

Forest Plan

West Devon

2015 - 2025



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



CONTENTS	Page
Application Form	2
1.0 Policy & Context	3
1.1 Strategic Objectives	
1.2 Consultation	
1.3 Implementation	
1.4 Protected species and habitats	
1.5 Cultural Heritage	4
2.0 Location Map	5
3.0 General Description	6
3.1 Woodland Summary	
3.1.1 Production Forecast	7
3.1.2 Ecosystem Services	
3.2 Location and Access	9
3.3 Tenure	
3.4 Physical Environment	
3.5 Landscape setting & designations	10
5.0 Management Objectives	11

CONTENTS	Page
5.0 Review & Implementation	12
Current Land Use	
Current Species Groups	
Age Structure	
Future Species	
Maps	
General Analysis	13
General Concept	14
Habitat & Ecosystem Services Analysis	15
Habitat & Ecosystem Services Concept	16
Long Term Felling & B Management Types	17
Felling & Restock - Bramble & Cookbury	19 & 20
Felling & Restock – Holsworthy & Leaworthy	21 & 22
Felling & Restock – Halwill Main Block	23 & 24
Felling & Restock – Quoditch & Witherdon	25 & 26
Felling & Restock – Wadland & Northcombe	27 & 28
6.0 Tolerance Table	29
Appendix 1- Record of consultation	30
Appendix 2 – Major Policy Documents	32

FORESTRY COMMISSION - Application for Forest Design Plan Approval

Forest District: West England Forest District (FD)

Woodland or property name: West Devon

Nearest town, village or locality: Holsworthy / Halwill Junction

OS Grid reference: SS42820081

Local Authority district/unitary Authority: West Devon Borough Council / Torridge District Council

1. I apply for Forest Design Plan approval for the property described above and in the enclosed Forest Plan.
2. I confirm that the scoping, carried out and documented in the Consultation Record attached, incorporated those stakeholders which the FC agreed must be included. Where it has not been possible to resolve specific issues associated with the plan to the satisfaction of consultees, this is highlighted in the Consultation Record.
3. I confirm that the proposals contained in this plan comply with the UK Forestry Standard.
4. I undertake to obtain any permission necessary for the implementation of the approved Plan.

Signed.....
 (FE) Forest Management Director

Signed.....
 (FS) Regional Director

District.....

Region.....

Date

Date of Approval

Date approval ends:

(ha)	Conifers	Broadleaves	Successional Habitat	Open Space
New planting	Nil			
Felling	253	22		
Restocking	207	19	17	32
Managed under continuous cover*	6			
Restocking areas already felled	11.2	2.6		3.5

*Only one regeneration felling will take place during the period of this plan – this figure is also included in the felling area.

1.0 Policy & context

The Forestry Commission (FC) has been independently audited against the UK Woodland Assurance Standard (UKWAS) and its management standards have been endorsed by the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC). The FC is committed to maintaining woodland management to these standards.

This plan has been prepared in order to achieve compliance with UKWAS and comply with FSC and PEFC standards.

The Public Forest Estate in the West Devon Forest Management Unit lies within West England Forest District which covers the west of England as far as North Shropshire.

1.1 Strategic objectives for the management of woodland on the Public Forest Estate in the South West.

Management of woodlands on the Public Forest Estate will deliver Government aims for forestry in England as described in the Forestry Policy Statement which is available from the DEFRA website. In Summary we will seek to achieve the following key objectives:

- **Protecting** the nation's trees, woodlands and forests from increasing threats such as pests, diseases and climate change,
- **Improving** their resilience to these threats and their contribution to economic growth, people's lives and nature,
- **Expanding** them to increase further their economic, social and environmental value.

Further details on how these objectives will be achieved and implemented in West England are available in our strategic plan due for publication in 2015.

1.2 Consultation

Consultation has been carried out with identified stakeholders as shown in the consultation record at appendix 1. Our method of identifying consultees is based upon the three major sensitivities of any particular woodland: landscape, recreation and environment, coupled with the level of change we anticipate being caused by the renewed Plan.

1.3 Implementation of plan objectives

Before major forest operations are undertaken a documented Operational Site Plan is completed for the proposed operation. This identifies site constraints and opportunities and ensures that all actions are consistent with current statutory and UKWAS requirements.

