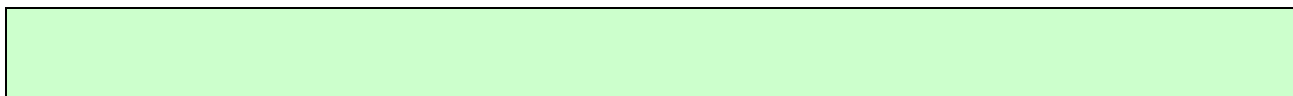




South Central BAU (Business Area Unit) Strategic Plan



Foreword

I have great pleasure in publishing Coillte's South Central Business Area Unit (BAU) strategic plan.

This BAU strategic plan sets out our **intentions for Coillte's forest** and non-forest business in South Central area of Ireland as part of achieving its economic, social and environmental goals.

Mick Power

BAU Manager



Statement of Compliance with Principles of Sustainable Forestry Management

Coillte acknowledges the need for sustainable and responsible forest management. Coillte has adopted sustainable forest management (SFM) as the guiding principle by which it manages its forest now and in the future.

In practising sustainable forest management we will:

- develop our forests in a way that is both environmentally sensitive, socially beneficial and economically sustainable;
- choose to independently verify that SFM is being practiced in our forests through the forest certification process;
- undertaken to work, with our stakeholders, towards full compliance with Irish Forestry standards;
- comply with applicable legal requirements and the ¹Forest Stewardship Council's® (FSC®) International Principles and Criteria as embodied in the FSC Irish Forestry Standard;
- achieve full compliance with the FSC standard;
- comply with applicable legal requirements and achieve full compliance with PEFC (Programme for the Endorsement of Forest Certification) Irish Forest Certification Standard
- abide by the Forest Service Code of Best Practice and related guidelines on archaeology, fisheries, landscape and biodiversity among others;
- strive for continuous improvement of forestry practices.

Mick Power
BAU Manager

¹ FSC licence code FSC- C005714

The South Central BAU Team

The BAU team structure is outlined below:

BAU Manager	Mick Power
BAU Administration/Cost Control	Liz Griffith
Forest Operations Managers	John Moore
	Dermot Cantwell
	Kevin Power
Harvesting Operations Managers	Pat Kelleher
	Jim Lynch
	Tom Noonan
Resource Operations Managers	Brendan Lally
	Tom O'Donoghue
Engineering Operations Managers	Liam Honan
	Tony Durack
Forest Technicians Forest Operations	Michael Collins
	Tom Shore
	Ned Landers
Forest Technicians Harvesting Operations	Oliver Russell
	Pat Gahan
	Tony Dunne
Forest Technician Resource Operations	Bernard Walsh

Office Location in the BAU
Unit 27, Danville Business Park, Kilkenny

Coillte South Central BAU strategic plan

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1. Coillte and the BAU Strategic Plans

1.1 Coillte

Coillte is Ireland's leading natural resources company with operations in forestry, timber panel production, renewable energy and land management. The core purpose of the company is to enrich lives locally, nationally and globally through innovative and sustainable management of natural resources.

History

Coillte was established under the Forestry Act of 1988 as a private limited company registered under and subject to the Companies Acts 1963-86. All of the shares in the company are held by the Minister for Agriculture, Food and the Marine and the Minister for Public Expenditure and Reform on behalf of the Irish State. The Board of Directors is appointed by the Minister for Agriculture. Coillte commenced trading in 1989 when it **acquired ownership of the Irish State's forests.**

Coillte today

The company is an export orientated, forestry and forest products business, with interests in renewable energy. The company has three operating divisions - Coillte Forest, Coillte Panel Products and Coillte Enterprise.

In recent years the company has worked with its sawmill customers to strengthen the market position for Irish timber in the UK. The company is playing an increasing role in developing wind energy and biomass assets and is also playing a key role in the roll out of broadband through its telecommunication mast sites.

The company has retained Forest Stewardship Council (FSC) Certification for its forest management since 2001 through an intensive approach to meeting the appropriate standards, balancing the social, economic and environmental impacts of its activities.

The company employs approx 1,000 people across Ireland and the UK and supports the employment of many more people in jobs that add value to our forest products.

The Forest Service (Department of Agriculture, Food and the Marine) is the forest authority in Ireland. The Forest Service is responsible for ensuring the development of forestry within Ireland in a manner and to a scale that maximises its contribution to national socio-economic well-being on a sustainable basis that is compatible with the protection of the environment.

Outdoor Recreation

As Ireland's leading provider of outdoor recreation we have more than 150 recreation sites for you to enjoy. For more information on how to get out and enjoy the outdoors see www.coillteoutdoors.ie

Coilltes change in organisational structure

Coillte would like to take this opportunity to advise our stakeholders that we have changed our organisational structure in the Forest Division. This will mean the following:

Our operating structure of 13 Districts has changed since Oct 1st 2012 to eight Business Area Units (BAU). As part of this change we reconfigured our previous District Strategic Plans (DSPs) 2011-2015 to reflect these new business areas. However, there will be no changes to our current forest management plans or their boundaries within these areas.

This reconfiguration will result in eight Business Area Unit strategic plans of which the South Central BAU is one.

1.2 Renewable Energy

Coillte's core purpose is to enrich lives locally, nationally and globally through the innovative and sustainable management of natural resources. **Coillte's lands possess some of the best wind regimes in Ireland and Coillte has a fundamental role to play in helping reduce Ireland's carbon emissions and achieving the Irish Government's renewable energy targets.** The Coillte forest estate has the potential to make a **significant contribution to Ireland's renewable energy targets through wind energy generation and through biomass.** In many regions in Ireland Coillte is developing wind energy projects both on its own and in conjunction with co-development partners.

