



Surrey County Council Countryside Estate Woodland Strategy 2015

1. Introduction

There is a consensus among the Forestry Commission, Natural England and conservation Non-Government Organisations that a resumption of active management is needed to reverse a measurable decline in UK woodland biodiversity. Furthermore active management of woodlands can improve their value for access while providing a source of income from timber and produce sales to support ongoing stewardship of woodland sites.

The overall objective of this strategy is to ensure responsible stewardship of woodlands on the SCC Countryside Estate. It builds on the Surrey Woodland Study (Surrey County Council 2008) and is reinforced by the themes being taken forward by the SCREF Woodland Task Group.

The result will see a contribution economically to the rural economy whilst providing excellent biodiverse habitat and places for people to recreate and work.

These outcomes will be brought about by having co-ordinated planning across the Woodland Estate supported by the outcomes of the individual site management plans.

2. Strategic and Policy Context

A component of SWT's Business Plan for the SCC Countryside Estate 2014 is to improve sustainable management of the Woodland Estate; increasing revenue from timber products and wood fuel.

Performance is measured through a Key Performance indicator (KPI). The development of an improved set of KPIs will help drive the positive desired outcomes within the Strategy. See Annex 1 for breakdown of KPI's.

The Sustainable Woodland Management policy developed in 2014 is summarised by the following policy statement:

Surrey Wildlife Trust manages its woodlands to maximise biodiversity and promote public access and enjoyment. In addition, SWT seeks to optimise economic returns from active woodland management where this does not compromise biodiversity and access objectives.

The development of the policy is a component of SWT's Strategic Plan 2013 – 2018, is supported by the Forestry Commission* and underpinned by the requirements and guidelines outlined in the UK Forestry Standard (2011). The concept of balanced objectives is central to the approach of the UK Forestry Standard, with environmental, economic and social functions of forests and woodlands interacting in support of each other.

The policy underpins a process which is applied to all individual woodland sites on the SCC Countryside Estate. See Figure 1.

*The Forestry Commission is the government body responsible for protecting, expanding and promoting the sustainable management of woodland. It is the regulator of felling activity and provides grants to support sustainable woodland management.

Figure 1: Surrey Wildlife Trust Woodland Management Process

Stage	Process	Description
1	Inventory	<p>For each woodland an inventory survey follows the methodology set out in the Forest Mensuration handbook 2006, the Forestry Commission Field Guide for Timber Measurement 2008.</p> <p>The surveyor stratifies areas of similar species composition, age and structure together. Areas are divided by compartments (clear discernible boundaries) and sub compartment boundaries (species or structural change).</p> <p>The inventory process should be carried out every ten years.</p>
2	Forestry Commission Woodland Management Plan	Ten year management plans relating specifically to vision, objectives and operations for woodland and forestry activity. Template provided by FC.
3	Felling licence, grant application	<p>Management plans approved by FC are mechanism for obtaining ten year felling licences. Felling licences are required by law for any felling above 5 cubic metres in volume per calendar quarter.</p> <p>FC Woodland Management Plans are a pre-requisite for woodland grants administered by FC, DEFRA and Natural England.</p>
4	Work Programme	The work programme or programme of operations is produced in spreadsheet form with the FC management plan. Additionally the scheduled work is uploaded onto SWT's management planning software package (currently CMSi).
5	Site Operations Plan	Before work is carried out on the ground a Site Operations Plan is produced to ensure all relevant permissions and licences are in place, that the work planned meets health and safety requirements and that economic efficiency is being realised.
6	Woodland Operations Carried Out	Work carried out on the ground is in accordance with SWT's policies and practice notes. These include risk assessments, method statements and the relevant British Standards.
7	Recording and Monitoring	Monitoring of volume of timber produced, income, ecological change, response of site visitors and site stakeholders.
8	Review	New inventory and management plan prepared.

3. Identifying the Woodland Resource

3.1 Woodland Extent

The total area of woodland is 1,250 hectares (ha). A map showing the location of woodland on the SCC Countryside Estate can be found in Annex 2.

