number of ways since the original plan was drafted five years ago and this is reflected in the new areas that the FDP needs to address. These new areas are listed below with a description of their potential impact.

The UK Forest Standard – This is a Forestry Commission document that sets the standard that both public and private owner should meet to demonstrate good forest practice. One of the main impacts of the standard on this plan is the requirement to have at least a 7 year gap between adjacent felling coupes. The issue of “adjacency” of coupes does occur within this plan.

The UK Woodland Assurance Standard (UKWAS) – The Forestry Commission has received accreditation under this standard so that it can sell its timber as Forest Stewardship Council (FSC) certified. This standard covers a wide range of issues that affect the way the forest is managed. The main effect of UKWAS on this plan is the requirement for the new FDP to meet certain minimum design thresholds including the amount of open space that is created during the life of the plan and the area that is designated as a natural reserve and managed by minimum intervention.

East Anglia Forest District Strategic Plan – This plan was recently revised by the forest district to show how it will deal with strategic issues and how it will carry forward some of the objectives of the East of England Regional Woodland Strategy. There are three strategic objectives that will affect this FDP:

“P1.3.iii) To collate and prioritise the ideas/objectives of all teams to fully inform the FDP.”

“P1.3.iv) Take into account the internal and external landscape considerations for the area.”

“En 2.2) To manage and monitor SACs, SPAs and SSSIs.”

The first two objectives are part of the normal forest design plan process and the third objective is tested when the revised FDP undergoes an appropriate assessment for its impact on the Sandlings SSSI/SPA

2. BACKGROUND AND SURVEY

2.1 Location

The plan area of 1432 hectares relates to the woodland that lies close to the east coast of Suffolk. The small villages of Butley, Chillesford, and Hollesley surround the forest and the town of Woodbridge is nearby.

The name of the forest is derived from the old Rendlesham Estate although the village of the same name is located a mile to the north. The plan area lies entirely within Suffolk and is administered by Suffolk Coastal District Council the plan area is also covered by the Suffolk Coast and Heaths AONB. The whole of the FDP area has been designated as a Special Protection Area (SPA) under the European bird directive and it is also notified as a SSSI.

2.2 Topography

The forest only rises to a maximum of 25m above sea level. There are two plateaux; one to the north, edged by the Butley River valley and one to the south, edged on its western side by the River Tang Valley. There is an additional small valley at Clayponds. The remainder of the forest is located on gently rolling and sloping land with few distinct features. Average annual rainfall is 660mm per annum.

2.3 Geology

The woods are centred on the Sandlings belt and there is little variation in the sandy heathland soils although there is a tendency towards a neutral pH soil at the western end (Hatchley Barn area). In addition there is a small red crag quarry on the eastern end.

2.4 Existing Species

The two predominant species are Corsican pine (*Pinus nigra* subsp. *laricio*) and Scots pine (*Pinus sylvestris*). These represent the main productive capacity of the forest both from the remains of the first rotation crop and subsequent re-stocking. Additionally there is a mix of broadleaved species including Birch (*Betula pendula* and *Betula pubescence*), Beech (*Fagus sylvatica*), English oak (*Quercus robur*), Red oak (*Quercus rubra*) Sweet chestnut (*Castanea sativa*) and Norway maple (*Acer platanoides*).

Whilst the conifers are managed in plantations of individual species, the broadleaves (with only the occasional exception) are managed in mixed belts.

2.5 Silviculture

The whole of the Sandlings area was devastated in the 1987 storm and a lot of Rendlesham Forest had to be cleared and replanted. This took place over five years and so the forest has large areas of young even aged trees. The main species used during replanting was Corsican Pine and this now dominates the species composition of the forest.

The heathland characteristics are reflected in the nature of the soils, which are sands of varying depth. Soil pH levels range between 5.5 and 6.0 across the area. The climate is generally mild with very warm summers, but spring and early summer frosts are common. These factors, coupled with the relatively low rainfall (660mm/year) create growing conditions best suited to species such as Pine and Birch.