In terms of developing our renewable energy sites we are committed to:

- Open and transparent consultation with stakeholders and local communities.
- Best in class environmental impact assessment to enhance and preserve local ecology and the habitats therein in the context of developing a wind farm.
- Minimising the impact on surrounding forestry in so far as possible.
- Complying with all relevant environmental legislation, regulations and other requirements as they arise.
- Minimising the landscape impact of wind farms through careful siting and design.
- Considering the impact on recreational users, and also the opportunity there may be when developing a wind farm to put in trails or other recreational facilities.
- Minimising the risk of pollution and conducting our business in an environmentally friendly way.
- Participating in discussion groups through industry associations and initiatives (IWEA, etc) to raise awareness and improve industry wide performance.
- Environmental training of all employees and those of our partners. We will strive to influence third parties who work on our land to act in an environmentally responsible manner.
- Communicating this policy to our staff, suppliers, contractors, partners, stakeholders and customers with the aim of ensuring increased awareness and encouraging environmentally sustainable behaviour and responsible forest management.

1.3 Telecommunications

As one of the most significant and diverse landowners in the country Coillte has played a key role in supporting mobile telecommunications infrastructure in Ireland over the past 20 years. In the early years this business originated from customer led requests for leased sites to support the roll-out of mobile telephony infrastructure. More recently Coillte has taken a more proactive role with its involvement in supporting the requirements of the National Broadband Scheme. Coillte provided sites and infrastructure for approximately 100 mast sites across the country, equating to 25% of one of the most important infrastructure programs in Ireland in this decade. Coillte is committed to ongoing investment in infrastructure in support of Ireland's objective to achieve top tier status in respect of critical telecommunications infrastructure and access to broadband.

Coillte has significant commercial relationships with the four mobile network operators in Ireland, namely; Vodafone, O2, Meteor & 3Ireland. We expect the mobile market to continue to be dominated by the four mobile network operators over the next decade as they have reached market saturation in terms of new customers. The Irish market has achieved the highest level of mobile telephony penetration in the EU. The main area of growth for the current customer base will be the provision of high speed mobile broadband services. This will be achieved through the following key initiatives:

- allocation of additional frequency spectrum by ComReg;
- deployment of new technology in the form of next generation networks;
- fibre connectivity to Telecom sites.

1.4 Coillte's resource management approach

During 2011 and 2012 a major project was undertaken within Coillte Forest to review fundamentally our approach to managing our forest resource. The underlying objective of this work is to use optimisation techniques to ensure we are maximising the return from the land resource in a balanced and sustainable manner. During 2013 this project is moving into implementation phase and, subject to further development and a successful pilot programme from 2014 the schedule of, for example, clearfell, thinning, later manuring, roading and restock actions will reflect this approach.

The schedule itself is built through running a management model. It is important that the model reflects:

- the costs and benefits of all possible actions;
- the crop and site types and the circumstances under which each action is allowed;
- and the relevant management objectives and constraints operating at a strategic and more local level.

As the model is developed and refined it will be important that each BAU is consulted on the model as it applies to their area. The outputs of the management model may span

multiple years or decades and in this format, will be used as a strategic resource management tool. When due for implementation in any one year the model schedule will be validated by local staff familiar with the area in question.

A major benefit of the approach to Coillte is the speed with which a new national activity schedule may be generated which reflects, for example, the impact of storm or a significant shift in markets. In extreme cases a stand may have its scheduled fell year shifted as frequently as every quarter, as the model is re-run to incorporate emerging information on demand or crop parameters. This is why forest management principles, objectives and constraints must be reflected in each Strategic BAU document as these will form the basis of a management model. Once these principles are agreed, each model run which takes place during the lifetime of the BAU Strategic Plan will comply with them and the ensuing schedule will also. As is presently done for the Forest Management planning process, it would be our intention that a map be produced every five years, as part of the review of the BAU Strategic Plans, that reflects the indicative areas for clearfelling during the lifetime of the BAU Strategic Plan. This map would form the basis of public consultation and if concerns are raised about particular areas they would be addressed at that time.

1.5 Benefits of Coillte

In addition to benefits to the economy in terms of sustainable forest products and energy production, **Coillte's forests provide a range** of social, environmental, recreational, health and tourism benefits to the State and its people.

Coillte provides a wide range of 'public goods'. Extensive recreation facilities are provided in Coillte's forests including Ireland's best mountain biking facilities. Coillte operates an open access policy for walkers and pedestrian users, and people can apply for licenses and permits to engage in a wide range of other activities. **Coillte's recreation policies are set out in the company's website at www.coillte.ie/aboutcoillte/recreation/recreation_policy/ and a special website www.coillteoutdoors.ie** provides information about our recreational opportunities. Coillte plan to develop a number of BAU level recreation plans during the next five years.

Over fifteen per cent of our estate is actively managed for nature conservation. Habitat restoration projects such as the EU funded LIFE Priority Woodland Project, and recreation partnerships like the Dublin Mountains Partnership are showcase projects that demonstrate best practice natural resource management.

In addition to being important resources for construction and for energy production our forests are also important natural systems for capturing and storing carbon from the atmosphere and they play a role in moderating flooding at times of high rainfall.

We talk to people locally about how to maximise these benefits through our BAU social and environmental panels which are drawn from key stakeholders in each BAU.

1.6 Meeting external challenges and constraints

Coillte and all of its forests are subject to a number of key external factors, many of a policy or legislative nature, which are driving change and will have a major influence on its future. Understanding and anticipating such factors is vital in order to manage change proactively rather than responding to it reactively. The following table outlines some of the principal challenges and commitments. The BAU strategic plans will each contribute to meeting these challenges and constraints.