This figure represents the total woodland coverage, including non-productive areas within woodland blocks such as rides (vehicle tracks), glades and car-parks. When all glades, car-parks and major rides are excluded, the total woodland under management is approximately 1,150 ha.

The Woodland Inventory process outlined above was carried out across a total of approximately 1,030 ha*

3.2 Overarching Site Management Plans

The significant nature conservation, heritage, landscape and public access value of the SCC Countryside Estate woodlands is documented in the current approved site management plans.

A large proportion of the Estate is designated Site of Special Scientific Interest (SSSI) and European Special Area of Conservation, so these plans have also been consented by Natural England.

All of the woodlands on the Estate are subject to high levels of public access. Car parks, statutory and permissive routes are all mapped in the site management plans.

These site plans remain valid and will be supplemented by the Forestry Commission plans being produced for each site.

3.3 Woodland Inventory and Assessment

In 2014, woodland assessments were carried out across the SCC Countryside Estate woodlands in line with the KPI and the agreed policy.

These assessments take the form of an inventory providing information on:

- tree species present
- stocking densities
- basal areas, diameters and heights
- standing volume (in cubic metres [m³])

Data is used to create a GIS stock map and Sub-Compartment Database. This forms the basis of management prescriptions and associated volume estimates of wood available for sale to local markets over time.

Penfold's Woodland Management was commissioned in February 2015 to provide a complete inventory of all SWT managed SCC woodland sites.

*Approximately 120 ha of tree cover received no formal sampling effort being areas of young plantation, dense scrub, pure hazel coppice, very open woodland or areas of very steep or wet ground inaccessible by vehicles, making the standing volume either insignificant or obviously unviable for harvest respectively.

4. The Woodland Timber Resource

4.1 Gross Standing Volume of Timber

The Woodland Inventory was completed in 2015. The resultant overall estimate of gross standing timber volume across all 19 SCC sites is 235,270 m³.

Standing volume is defined as the volume of living standing trees above stump measured over bark to the top. It includes all trees (regardless of diameter), tops of stems, and large branches but excludes small branches, twigs and foliage.

4.2 Harvestable Volume of Standing Timber

Whilst standing volume represents the overall woodland resource in cubic metres, the estimate of *harvestable* resource (e.g. through thinning) is very much lower. This can be seen in Figure 2 which shows sustainable harvestable volume on a site by site basis.

The total sustainable harvestable volume for the next ten years across all 19 SCC woodlands is estimated at 33,837 m³ (14% of estimated gross standing volume).