Conifer species dominate the forest area (76%), with 11% broadleaves present. Continuous cover management systems will be applied to broadleaved crops and some conifer species such as Douglas fir.

2.6 Conservation & Archaeology

The entire forest has been designated as a Site of Special Scientific Interest (SSSI) and a Special Protection Area (SPA), the latter under the European Birds Directive, to conserve the breeding habitat Woodlark (*Lulula arborea*) and Nightjar (*Caprimulgus europaeus*). These both use open ground to nest on and as such rely the clearfell system to generate suitable habitat.

Where possible, new open space links will be created to enhance the wildlife benefit of both the internally designated areas and heathland areas outwith the forest boundary.

There are two wetland areas: -

The Tang valley system leading to Scotland fen that has remnant fen alder carr flora.

The Butley River valley that has a sedge dominated basin that has a high peat basis.

Both areas have at some time been afforested but are now under reversion to site native, predominantly non-woody species

There are 5 barrows designated as unscheduled ancient monuments within the FDP area.

2.7 Recreation

Rendlesham Forest Centre is the focal point for the estimated 100,000 visitors who come to area each year. Situated in the heart of the forest it provides a number of facilities for the public. These include waymarked walks, adventure playground, children's orienteering course and cycle trails.

The Forest Centre is also the base for educational activities with ranger led and self led visits from schools and other groups.

The area also has horse riding and carriage driving trails and husky training is permitted within this Design Plan. A number of permitted recreation events take place throughout the year and these include: sponsored walks, husky racing, cycling events, motor cycle enduros and long distance riding. Access to the forest is also possible via the limited network of public rights of way distributed over the plan area.

3 DESIGN CONCEPT

The issues that the forest design plan should address are set out below under three broad headings, which relate to the structure of DEFRA's "A Strategy for England's Trees, Woods and Forests".