1.4 Protected Species and habitats

Where the Operational Site Plan has confirmed that European Protected Species (EPS) or other protected species or habitats are present on a site, operations are undertaken in accordance with guidelines agreed by Natural England.

1.5 Cultural Heritage

Scheduled Monuments

All Scheduled Monuments are subject to a separate Management Plan, agreed with English Heritage.

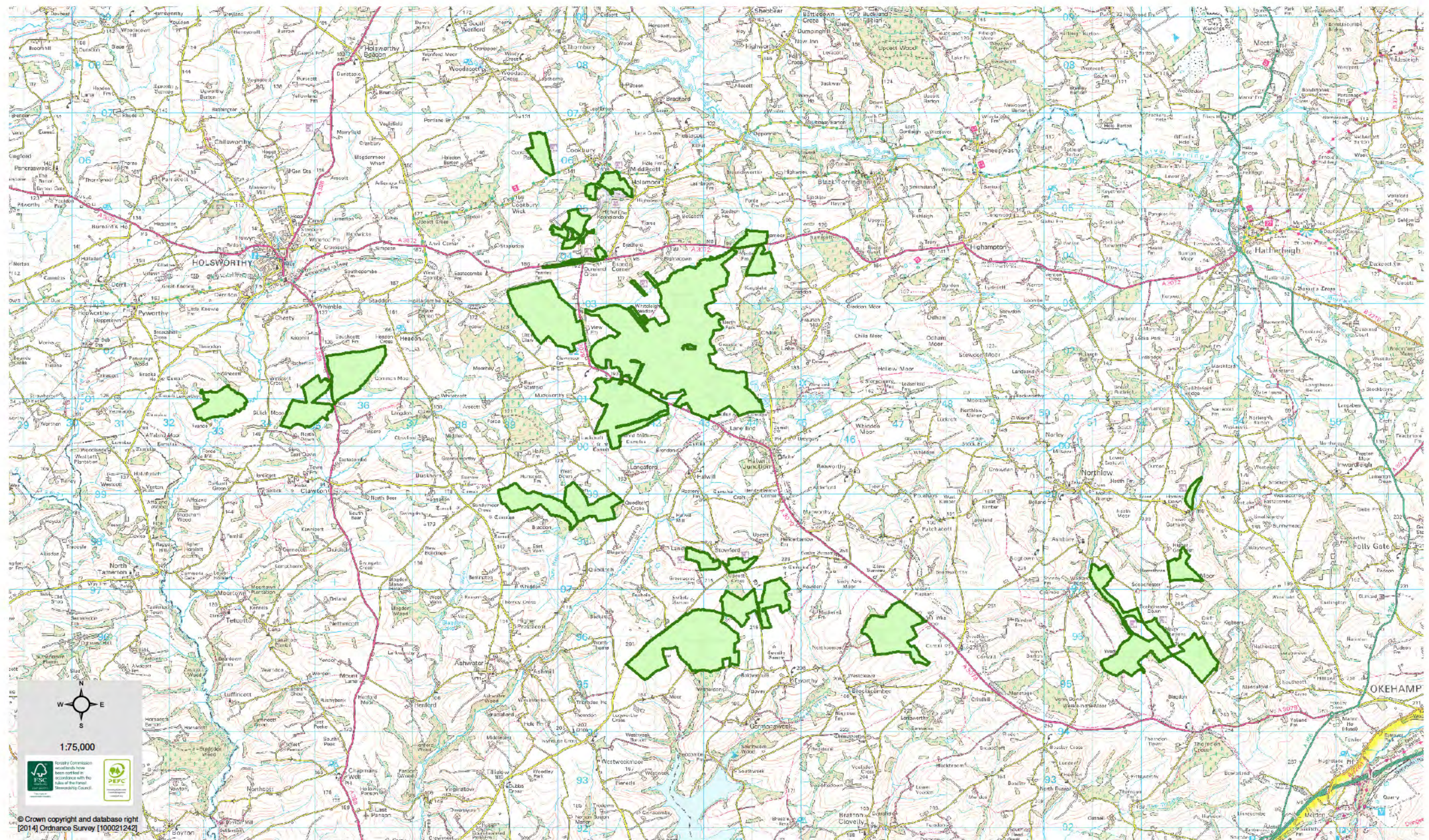
At Forest Plan level Scheduled Monuments will simply be mapped on the ecosystems services map. Any additional felling agreed in the Scheduled Monument plan will be subject to liaison with Forest Services.