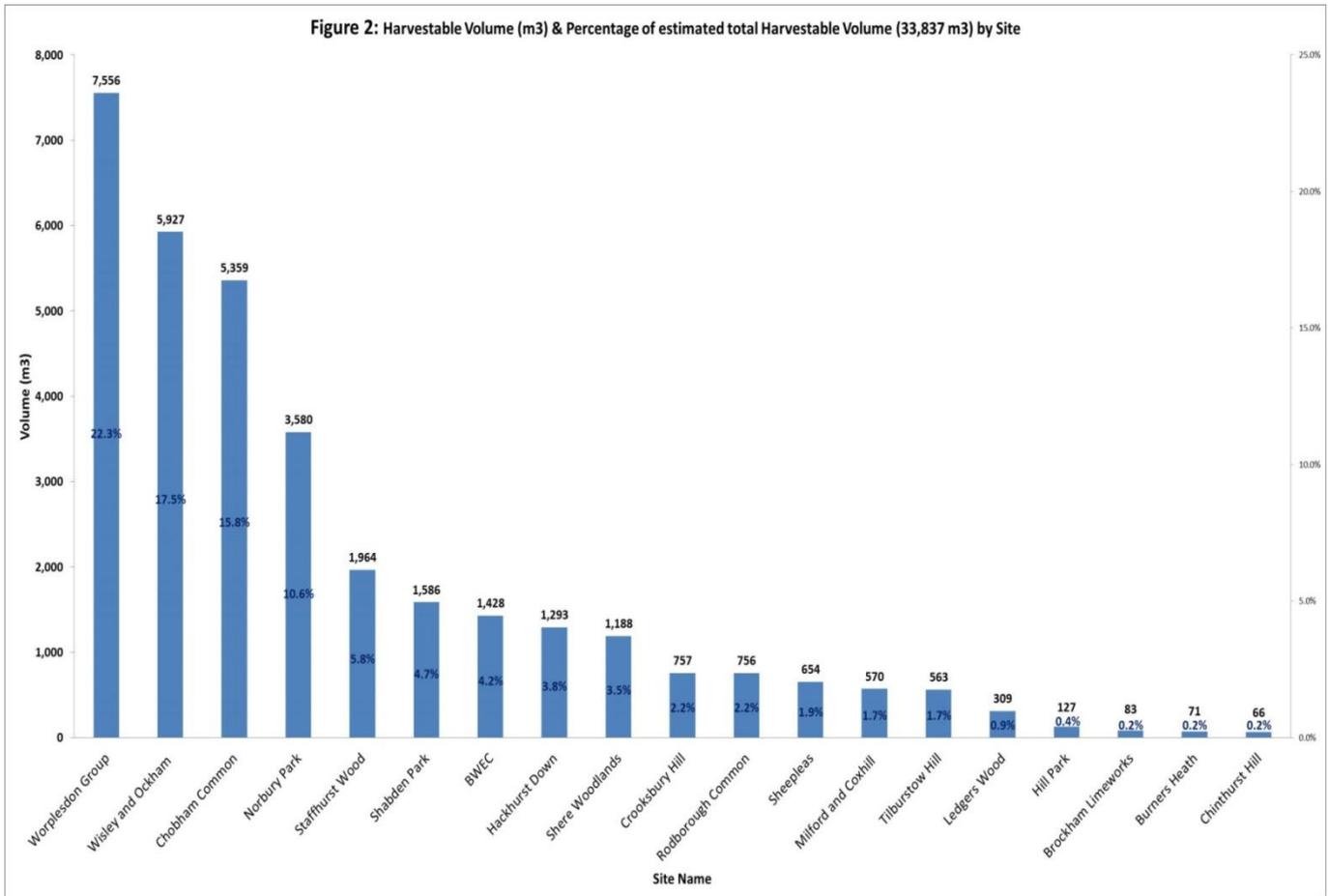
It should be noted that:

- i. Those stands below threshold basal area are excluded. Thinning of stands below threshold basal area would mean thinning already understocked stands; apart from being economically unviable it lowers the overall productivity of the remaining trees as a healthy stand requires the right balance of competition with adjacent trees and space to grow into to maximise healthy growth. It also increases the risk of damage to the remaining trees by heavy winds.
- ii. Almost all of the harvestable volume over the next ten years will be obtained from thinning overstocked woodland. To ensure maximum productivity in terms of increasing standing volume, it is assumed all stands will be thinned to their 'Marginal Thinning Intensity'. This ensures the maximum possible increase in yield for the woodland by only harvesting 70% of the yield class annually.

The *actual* harvestable volume will be obtained from individual FC Woodland Management Plans. These will take into account a number of factors including:

- current access for management
- infrastructure required for harvesting and extraction
- costs associated with both of these factors
- commercial viability of the stands given the current timber and woodfuel markets
- the requirement to abide by European Law regarding Protected Species in woodlands.

A sample plan can be seen in Annex 3.



5. Forestry Commission Management Plans

5.1 Plan Objectives

Forestry Commission Woodland Management Plans are being prepared for all 19 SCC woodland sites to the timetable defined in the agreed KPI (Annex 1).

These plans are regarded by the Forestry Commission as ‘the foundation of sustainable woodland management’. They take a holistic approach that captures the current condition of the woodland, including features, threats, and opportunities. They also define how the woodland will be managed to increase public benefit in relation to economic, environmental and social values.

Each plan details the management to be undertaken over the next ten years and the initial estimated net financial outcome. Budgets covering more than three years within the forestry sector provide a misleading forecast as the costs and incomes of management within the sector are dynamic and thus hard to predict.

The Woodland Management Plan for each site will propose optimal intensity of management over a ten year period.