Working Woodland

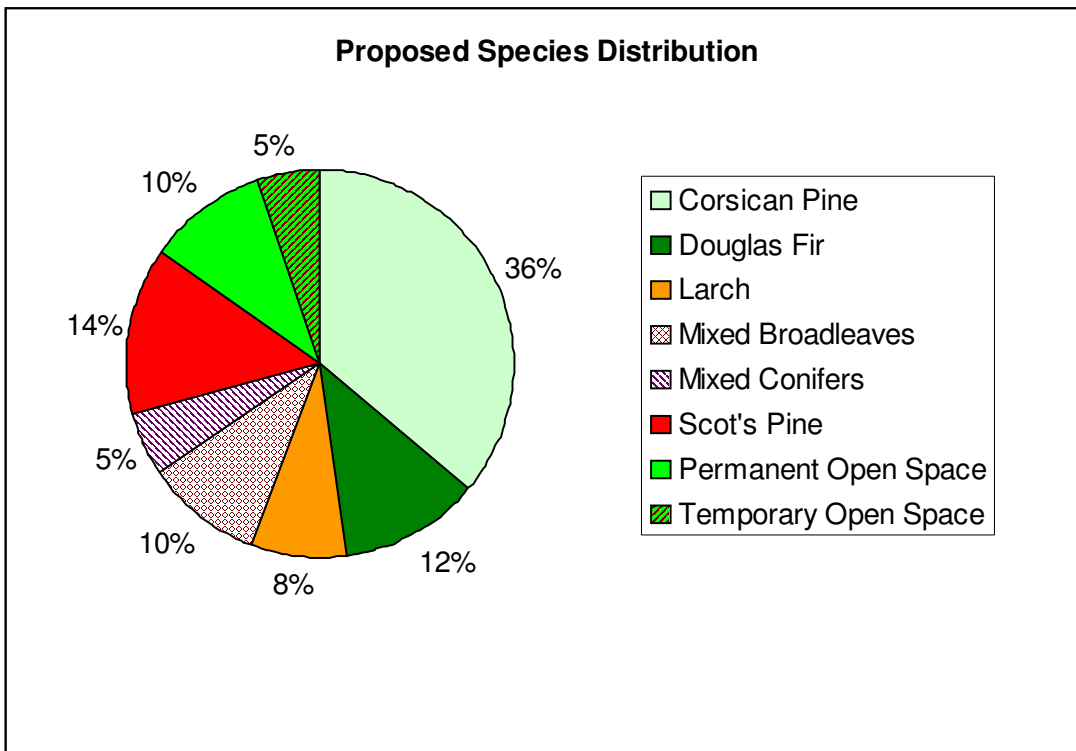
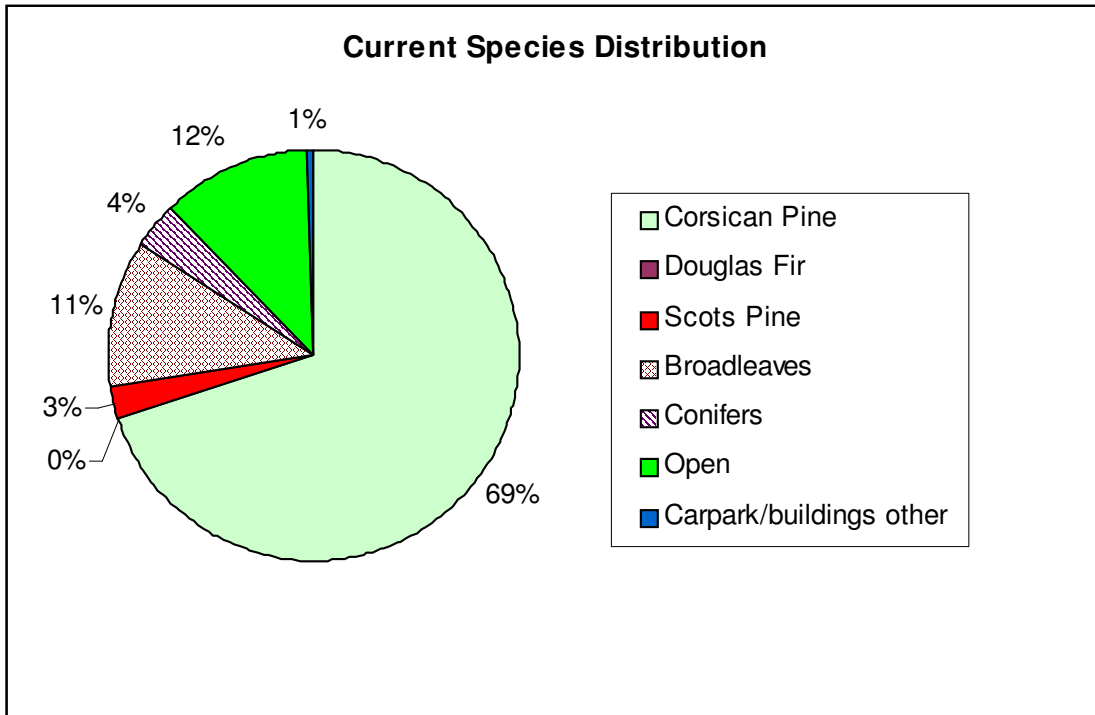
- The felling plan should aim to smooth production from crops in cyclic clearfell but also meet market commitments for 2008-11.
- Design felling coupes that are economical to restock.
- Restocking should aim to maximise production but also to increase species and habitat diversity.
- Restock species should take soil pH into account and the threat posed by Red Band Needle Blight.