Consultation with English Heritage on any potentially damaging operations to Scheduled Monuments will take place at the Operational Site Plan Stage.

Other Heritage Features

Work on all other heritage features are subject to an agreement with Local Authority. During the course of this plan we will identify significant heritage features and incorporate appropriate actions into our core work, but as a minimum all heritage features will be identified by liaising with the relevant representative within the organisation and a suitable working method agreed prior to any operation.

2.0 Location Map



3.0 General Description

Topic	Description	Management Considerations	Proposals
3.1 Woodland Summary	<p>The West Devon Forest Management Unit (FMU) extends over 1826 Hectares of the Public Forest Estate in Devon. The woodland is primarily conifer plantation, but has numerous belts of broadleaves, scrub and open space running through it.</p> <p>Approximately 92% of the woodlands are under 50 years of age with the majority (25%) between the ages of 20 – 30 years.</p> <p>There is a range of tree species but the dominant species by far is Sitka spruce comprising approximately 74% of the forested area.</p>	<p>The present and future value of the commercial resource to the local economy is significant.</p> <p>Past silvicultural management, ground preparation and choice of species has been heavily influenced by wet soils and exposure leading to wind blow. Traditionally the concept of terminal height has been adopted and most conifer crops were felled between 40 and 50 years of age.</p> <p>Sitka spruce is well suited to the West Devon plan area, particularly on ex agricultural land where practices have improved the availability of base elements. However where spruce has been planted as a successor crop we are observing issues with less successful establishment and performance on some, but not all sites.</p> <p>There are significant areas which have not been planted and have been colonised by Birch, willow gorse and alder with some mixed conifer and oak. This species mix provides a benefit in terms of soil improvement and provision of habitat, but can become dominated by the willow and gorse, and do develop into unstable woodland with poor access.</p>	<p>There is a desire to diversify management and species choice to provide wider economic benefit and to be more resilient to climate change, plant health issues and financially.</p> <p>Engage with specialist advisors and researchers to learn more about the issues with Sitka spruce. Establish trials using different ground preparation techniques and consider establishing a species trial.</p> <p>With a view to increasing stability the design of forest edges will adhere to recommendations documented in the Forestry Commission's Technical Paper No.16. There will also be a presumption towards thinning crops and extending rotations. This will widen the opportunities to introduce different silvicultural systems as an alternative to clear felling.</p> <p>Active management will increase in areas of broadleaves which have developed naturally. Identify and monitor the development of these areas.</p>