This will take into consideration:

- current access infrastructure,
- any improvements required to facilitate harvesting and extraction to roadside (e.g. road surfacing, creation of stacking areas)
- the costs associated with these factors,
- re-stocking costs,
- commercial viability of the stands given the current timber and woodfuel markets,
- consideration of European Law regarding Protected Species in woodlands,
- other requirements of the UK Forestry Standard.

5.2 First tranche of plans

This process has been completed for 4 sites to date:

- Norbury Park
- Sheepleas
- Wisley & Ockham Commons
- Rodborough Common

Figure 3 summarises the predicted volumes arising from management over a ten year period.

Summary Felling Programme							
Site	2016	2017	2018	2019	2020	2021-2026	Plan Period Total
	m ³						
Norbury Park	680	520	475	315	390	1,450.00	3,830
Sheepleas	0	0	560	0	260	0.00	820
Rodborough Common	140	132	164	173	155	136.00	900
Wisley & Ockham Commons	1929	0	0	3685	2477	530.00	8,621
Total	2,749	652	1,199	4,173	3,282	2,116	14,171

Figure 3 Summary Felling Programme from Woodland Management Plan completed to date

5.3. Projected Harvest

For the four sites completed to date, the projected harvest is 14, 171 m³ over ten years. As illustrated, the majority of the work is scheduled to occur in the first five years of the plan. This will enable the maximum amount of time for stands to re-grow, replacing the harvested volume. It will also ensure that benefits of actively managed woodland (e.g. increased light reaching ground flora) are seen as soon as possible.

If the total figure of 14,171 m³ was sold 'standing' and harvested by woodland contractors it would earn around £10 per m³ (based on 2015 market prices). This is the expected achievable price for wood sold standing given the current value of firewood grade material. This provides the lowest risk, least effort return for the SCC Countryside Estate.

Material extracted to and sold 'at roadside' (adjacent to hard-standing or paved tracks/roads) is currently valued at above £35 per m³. Thus the £10 per m³ is the predicted price the Estate could expect to receive after a contractor deducts the costs associated with felling and extracting the material to 'roadside'. In the SCC Countryside Estate Business Plan 2015 and when writing the FC management plans for each site it is assumed that all wood is to be sold 'standing'. This is because SWT currently lacks the specialist forestry machinery and staff resources to manage woodland in any other way. However, alternative models will be evaluated, see 5.4 below.

It is important to note that any costs associated with woodland management (e.g. provision of stacking areas, improvement of tracks, management and oversight of contracts, re-stocking) require calculation. This is covered by the final stage in the process prior to commencement of woodland management, i.e. the creation of individual woodland budgets to estimate the net financial outcome of the work proposed in the FC plan. Once applied to all sites, this will provide an overall understanding of the economic sustainability of the SCC Woodland Estate.

5.4 Alternative Models to Selling Timber 'Standing' and Other Income Streams

An alternative to selling the timber 'standing' is to invest in appropriate resources to bring forestry operations in-house. This would require investment in specialist forestry machinery, equipment and staff resource to realise the higher potential gross incomes from selling timber at roadside.

This alternative model of operations is to be explored in a Full Business Case in 2016. This will evaluate both roadside sales and the potential of developing a firewood/logging business to maximise income from sustainable woodland management on the SCC Countryside Estate.

The SCC Woodland Estate presents opportunities to generate income through activities other than timber production alone; in fact, these activities could sit well with sustainable timber production. At present, SWT is exploring a range of leisure opportunities that might be appropriate in areas of woodland that have conservation and landscape sensitivities.

6. Public Consultation

Consultation and/or engagement on the content of the draft FC Management Plans will be undertaken with stakeholders relevant to individual sites. For several of the sites, formalised Liaison Groups are in place with representatives of local community and stakeholder groups. Local SCC members will be separately briefed and in some instances site visits may be held to explain and discuss some of the proposals.

7. Work Programming and Site Operations Plans

Work programmes arising from the FC management plans are uploaded to SWT's management planning database which also enables recording and monitoring of work carried out on the ground.