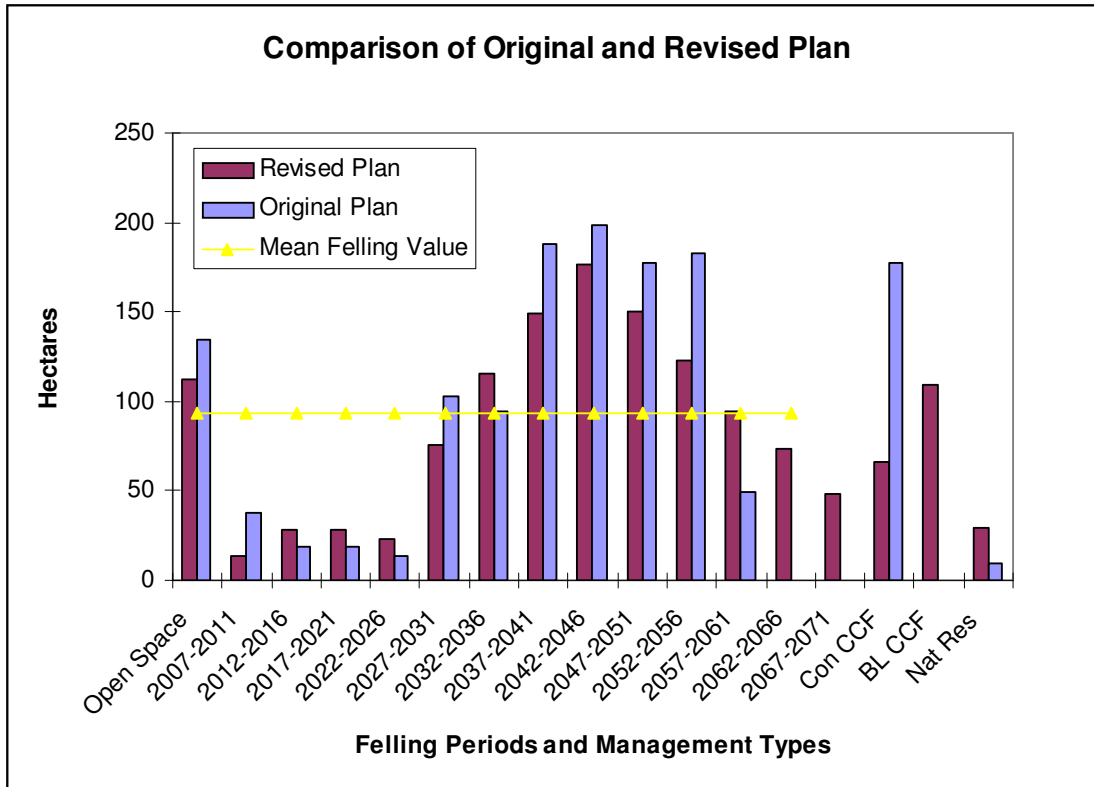
Communities and Places

- Maintain a pleasant woodland environment for use by local dog walkers, cyclists and horse riders.
- Reduce the size and shape of felling coupes to fit into the landscape.
- Restructure areas with coupes that are marked as being felled in adjacent felling periods.

Land and Natural Environment

- Felling plans should aim for a more even distribution of felled area for Woodlark/Nightjar habitat under the SPA.
- Link open spaces and widen conservation rides.
- Increase amount of open space to a minimum of 10% of the plan area (UKWAS target).
- Identify a minimum of 1% of the plan area, which is suitable as a Natural Reserve (UKWAS target).





* The indicative mean is an estimated value based on the area of cyclic clearfell within the FDP divided by 59. The 59 represents an average rotation length of 57 years plus 2 years of fallow while the ground is prepared for the next crop.

5 PLAN APPRAISAL

The appraisal of the revised plan is measured against the design brief on page 5, this has three separate sections and the appraisal relates to these sections:

Working Woodland

The relationship between timber volume production and felling area is close enough for the bar chart above to illustrate the smoothing effect that the revised plan has had on volume. The production of timber volume has been levelled significantly but it will take another rotation before the actual felling area is closer to the indicative mean value. It is also noticeable that the felling area for the periods 2007 to 2026 are considerably below the indicative mean, this is due to these areas being among the last of the first rotation crops left standing after the 1987 storm and before the second rotation crops are fully mature.