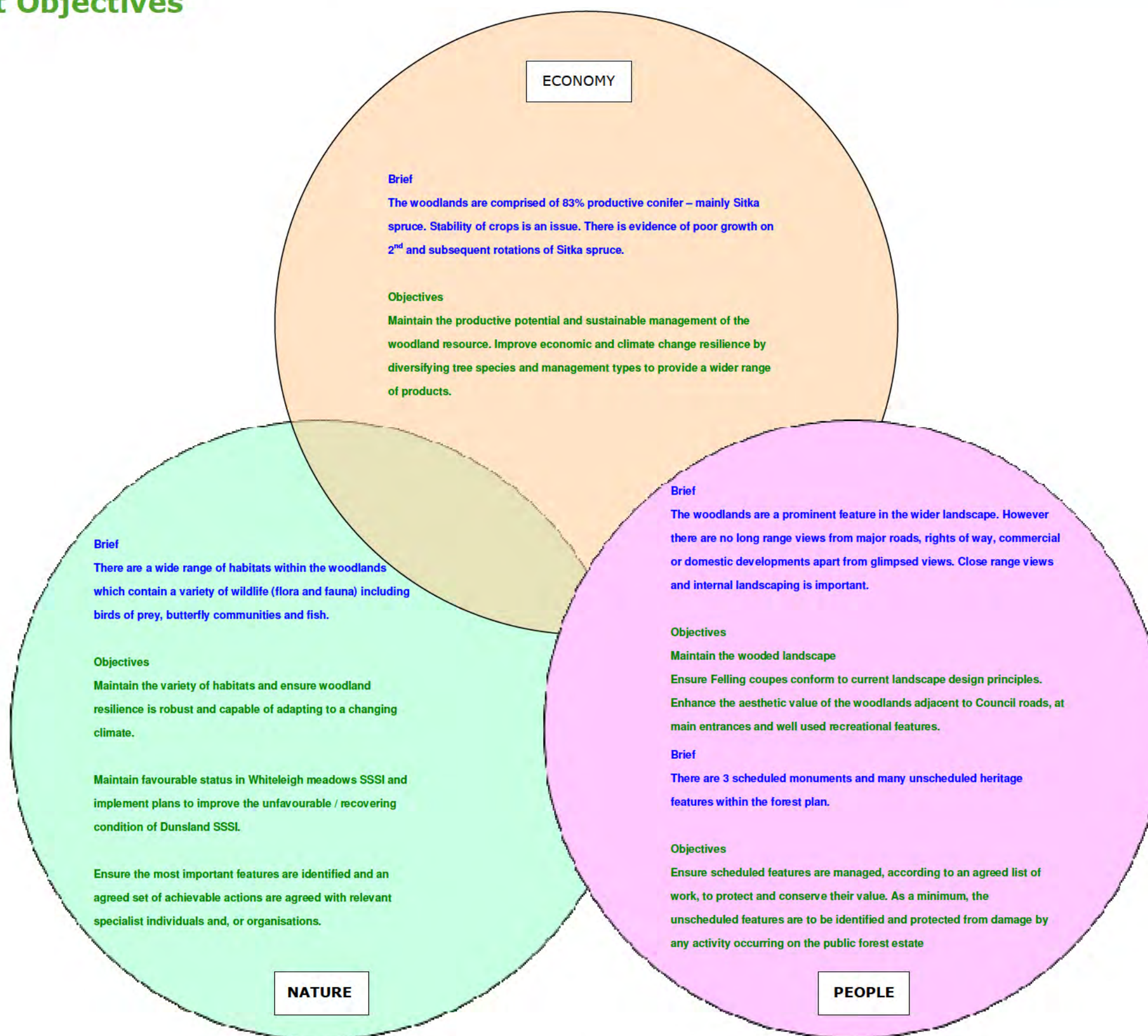
Topic	Description	Management Considerations	Proposals																																																																
3.1.1 Woodland Summary (Production)	<p>Timber Production Forecast</p> <p>Forecast based on the existing Forest Plan:</p> <table> <tr> <th>Forecast Period</th><th>All Species</th><th>Conifers</th><th>Broadleaves</th></tr> <tr> <td>2013-2016</td><td>13712</td><td>13670</td><td>42</td></tr> <tr> <td>2017-2021</td><td>16382</td><td>16223</td><td>159</td></tr> <tr> <td>2022-2026</td><td>20796</td><td>20748</td><td>49</td></tr> <tr> <td>2027-2031</td><td>23196</td><td>23085</td><td>111</td></tr> <tr> <td>2032-2036</td><td>14103</td><td>14014</td><td>88</td></tr> <tr> <td>2037-2041</td><td>12175</td><td>11829</td><td>345</td></tr> <tr> <td>2042-2046</td><td>14374</td><td>14220</td><td>153</td></tr> </table> <p>Forecast based on this Forest Plan:</p> <table> <tr> <th>Forecast Period</th><th>All Species</th><th>Conifers</th><th>Broadleaves</th></tr> <tr> <td>2013-2016</td><td>9321</td><td>9277</td><td>44</td></tr> <tr> <td>2017-2021</td><td>18605</td><td>18523</td><td>83</td></tr> <tr> <td>2022-2026</td><td>19231</td><td>19150</td><td>81</td></tr> <tr> <td>2027-2031</td><td>18136</td><td>18032</td><td>104</td></tr> <tr> <td>2032-2036</td><td>19011</td><td>18885</td><td>126</td></tr> <tr> <td>2037-2041</td><td>11087</td><td>10986</td><td>101</td></tr> <tr> <td>2042-2046</td><td>22679</td><td>22495</td><td>184</td></tr> </table> <p>(The figures shown represent an estimate of the average volume production per year. All figures are M3 over bark standing.)</p>	Forecast Period	All Species	Conifers	Broadleaves	2013-2016	13712	13670	42	2017-2021	16382	16223	159	2022-2026	20796	20748	49	2027-2031	23196	23085	111	2032-2036	14103	14014	88	2037-2041	12175	11829	345	2042-2046	14374	14220	153	Forecast Period	All Species	Conifers	Broadleaves	2013-2016	9321	9277	44	2017-2021	18605	18523	83	2022-2026	19231	19150	81	2027-2031	18136	18032	104	2032-2036	19011	18885	126	2037-2041	11087	10986	101	2042-2046	22679	22495	184		
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3.1.2 Woodland Summary (Ecosystem services - Habitat features, species interest and heritage)	<p>The woodland habitat supports a wide variety of flora and fauna including ground nesting and other birds and several bird of prey species, Red and Roe deer and Grey squirrel. There are also several European Protected Species (Bats, Otter, Dormouse) present.</p>	<p>The SSSI's and The Scheduled Ancient Monuments are covered by separate plans agreed with Natural England and English Heritage respectively.</p> <p>Butterfly Conservation have provided information on how best practice can be incorporated into our routine work</p>	<p>Continue to liaise with statutory bodies over the condition of designated features.</p> <p>Incorporate agreed target work areas to improve the habitat for the protection and expansion of butterfly species within the Forest Plan. Monitor success and review outcomes at regular intervals, and as a</p>																																																																