Challenges and commitments	Response
<p>National Forest Strategy</p> <p>The government forestry strategy published in a document titled "Growing for the Future"</p>	<p>In response to the National Forest Strategy:</p> <p>Coillte will set and meet targets for the national timber supply.</p> <p>It will engage in a greater diversification of species and increase broadleaf content.</p> <p>Coillte will seek to increase the recreational value of some of its forests.</p>
<p>National Biodiversity Plan</p> <p>Ireland is a signatory to the 1992 Convention on Biological Diversity and is committed to biodiversity protection and enhancement measures in the National Biodiversity Plan.</p>	<p>Coillte is making a meaningful contribution to the National Biodiversity Action Plan through the designation of 15% of its forest estate overall for nature conservation.</p>
<p>EC Habitats Directive and EC Birds Directive (92/43/EEC) as transposed into Irish law under the E.C. (Natural Habitats Regulations 1997 (S.I. No. 94 of 1997)</p> <p>The EU Directive on the conservation of natural habitats and of wild fauna and flora provides for the protection of habitats and their species, and where necessary their restoration to favourable conservation status.</p>	<p>Coillte is committed to achieving or maintaining favourable condition of all of the Special Areas of Conservation (SACs). Special Protection Areas (SPAs) and Natural Heritage Areas (NHA) on its lands.</p> <p>All forest operations which potentially could impact on such sites will be assessed under the Habitats Regulations.</p>

Challenges and commitments	Response
<p>Water Framework Directive (2000/60/EC)</p> <p>The EU Water Framework Directive establishes a framework for the protection of rivers, lakes, coastal and ground waters by requiring States to achieve good ecological status for all waters by 2015 and ensuring that status does not deteriorate in any waters.</p>	<p>National Surface and Drinking Water Regulations have been enacted since 2007 to give legal status to the criteria and standards to be used for classifying surface waters in accordance with the ecological objectives approach of the Water Framework Directive. The classification of waters is a key step in the river basin management planning process and is central to the setting of objectives and the development of programmes of measures. Waters classified as 'high' or 'good' must not be allowed deteriorate. Waters classified as less than good must be restored to at least good status within a prescribed timeframe. The environmental targets or goals and the programmes of measures (POMs) to be included in river basin management plans must therefore reflect these requirements.</p> <p>Coillte has been proactive with the regulatory agencies, such as the Forest Service, Inland Fisheries Ireland, Local Authorities and NPWS, in deriving POMs to be implemented by the forest sector in avoiding and/or minimising the potential impact of forest activities on water quality. A central tenet of the POMs is adherence to the Forest Service Code of Best Forest Practice and Guidelines, including all relevant regulations and requirements, and the Forest Standards for Ireland (National and FSC) with compliance assessed by way of independent audit by the Forest Service and the FSC.</p>

Challenges and commitments	Response
<p>Sustainable Forest Management (SFM)</p> <p>SFM is the forestry sector's response to sustainable development. Balancing the economic, environmental and social elements is now the accepted way by which forest management is conducted. Forest certification ensures best forest practice is implemented and provides stakeholders with an opportunity to contribute to the management of forests.</p>	<p>SFM and certification are providing a framework by which the social and environmental issues can be addressed in developing forward planning in a constructive manner. It provides an opportunity for Coillte to work in partnership with its stakeholders at national, BAU and individual forest level and helps foster a better understanding of the forestry- related issues that concern different sectors of the community. SFM also provides an incentive to address nature conservation issues which are vital to the ecological support systems of the countryside.</p>

Coillte also responds to external factors that have a significant impact on its forests. One example is the disease *Phytophthora ramorum* also known as sudden oak death which has been detected in a number of BAUs. Another is *Chalara fraxinia* which is a serious fungal disease of ash trees. This has caused widespread damage to ash populations in continental Europe and was recently detected in a number of privately owned forests.

Coillte will liaise closely with Forest Service with regard to this significant potential threat to our Ash woodlands and will respond immediately to any mitigation measures proposed.

A number of changes in **modern society also impact Coillte's management and planning** for its forest estate and these include:

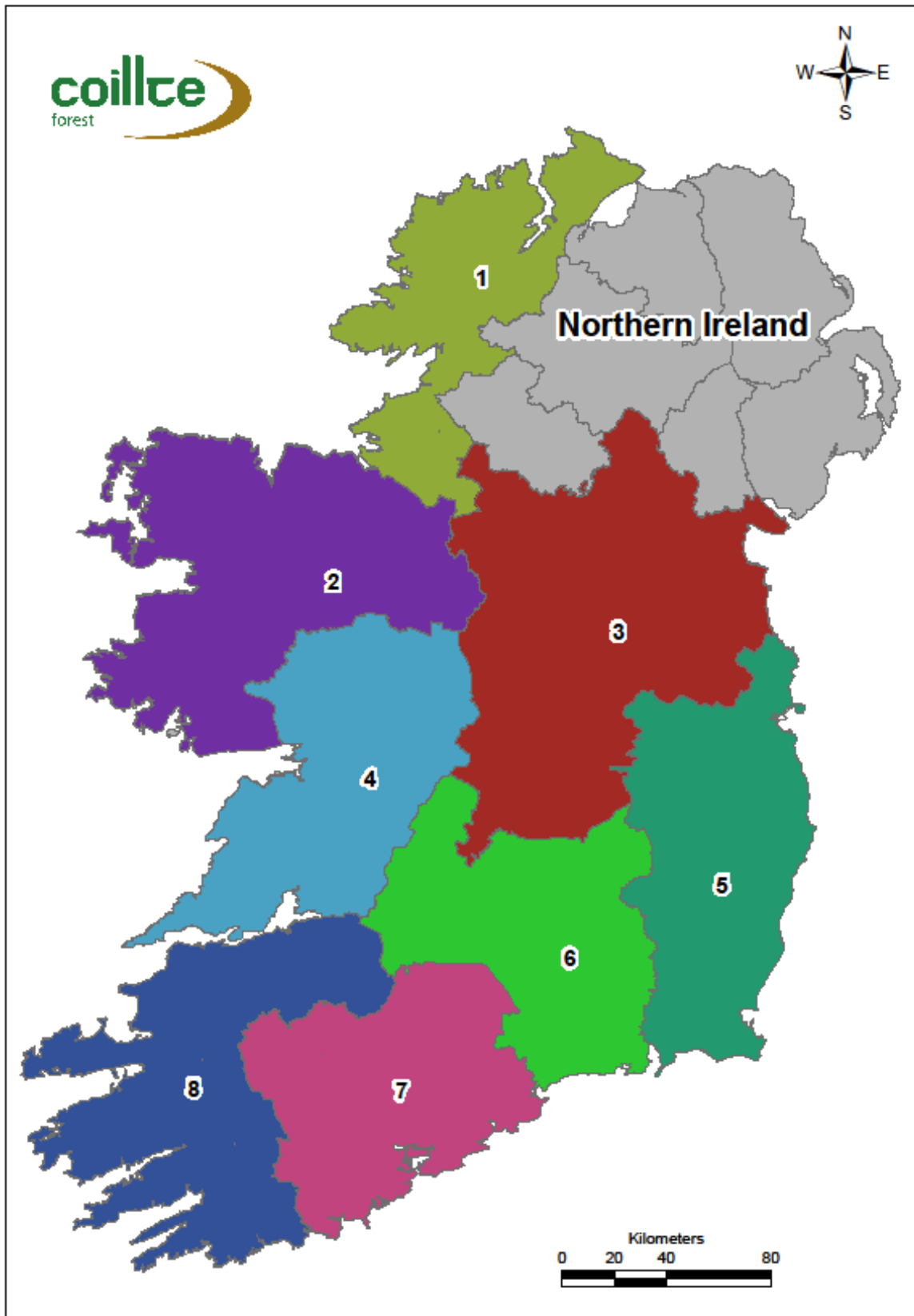
- A greater awareness of environmental issues amongst the public leading to a demand for higher standards of environmental protection. The challenge for Coillte here is the long term nature of forest planning and the need to realise the commercial potential of mature timber without excessive cost.
- Coillte has responded to an increased appreciation of landscape and of the place of forests in the landscape by new policies and practices in relation to forest design and by new approaches to felling decisions, in particular looking at alternatives to extensive clear felling where possible.
- A higher demand for access, recreational and tourism facilities in forests and in the types of recreation demanded – Coillte practices an open forest policy where all of its