A comparison of the pie charts on page 4 indicates that species diversity will increase over the life of the plan. The plan shows a decrease in the amount of Corsican Pine that will be planted. This is partly as a response to the threat posed by Red Band Needle Blight but also as a result of matching other species to the appropriate soil type. The future management of the mixed conifers and broadleaved areas will be by continuous cover systems, with 1% of the total area managed by minimum-intervention.

Communities and Places

The size and number of felling coupes within the block has been designed to increase visual diversity and make the forest more interesting to visit. The revision of the plan has been an opportunity to check all the coupes for issues of adjacency so as to avoid adjoining coupes being felled consecutively this has now been addressed.

Environmental Issues

As mentioned earlier, the felling area chart on page 7 shows how the revised plan has “smoothed” the creation of felling area so that Woodlark and Nightjar habitat is more evenly distributed. The effect of the revised plans on the cyclic felling area across the whole SPA has been calculated on GIS (Geographic Information System).

In the Sandlings Forest SSSI “Views About Management” statement, English Nature asks for no coupes to be less than 5 hectares in size as felled coupes smaller than this are judged to be less attractive as breeding habitat for Woodlark and Nightjar. This is not possible given the age structure of the forest and the small areas of felling in the next 20 years after that the time the forest moves into the second rotation crops and coupe size increases.

The pie chart on page 6 shows a decrease in permanent open space of 2% to 10% when compared to the original plan. This decrease in open space has occurred, largely, by correctly mapping the existing open space, which had been mapped in error on the original plan. The revised plan indicates where rides can be widened to create links with existing open space. The resulting effect is a network of wide rides of high conservation value. The creation of this network can be hastened by widening the rides at the time of next thinning. It should also be noted that the cycle of clearfelling produces ephemeral open space, which is particularly used by Nightjar and Woodlark.

The revised plan also shows an increase in the area of land that will be managed by minimum intervention to create natural reserves.

6 MONITORING

Once the felling of a coupe has been completed, the shape of that coupe is captured on the ground using a GPS (Global Positioning System) receiver and the data is uploaded into GIS. The resulting point data is then compared to the original coupe shape to confirm that the felling coupe has been accurately laid out on the ground.

A felled coupe is usually restocked two years later, when all the ground preparation and weed control has been completed. At this point the forest district database is updated to show the newly planted species and their proportions. As part of this updating process the restocking information is compared with the FDP restock plan to confirm compliance. The restocking can vary slightly from the FDP as physical features, such as banks and pits, come to light after felling, which were not picked up during the planning process. Most of these minor changes are within the tolerances agreed between Forest Enterprise and the Forestry Commission – see Appendix I.

7 PLAN REVIEW

This FDP will be reviewed internally after 5 years and formally revised before 31 March 2018.

8 APPROVAL

Forest Enterprise seeks approval from the Forestry Commission to fell and restock 71 hectares and for selective felling of approximately 58 hectares within 175 hectares for the purpose of continuous cover forestry during the period 1/4/2008 to 31/3/2018 as shown on the enclosed plans.

Maps included with this document are as follows –

Analysis & Concept

Management

Habitat

Signed:Date.....

Approved:Date.....