Topic	Description	Management Considerations	Proposals
3.1.2 Cont'd	<p>There are two separate SSSI's which straddle FC land and neighbouring land. Whiteleigh Meadows is designated for the unimproved grassland (Culm Grassland) which is botanically rich and is currently in favourable condition. Dunsland is designated for rare lichens associated with veteran trees and is currently in unfavourable / recovering condition.</p> <p>Cookworthy (911 hectares) and North down (138 hectares) are both identified in the joint Butterfly Conservation (BC) / FC conservation strategy; 'Lepidoptera on FC Land in England'. The habitat in these woodlands supports Pearl-bordered Fritillary and Dingy Skipper amongst other species. There are three further sites which are identified in the joint FC and BC strategy for Wood White.</p> <p>There are several areas either adjacent to or in close proximity to FC land which are managed by the Devon Wildlife Trust, some of which are county wildlife sites. Devon Wildlife Trust are collecting seed from grassland areas on FC land which are botanically rich.</p> <p>The plan area straddles two water catchments, Tamar to the South West and Torridge to the North East. The part which is in the Torridge catchment also falls within the North Devon Nature Improvement Area.</p> <p>Three ancient monuments which have been scheduled by English Heritage are located in the plan area. In addition there are numerous other heritage features which have remained undesigned.</p>	<p>programmes (road maintenance, flailing etc.) for the benefit of butterflies as well as advising on specific work programmes / projects.</p> <p>Devon Wildlife Trust have provided information on local projects they are undertaking within the plan area, including the Working Wetlands project. This project is helping to reverse Culm decline by carrying out targeted habitat management, creation and restoration. In addition to providing habitat for many rare species, helping achieve the objectives of the water framework directive and water quality for consumption are key drivers.</p> <p>The Environment Group at Devon County Council provide information on unscheduled heritage features. These are taken into consideration at the site planning stage prior to the commencement of any operation.</p>	<p>minimum at plan review in 2020.</p> <p>Through the scheduled felling and replanting / regeneration programme ensure identified corridors, particularly those adjacent to watercourses, are managed in accordance with the District policy on Environmental Corridors. Also through scheduled operations manage the woodland edge to create greater permeability, increase connectivity between the woodlands and identified areas externally and allow species to move more freely across the landscape.</p> <p>Continue local partnership with Devon Wildlife Trust to maintain and improve the botanical value of our open spaces.</p> <p>Pilot an approach using data from Devon County Council to categorise heritage features and identify those which warrant additional management. Incorporate agreed management actions into the normal / cyclical forest management and harvesting operations.</p>