forests are open for walking, and has increased its provision of special trails including improved provision of waymarked ways and looped walks, mountain bike trails and nature trails. Coillte frequently enters into partnerships with local communities, local development and tourism groups, county councils, and with development bodies such as Fáilte Ireland, Waterways Ireland and the Fisheries Boards to achieve such provision.

- Significant increases in illegal disposal of waste, often within Coillte forests, has led to requirements to remove waste and litter and to partnership based approaches to reducing dumping and littering.

1.7 Coillte BAUs and forests

Coillte's estate is divided into 8 Business Area Units (BAUs).



Coillte has developed plans for each of these BAUs, called BAU strategic plans which describe Coillte's forests and other assets in the area, and set out a vision for their management. The last planning cycle was for 2006-2010. This consultation document refers to the incoming planning cycle 2011-2015.

Coillte's 321 forests also have individual forest management plans which are approved for a five-year period and are available for the public to view at www.coillte.ie. An update of Coillte's forest management plans was carried out in 2009. Members of the public had the opportunity to submit comments/views in relation to local forest management issues. These comments/views were considered and, where possible, fed into the planning process at review time. These consultations have influenced the development of these BAU strategic plans.

Coillte also convenes a social and environmental panel for each of its BAUs. Plans and programmes are discussed with these groups to help Coillte to understand social, recreational, environmental issues, opportunities and concerns in the BAU.

1.8 BAU strategic plans and their purpose

The purpose of a BAU strategic plan is to set out plans for the forest and non-forest business that will take place in the BAU during the plan period. In compiling these plans Coillte has applied the principles of environmental impact assessment and risk management to the potential interactions between forest activities and standard receptors.

The topics covered in a BAU strategic plan include:

Commercial Planning:

- timber planting
- timber harvesting
- timber sales
- forest roads and access
- licenses, lettings, recreation and non-forestry land uses
- land acquisition and sales
- non-forest business – such as renewable energy and telecommunications

Planning for public benefits and public use:

- community facilities and benefits
- recreational and tourism infrastructure and partnerships
- access
- environmental enhancement measures such as biodiversity and nature conservation

Planning for sustainable use of resources:

- sustainable forest management
- long term retention of trees
- low impact silvicultural¹ systems
- water quality
- forest design
- use of chemicals

1.9 Summary on the various levels of Coillte forest management planning

The **BAU strategic plan** sets out the economic, social and environmental strategies and priorities for the long and medium term in the BAU and gives a clear direction for the management of the forests at local level for the next 5 years. The plans are developed in consultation with a wide range of stakeholders both internal and external to the company. Input from external stakeholders (individuals, communities, NGOs and statutory bodies) are sought during the consultation process, feedback is considered and where feasible, is incorporated into the plans. The Forest Management Unit (FMU) planning requirements of the FSC Standard for Forest Certification is achieved through the BAU strategic plan process.

Forest Management Plans (FMPs) show the spatial layout of management objectives at local level. These objectives will be described in the Management Units (MUs) and will form the basis for the site management plans which are documented through the Management Unit Site File (MUSF).

MUSF (Management Unit Site File) is built when site-level planning is initiated for activity within each MU from the FMP and describes how the plan is going to be implemented for the operation managers, workers and contractors. Social and environmental impacts including consultation are assessed through the environmental impact appraisal process and mitigation measures are written in each site management plan.

All levels of planning feed into the annual **BAU operating business plan and work plan**. These focus on the tasks/targets to be achieved during the year and outline the necessary resources (financial and human) required.

The four different plans are components of the same planning system which is supported by the IT based Integrated Planning System.

¹ Growing and harvesting wood

1.10 Coillte's forward plan for its BAUs for 2011-2015

Coillte has already undertaken a pre-planning consultation on its BAU strategic plans. This took place in autumn of 2010. Key issues and comments identified during the pre-plan included:

- Smaller areas of forest clear felled and with access for hill walkers retained or quickly restored during felling and thinning operations.
- An increase in the area of planting of broadleaved trees and a greater diversity of species and age within forests.
- Continuation with landscape sensitivity and design work and adherence to Forest Service Forestry and Landscape Guidelines.
- More protection of rare and threatened species both within and outside areas designated for nature, and more control over pests.
- Higher sensitivity in forest operations to cultural heritage features and to retaining important vistas and open summits in replanting schemes
- Working more closely with people such as recreational users and local communities, and engaging in recreation planning even outside recreation forests
- Making sure that stakeholders are informed about sales of Coillte lands, and about plans and consultation on masts on Coillte lands.
- Retention of the Coillte open access policy on lands that are sold to others.