Forest Management Director

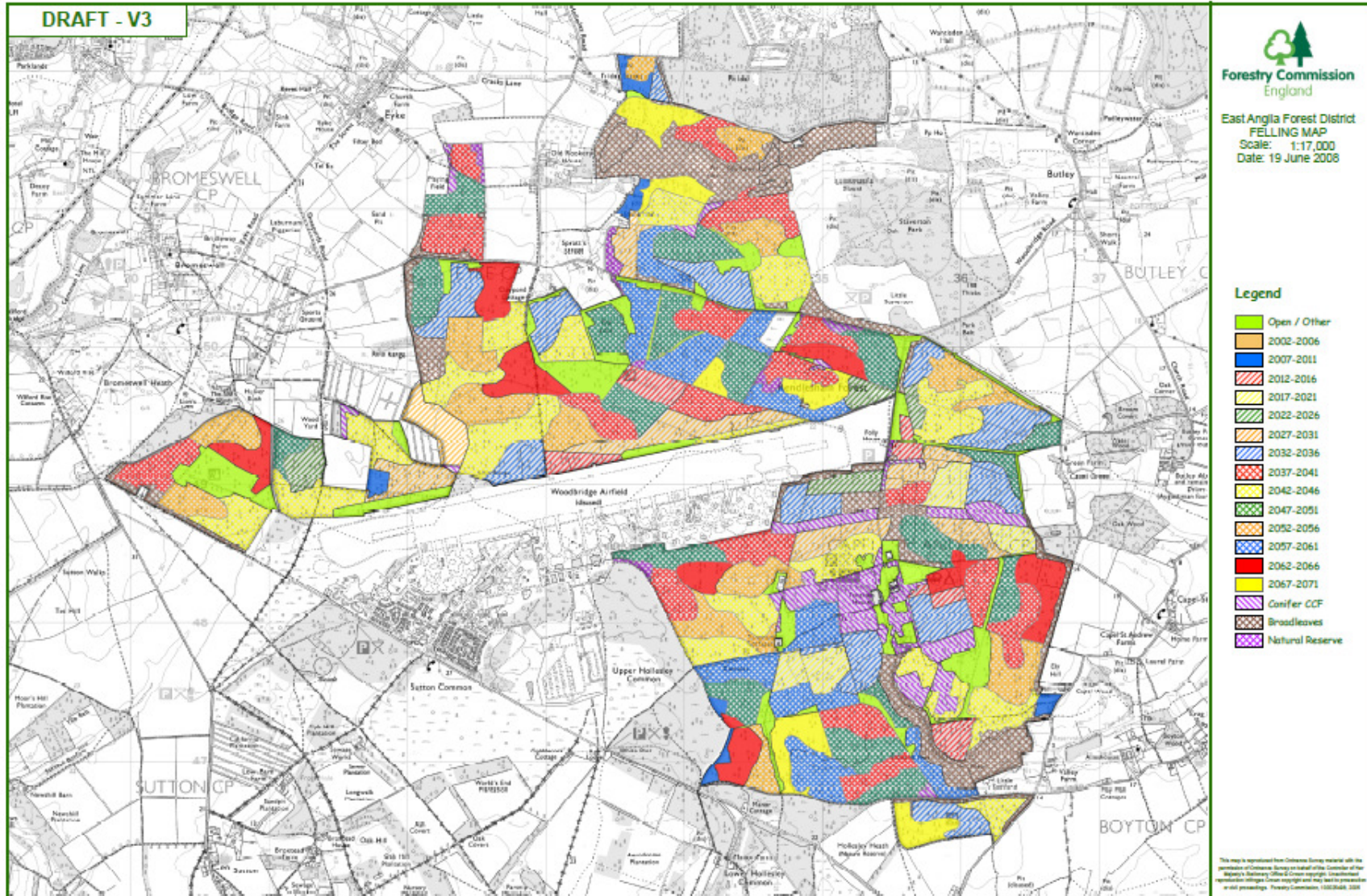
Regional Director

Appendix I

Tolerance Table

	Adjustment to felling coupe boundaries	Timing of Restocking	Changes to species	Windthrow clearance
FC Approval normally not required	0.5 ha or 5% of coupe	Up to 3 planting seasons after felling	Change within species group e.g. evergreen conifers; broadleaves	Up to 2ha
Approval by exchange of letters and map	0.5ha to 2ha or 10% of coupe	Up to 4 planting seasons after felling	Change from other conifers to Corsican Pine	> 2ha to 5ha
Approval by formal plan amendment	> 2ha or >10% of coupe	Over 4 planting seasons after felling	Change from broadleaves to conifers	> 5ha

Appendix 2 Felling Map



Appendix 3 Restock Map