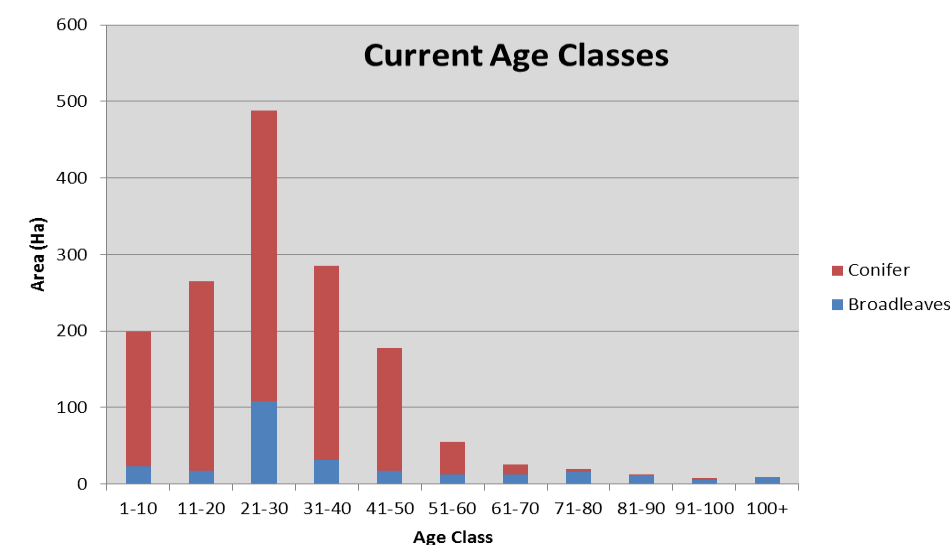
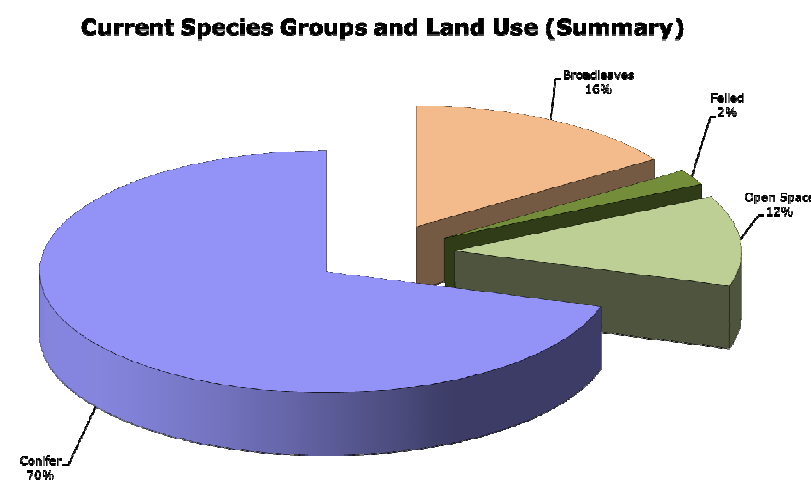
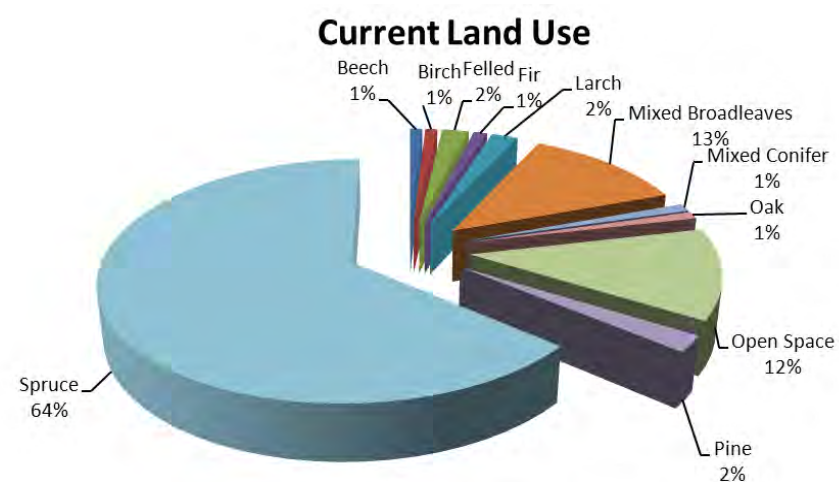
Topic	Description	Management Considerations	Proposals
3.2 Location & Access	<p>The West Devon FMU is located between Holsworthy and Oakhampton. It is within West Devon Borough Council and Torridge District Council unitary authorities. It is spread over several Parish council areas – Clawton, Ashwater, Cookbury, Broadwoodwidge, Halwill, Black Torrington, Bradford, Holsworthy Hamlets, Germansweek, Bratton Clovelly, Beaworthy, Northlew, Inwardleigh.</p> <p>Vehicular Access to the majority of the Public Forest Estate is good.</p> <p>Internally the woodland is serviced by a good network of forest roads, tracks, rides and routes suitable for forest machine access.</p> <p>1334 Hectares are Dedicated Open Access under the Countryside Rights of Way act.</p>	<p>The network of access routes within the woodland offer a valuable recreational resource to the local community, and as such it is well used, mainly by dog walkers and horse riders.</p> <p>Maintenance of the access routes for forestry activities is vital.</p>	<p>Maintain open access and provision for visitors including the informal car parks. Improve the visual appeal and sense of place on external boundaries adjacent to council roads, car parks and access points through the implementation of scheduled felling and regeneration.</p> <p>Implement good management principles (described in the District policy for the management of environmental Corridors) particularly at re-stocking stage to safeguard forestry access routes, improve habitat links and internal landscaping.</p>
3.3 Tenure & management agreements	<p>1736 Hectares of the FMU area is registered as freehold with the Land Registry. The remaining 90 Hectares is Leasehold.</p>	<p>Sporting rights are let in some of these woodlands mainly for rough shooting. There are no other 3rd party agreements.</p>	<p>Maintain current arrangements into the future. Ensure management is consistent with standards expected by UKWAS.</p>
3.4 Physical Environment	<p>Elevation of the plan area ranges from 100 – 200m above datum.</p> <p>Rainfall ranges from 478mm in the Summer to 712mm in the winter, and the average over the last 30 years is 1200 – 1400mm per annum.</p> <p>The underlying geology is the mudstone, siltstone and sandstone from the Holsworthy Group. Soil type is mainly Surface Water Gley</p>	<p>The Forestry Commission Ecological Site Classification tool (ESC) rates the main species currently on site as suitable at the present time.</p> <p>Using the same tool the 2050 HI model which predicts impact of climate change rates the main species as follows:</p> <p>Suitable / Very Suitable – Scots pine, Lodgepole pine, Sitka spruce, Japanese &</p>	<p>There are quite a few other species which may be considered as alternatives; however a risk based approach to species selection at restocking stage will be applied. It is likely that the alternative species used for restocking will include Swamp cypress, European silver and Noble fir, Western hemlock, Japanese Red and Western Red cedar and aspen.</p> <p>Introducing mixtures and the possibility of</p>