The Site Operations Plan shows how a planned operation will help advance the Woodland Management Plan. It ensures that work carried out is legal, safe, efficient and exactly as intended in the Woodland Management Plan. It also ensures that all SWT departments are aware of the works and have had an opportunity to provide input.

A Site Operations Plan includes the following aspects:

- Site specific interests, e.g. protected biological resources, scheduled monuments
- Soils and hydrology
- Harvesting details, including requirements for deadwood retention
- Available access for management activities
- Marketing of products
- Regeneration guidance
- Licences and consents
- Constraints
- Opportunities
- Public/community awareness.

8. Certification Requirements.

Until December 2013, the management within ten SCC woodlands was Forest Stewardship Council (FSC) certified. This certification was accredited by the only UK body providing this service: the UK Woodland Assurance Standard (UKWAS). A decision was made not to renew FSC accreditation in 2014 owing to contemporaneous changes being enacted within the UK Forestry Commission relating to forest management.

In 2014 the Forestry Commission updated its management planning templates and processes to ensure all management plans produced and approved by them through this process comply with the UK Forestry Standard; the UK governments standard for sustainable forest management.

UKWAS bases its decision for certification on whether a site meets the UK Forestry Standard. Therefore, as all SCC woodland will have FC approved management plans meeting the requirements of the UK Forestry Standard, the only benefit of UKWAS (FSC) certification is the permission it provides to use the FSC logo on harvested, but not processed, wood. An extra level of certification is required to use the FSC logo on processed materials, e.g. firewood.

FSC accreditation is most suitable for wood and wood products sourced from countries and forests outside the UK or for UK woodlands without management plans already subject to the stringent demands of the UK Forestry Standard.

9. External Grants Available

All SCC owned SWT managed woodlands have Forestry Commission approved Woodland Planning Grants (WPG) in place under either the only England Woodland Grants Scheme (eWGS) or the new Countryside Stewardship grant. These grants are helping to meet the costs associated with management planning.

The eWGS was replaced in 2015 by the Countryside Stewardship scheme. Two streams of funding are available under the new scheme: a 'Woodland Improvement Option (WD2)' and a range of capital items, e.g. temporary deer fencing to protect coppice. It is prerequisite of both funding options that a Forestry Commission approved woodland management plan is in place prior to applications for funding.

Applications to both funding streams are now closed until 2016. However, sites that have a FC approved management plan in place in time for the 2016 deadline will have applications made to the Woodland Improvement Grant (WD2) and for any relevant capital items. WD2 payments can be as high as £100 per hectare per year which could, for larger sites, help to improve the economic viability of many SCC woodlands.

Annexes:

Annex 1: Key Performance Indicator: Sustainable Woodland Management Summary

KPI 3: Sustainable Woodland Management

Annual KPI targets as follows:

- Yr 1 (2014/15): Undertake the following:

Sustainable Woodland Management Policy to be agreed by December 2014

100% SCC CE Woodlands to have a Woodland Assessment.

- Yr 2 (2015/16):

50% of woodlands have jointly agreed management plans.

Woodland Strategy to be developed by December 2015

- Yr 3 (2016/17):

75% of woodlands have jointly agreed management plans

- Yr 4 (2017/18):