Coillte has also identified its overall production targets from its BAUs for 2011-2015 and these are shown in the table below.

BAU	Harvesting area (ha)	Restocking area (ha)	Total volume (000's m3)
B1	4,627	4,130	1,854
B2	5,925	5,447	2,005
B3	3,891	4,177	1,876
B4	4,351	4,187	1,836
B5	3,004	3,613	1,666
B6	3,582	3,598	1,768
B7	4,314	4,777	2,107
B8	4,900	4,163	2,073
Total	34,594	34,092	15,184

2. South Central BAU

2.1 The South Central BAU

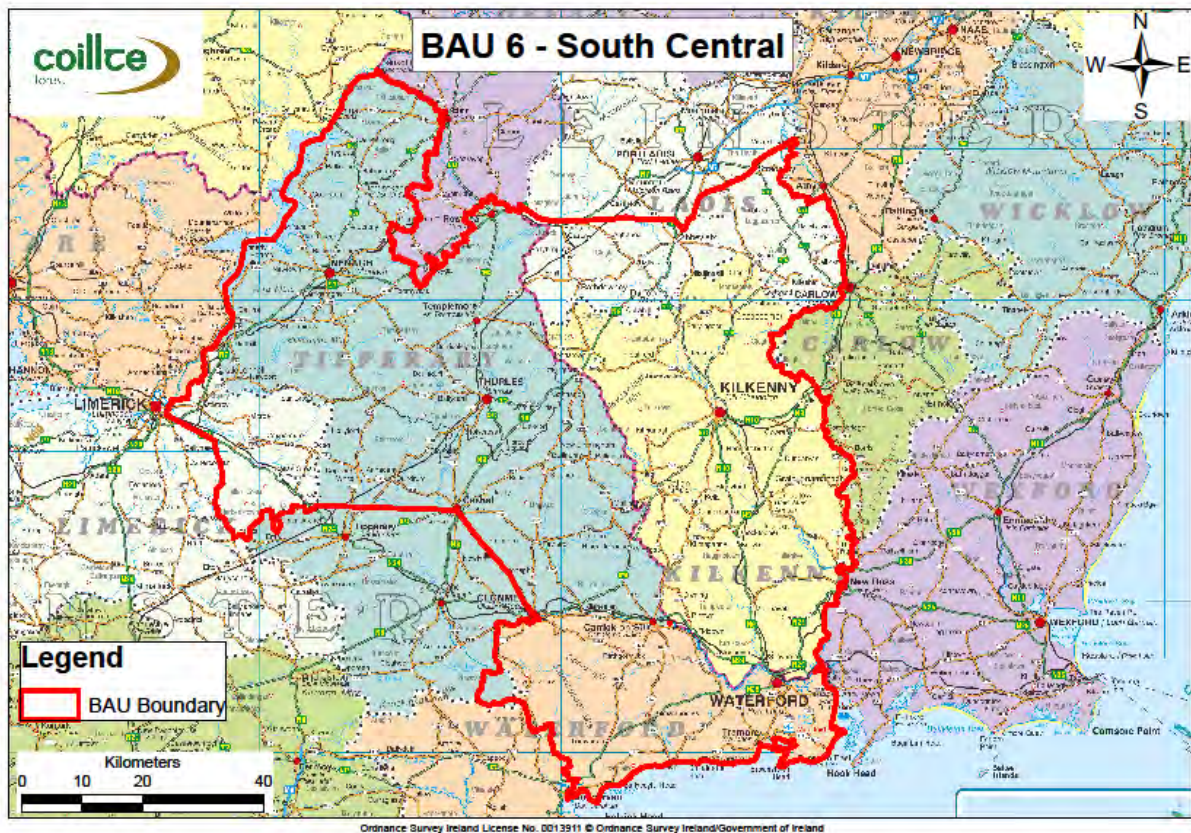
All BAUs play important roles in achieving Coillte targets and objectives. The South Central BAU of Coillte Forest encompasses Counties Kilkenny, Tipperary, Waterford (part), Laois (part), and Limerick (part). It is a large BAU covering 766,854 hectares of Ireland. Within this area, Coillte owns 48,160.72 hectares (6.28%).

Main population centres in the area include Kilkenny, Waterford, Clonmel, Cashel, Nenagh, Thurles, Roscrea, and Abbeyleix. Other main towns within the environs are Castlecomer, Graiguenamanagh, Callan, Stradbally, Rathdowney, Templemore, Borrisokane and Newport.

Main mountain ranges and upland areas include Slievenamon, Comeraghs, Devils Bit, Knockmealdowns, Slieve Ardaghs, Mount Brandon, and Castlecomer Plateau.