Topic	Description	Management Considerations	Proposals
3.4 Cont'd	<p>(7i imperfectly aerated & 7c cultivated) with some Brown Gley (7bc cultivated).</p> <p>There is obviously a variation across the area but in general the Soil Moisture Regime is moist or wet and the Soil Nutrient Regime is poor or medium. Rooting depth is limited to 30cm across many areas.</p>	<p>Hybrid larch, Birch, Pedunculate oak.</p> <p>Marginal / unsuitable - Douglas fir, Norway spruce, Beech.</p> <p>It is high risk to plant species highly susceptible to phytophthora ramorum in the South West; therefore larch will not be used.</p> <p>In addition to soil conditions, exposure, and climate change considerations, deer pressure and susceptibility to hetrobasidion annosum further limits the range of appropriate species on certain sites.</p>	<p>using short term soil improver crops such as Birch or Alder with a view to future restocking with productive conifer or other broadleaved species will be considered, as long as the proportions of broadleaves within the FMU is gradually increased overall.</p> <p>As previously mentioned a species trial managed in partnership with Forest Research may be considered to find out how a wider range of alternative species would perform in the West Devon environment.</p>
3.5 Landscape Setting and Designations	<p>Natural England Landscape Character Area Profile is 149 The Culm.</p> <p>The West Devon Forest Plan area is not within an AONB.</p>	<p>Relevant extracts from the NE LCA:</p> <p>Rolling, open plateaux with many small but deep valleys, fast-flowing rivers and streams that drain the area and wide views across a remote landscape.</p> <p>Heavy, poorly-drained soil, which supports a pastoral landscape of low agricultural quality but high nature conservation interest.</p> <p>Conifer woodlands, popular for recreation, for on-going access and transition to native broadleaf woodland, heath and rush pasture.</p>	<p>Manage the woodland to deliver economic, environmental and social benefits and ensure that future management compliments the local landscape.</p>