100% of woodlands have jointly agreed management plans

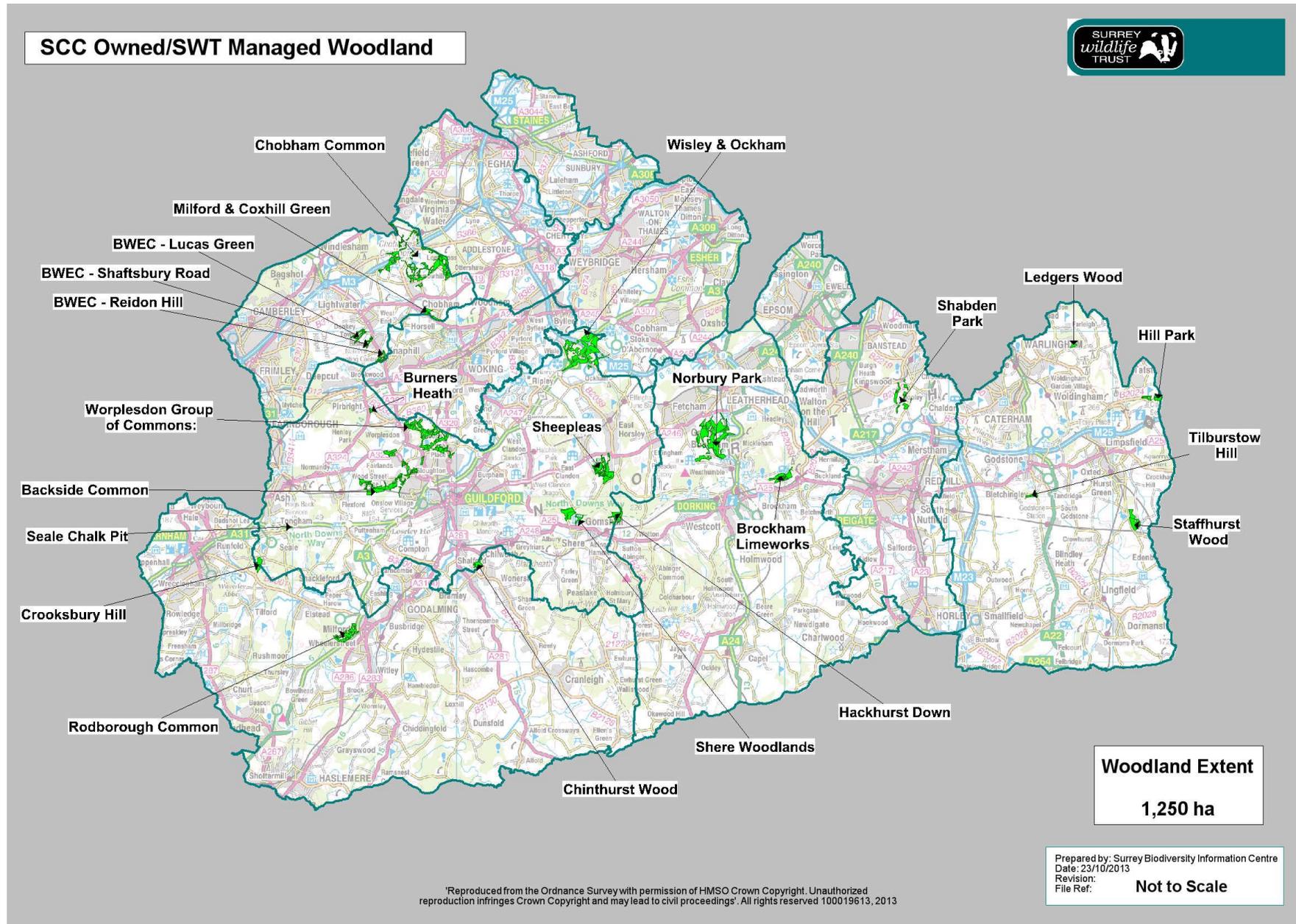
- Yr 5 (2018/19):

Monitoring the woodland plans based on the objectives and deliverables set out in the management plans. A KPI will be developed to reflect this during the period.

Schedule for preparation of FC Woodland Management plans

	Site	SCC KPI Deadline
1	Sheepleas	March 2016
2	Norbury Park	
3	Rodborough Common	
4	Wisley and Ockham Common	
5	Bisley and West End Commons	
6	Chobham Common	
7	Worplesdon Group of Commons	
8	Shere Woodlands	
9	Staffhurst Wood	
1	Chinthurst Hill	March 2017
2	Shabden Park	
3	Ledgers Wood	
4	Hackhurst Down	
5	Milford and Coxhill Greens	
1	Hill Park	March 2018
2	Tilburstow Hill	
3	Brockham Limeworks	
4	Burners Heath	
5	Crooksbury Hill	

Annex 2: Location of Woodland Sites on the SCC Estate



Annex 3: Sample Forestry Commission Management Plan: Norbury Park.

Note: this plan is a draft and has yet to be consulted upon.