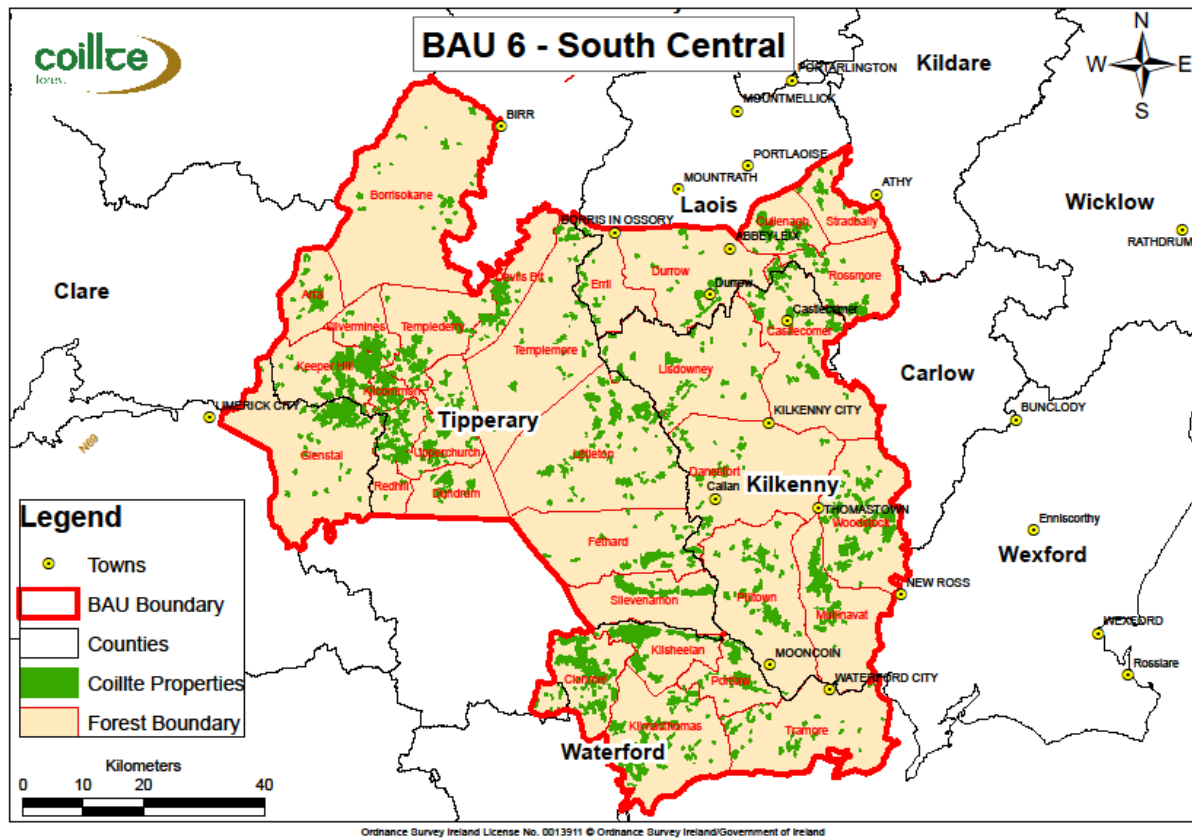
There are 2 Coillte owned Boardmills within the environs namely Medite in Clonmel, Co Tipperary, and SmartPly in Slieverue, Co Kilkenny.

The climate for forestry operations is suitable, with moderate rainfall and relatively good ground conditions, soil types are mainly gley, podzol and brown earth.



2.2 Forests and forest products in the South Central BAU

The map below shows Coillte's forests in the South Central BAU.



Timber produced within the BAU during the period 2006-2010 was primarily sold to Medite, SmartPly, Murray's, Glennons, Woodfab, ECC, Palfab, CJ Sheeran's, Coolrain and Laois Sawmills.

Coillte's production supports both Coillte owned panel mills in South Central Ireland, plus other sawmills such as Hollyford, and others in the surrounding area.

Coillte Forest is no longer engaging in the following areas:

Farm Partnerships

Afforestation services (private planting)

Long term forest management agreements (e.g. Forest life scheme)

However, any current partnerships/agreements still in operation which relate to the above areas will continue to be managed over the duration of this plan by the BAU.

Private timber

Coillte is the largest producer and consumer of pulpwood in Ireland. Coillte's strategy is to supplement its own supply through the purchase of private timber, through various channels. For further information please check the Coillte website at www.coillte.ie

2.3 Community, recreation and tourism facilities in the South Central BAU

Coillte has a long tradition of responsive community involvement through its extensive forest network. The development of recreational activities, **along with Coillte's open forest policy** are some of the many ways Coillte can contribute towards the 'public goods' value of forests in a community and enhance long term relationships and good will. The South Central BAU recreational activities complement the landscape and terrain within its boundaries and contribute to the social and economic life of the area.

A number of recreational facilities are the result of a joint initiative between Coillte and local communities. Examples of this collaborative effort are developments such as:

- Castlecomer Demesne Fishing Lakes and recreational area, run in conjunction with CDC (Castlecomer Development Company), which is a clear example of a derelict estate being brought back to life for the benefit of the local community.
- The Life Site at Durrow which is the restoration of an alluvial woodland site consisting **of 96ha's**.
- The development and enhancement work to the walks and trails in the BAU such as Castlemorris, Jenkinstown, Coill an Fhaltaigh (Peoples Millennium Forest), in County Kilkenny; Marl Bog, Bishops Wood, **Carey's Castle**, Glenbawn (Marlfield), in County Tipperary; Clondonnell, Coolishal, Faithlegg, Kilclooney and Mahon Bridge in County Waterford.

Many Coillte forests in this BAU are expansive and offer multiple activities such as walking, hiking, multi access, fishing, picnicking, watching wildlife, canoeing, field archaeology or simple enjoyment of the outdoors.

This BAU has designated areas for recreational activity, and these are detailed on the Coillte website www.coillteoutdoors.ie. The table below describes the recreational values of the BAUs sites.

Location	Description
Dunmore Wood, Durrow, Co Laois	Mixed woodland of broadleaves and conifers. The site contains rabbits, badgers, foxes, nature birds and fallow deer. There are also bluebells present in Spring. The site is a Coillte biodiversity area and contains a NHA/SAC.
Capponellan Wood, Durrow, Co Laois	Capponellan wood is located 1.5 km south west of Durrow. It was originally part of Castledurrow estate formerly owned by Lord Ashbrooke and subsequently divided by the Land Commission. The 'Durrow Leafy Loop' trail passes through both Capponellan and Bishop's Wood on either side of the N8.
Carey's Castle, Clonmel, Co Tipp	Car park and picnic area. The East Munster way passes through this site.