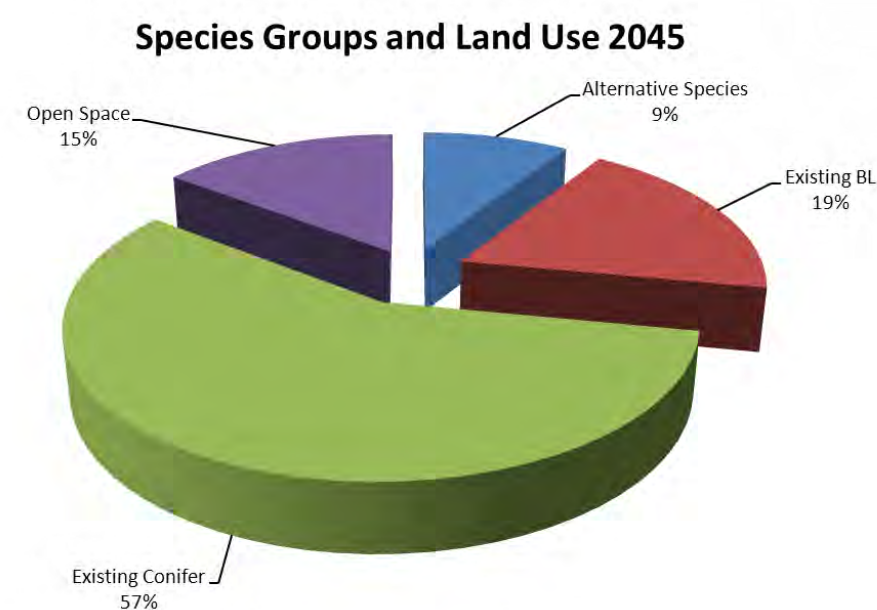
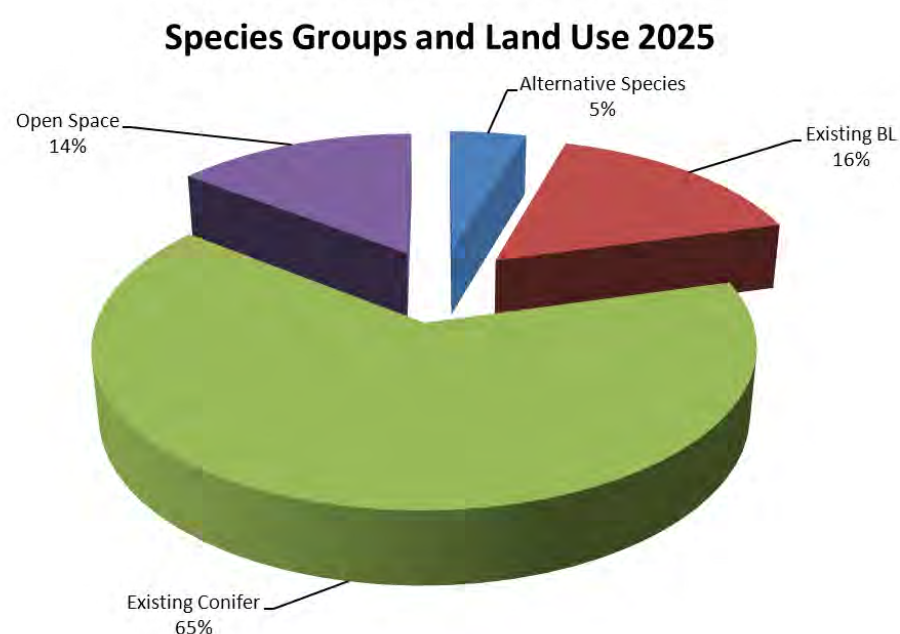
4.0 Management Objectives



5.0 Review and Implementation



The graphs on this page illustrate in broad terms how the Forest Management Unit is made up currently and what the composition is likely to look like when the management actions described later in this document are implemented.



The alternative species which we intend to use could include Swamp cypress, European Silver and Noble fir, Western hemlock, Japanese Red and Western Red cedar and aspen. Other species may be used as additional information becomes available on their characteristics and suitability to individual sites.