Location	Description
Faithlegg, Co Waterford	Woodland walks with panoramic views of the Suir and Nore rivers confluence.
Kilclooney, Waterford	Car park, picnic area, woodland walks and view points. Access to Corries Lakes in the Comeragh Mountains.
Castlemorris, Co Kilkenny	Castlemorris is situated off the N10 between Kilkenny and Waterford. There are 3 marked walks.
Jeninstown, Co Kilkenny	Jeninstown Park is approximately 10km north of Kilkenny city. The wood was formerly part of the Bryan Bellew Estate. Thomas Moore wrote the Last Rose of Summer while staying at Jeninstown house. There is a walled lawn area next to the house to commemorate this and it is a popular site for wedding photos. There is a deer enclosure next to the car park which is very popular with children of all ages.
Coill an Fhaltaigh, Co Kilkenny	It is located 5.8km southwest of Kilkenny off the Kilkenny to Callan road. This is a Millennium forest consisting of about 90 ha. There are 6 ha of oak woodlands over 100 years old.
Devil's Bit, Co Tipperary	There is a National Looped Walk that runs close to the famous Devils' Bit landmark.
Doonane, To Tipperary	A National Looped Walk and linear mountain access route passes through this forest in the Silvermines / Keeper Hill area. There is a mass rock, sweat house and cairn off the trails that are also popular with walkers. A car park was constructed in recent years. Up-to-date signage is also in place. The Slieve Felim Way, a long distance National Way Marked Way also passes through this forest.
Glenstal, Co Limerick	A National Looped Walk has its trailhead at the forest entrance to this property and a large section of this trail passes through the forest. Up-to-date signage is in place. The Slieve Felim Way, a long distance National Way Marked Way also passes through this forest.
Grange Crag, Co Tipperary	A National Looped Walk goes through this Coillte managed forest. There are a number of features from the bygone estate days that are included in the walks including an ice house and folly tower.
Knockalough, Co Tipperary	National Looped Walks that originate from the village in Upperchurch pass through this forest.
Knockanacree, Co Tipperary	This is a broadleaf woodland on the outskirts of the eco-village of Cloughjordan. There are a number of constructed trails in the forest.
Knockanroe/Step, Co Tipperary	A National Looped Walk passes through this forest which is located in the Silvermines. It is very popular with walkers. Up-to-date signage is in place. The Slieve Felim Way, a long distance National Way Marked Way also passes through this forest.

Location	Description
Laghile, Co Tipperary	A National Looped Walk that originates in the village of Kilcommon passes through this forest.
Marl Bog, Co Tipperary	Located close to the village of Dundrum, this site is very popular with the walkers and runners from the local running club. Facilities include a car park, lake and woodland walks.
Castlelough, Co Tipperary	Castlelough is located on the shores of Lough Derg. There are a number of former waymarked trails running through the woods
Ballyhourigan, Co Tipperary	This car park is located close to the Doonane car park and is also used by walkers.

There are also a number of Waymarked Ways passing through Coillte property in the BAU. These include the South Leinster Way, East Munster Way and Slieve Felim Way.

Coillte has also developed a number of looped trails in conjunction with Failte Ireland, under their Looped Walks Programme. The most popular are Castlemorris, Jenkinstown, Capponellan Wood, Dunmore Wood, Bishops Wood in Dundrum and **Carey's** Castle.

Coillte have been at the forefront in developing Ireland's first off-road cycle trails over recent years. These trails have been very successful and we receive numerous requests for new trail development around the country. Coillte are currently undertaking the development of an off-road cycling strategy to examine the best potential locations for future trail development.

We seek to provide high quality, authentic and safe experiences for all our visitors. One of the key issues for providing for safe cycling on the estate, is the development of sustainable trails and this requires a strategic approach to a national, regional and local trail offering. We are working closely with key partners in this strategic work, including Cycling Ireland, Failte Ireland, the National Trails Office and the Dept of Environment, Community and Local Government and we expect to have the strategy completed in September 2011. Further queries can be directed to daithi.deforge@coillte.ie.

2.4 Cultural and archaeological heritage in the South Central BAU

Coillte is aware of some 189 archaeological sites and sites of cultural significance in its landholdings in the South Central BAU. These monuments include megalithic tombs of different kinds, cashels and other enclosures and crannogs. A summary of archaeological sites in the BAU is provided in Appendix 1.

With support and advice from the NPWS, Coillte has developed a Code of Practice in order to protect this archaeological and cultural heritage.

Many land acquisitions contain farmsteads and features representing rural life in the 19th and early 20th century. These are identified and protected within forest management practices and identified when proposals for sales are being developed. They are evaluated in terms of their social and historical value and a plan implemented for their preservation.

The BAU will continue to support sites of cultural and literary heritage such as that at Jenkinstown and Woodstock, and will identify, protect and record all new items of heritage which are discovered on its lands.

2.5 Biodiversity and high conservation value forests (HCVF) within the South Central BAU

Ecological surveys were carried out between 2003 and 2006 to identify areas of maximum biodiversity value and draw up management plans for those areas. The findings of each of the completed surveys, were incorporated into our forest management plans. We consulted on our individual forest management plans a number of years ago.

The ecological survey classified 4,509 ha of Coillte lands in the BAU, where it was considered most appropriate to manage for conservation value. This area totals 9% of the BAU. Management plans for these sites have been agreed and adopted with the **ecologists and their recommendations will be implemented in Coillte's ongoing management of the areas to ensure conservation and protection.**

Each year, the sites of highest biodiversity value are targeted for monitoring and management activities. These sites are identified on a rolling programme each year.

Coillte's certification process requires it to identify areas of high conservation value forests (HCVF) across its forest estate. High conservation value forests (HCVF) are areas, not necessarily under forest, that are nationally important for nature conservation and have recognised conservation values associated with them. Two high conservation values have been identified for Coillte forest lands, namely:

1. forest areas containing globally, regionally or nationally significant concentrations of biodiversity values;
2. forest areas that are in or contain rare, threatened or endangered ecosystems.

HCVF areas in the BAU largely overlap with areas designated for nature conservation, either nationally under the Wildlife Act as Natural Heritage Areas (NHA) or under European Law in the form of the Habitats Directive as Special Areas of Conservation (SAC) or Special Protected Areas for birds (SPA). **Some old woodland sites in the BAU have the potential to be classified as HCVF and these sites are identified through Coillte's old woodland assessment procedure.**

HCVF areas may be quite large, such as Special Protection Areas in the west of Ireland for hen harrier conservation, or they may be quite small such as an old house within a forest which hosts an important roosting site for bats. They may also occur on non-forested lands such as the atlantic blanket bogs in the west and the raised bogs of the midlands.

All management operations in HCVF areas are designed to maintain and/or enhance the designated conservation value and operations are further managed using the precautionary principle.

The following table shows statutory designated areas and HCVF in the South Central BAU. Areas shown are in hectares (ha).

Designation	Area (ha) on Coillte lands
HCVF	9,817.44
NHA* - Natural Heritage Area	407.57
SAC* - Special Area of Conservation	834.84
SPA* - Special Protection Area	8,881.42
Nature Reserve	0.12
pNHA	560.71

(Overlap occurs between categories)

Coillte recognises that woodland sites have the potential to be high conservation value forests. These are Old Woodland Sites (OWS) with the best semi-natural characteristics, or that support nationally important populations of rare, threatened or endangered species. Coillte policy is to access and survey all OWS in advance of clear felling or high impact operations. Any site identified as having a **'high score'** is brought to the attention of the company's ecologists and their advice acted upon.

The South Central BAU achievements in relation to nature conservation include the following:

- One Alluvial woodland site has been restored;
- A number of sites being managed as OWS to retain their semi-natural characteristics;
- Habitats regulation assessments take place in relation to all works on designated sites.

2.6 Species and habitats in the South Central BAU

There are many special habitats in the district including excellent oak/birch/holly woodlands, mixed broadleaf woodlands, raised bog, and blanket bog. Notable mammals in the area include the Nightjar, Little Egret, Pine Marten, Red Squirrel, Fresh Water Pearl Mussel, Hen Harrier, Otter, Badger and Bats.

Detailed tables have been provided in Appendix 2 showing examples of our approach to the management of areas designated for biodiversity under each of the more important habitat types identified during the ecological surveys and also showing notable species of flora and fauna. The forest management plans for each forest contain details on the entire list of biodiversity areas involved.

2.7 Invasive species

Within the BAU there are a number of species that are not native to Ireland and which are capable of having a negative effect on native biodiversity. Most notable from a Coillte point of view are Rhododendron which is a significant issue on our properties. Other invasive species found in the BAU include giant hogweed, laurel and Japanese knotweed. Work has been carried out to help eliminate these species.

In line with international best practice, when controlling invasive species (including Rhododendron), the BAUs resources are focused on priority sites based on:

1. The **site's uniqueness (e.g. whether or not they are Priority habitats, as per EU Habitats directive)**;
2. Whether the presence of Rhododendron is likely to facilitate the spread of the exotic disease *Phytophthora ramorum*;
3. The **site's intrinsic ecological/biodiversity value (e.g. are they High Conservation Value Forests or Old Woodland Sites)**;
4. The social value of the forest (e.g. the extent to which the forest is used as a recreational facility/proximity to urban population).

2.8 Water quality and protection in the South Central BAU

In terms of water, the BAU is dominated by the South East River Basin and the Shannon International River Basin. The main rivers include Barrow, Nore, Suir and Shannon. Lough Derg is a dominant water feature. The rivers and lakes of the area support important salmon and trout fisheries and this is also important to the local economy.

Two of the catchments are designated SACs for the fresh water pearl mussel (*Margaritifera margaritifera*), namely Nore and Clodiagh.

Coillte actively participates in the implementation of the Water Framework Directive and ensures the forest sector plays its part in protecting the water bodies. Prior to the

commencement of all high impact forest operations, and environmental impact assessment is conducted whereby all important aquatic zones (as defined by the Forest Service Guidelines) and permanent relevant watercourses draining the proposed operations area are noted and mitigation measures listed to ensure protection of the waters. It is at this stage, the requirement for the establishment of water protection areas (buffer zones), if not already in-situ, will be stipulated for all watercourses. Reference will be made on how the trees are to be removed and prohibition of machinery movement in the buffer zones during forest operations.

If the proposed 'high impact' forest operations site is judged to be water sensitive, a water monitoring programme will be put in place. This will comprise of daily visual assessment and recording of surface waters draining the site during operations and the immediate adoption of appropriate contingency measures where discolouration of the water is observed. On the most sensitive sites, this monitoring process is backed up with short-term water sampling. Typically, this sampling would be of short to mid duration, lasting a few weeks to several months, depending on the duration of the forest operation. Sampling consists of taking samples from the main tributaries draining the forest site, before, during and after operations are completed.

The full implementation of both the EU Water Framework and Habitats Directives, has significant implications for forest management in the BAU. It highlights the potential pressures of forests on water quality and increased risks from erosion and sedimentation. The need to move away from monoculture blocks of forests towards restructured forest stands has been recognised in the BAU. When restocking after clear felling, an extensive network of new buffer zones will be established to protect adjoining watercourses. Drainage and cultivation practices on these sites are also designed to minimise their impact on local water. Coillte will continue to work closely with the relevant statutory bodies and assist where possible with their water and fishery rehabilitation plans.

2.9 Forest management issues

Coillte's South Central BAU faces a number of issues in relation to managing its forests effectively for production and for their recreational and social benefits. Over the past 5 years these have included security, litter, waste dumping, illegal use by motorised vehicles, inappropriate recreation, anti-social behaviour, deer poaching.

Coillte has recently introduced a set of byelaws to assist in controlling these activities.

2.10 The forest management plan consultation in South Central BAU in 2009

An extensive public consultation on the development of forest management plans for the South Central BAU was undertaken in 2008/2009 and a series of new plans developed for individual forests in the BAU.

Consultation responses relevant to the development of this BAU strategic plan are:

- Greater account of the potential adverse impacts of forest operations on the local road network with particular focus on repair to any damage caused;
- Concerns raised about the protection of archaeological monuments;
- Issues in relation to deer nuisance/damage and control of hunting and game shooting;
- Dumping raised as a concern by a number of respondents and in particular a wish that dumping is monitored more extensively in forests;
- Impacts on various habitats from forestry operations;
- Tree harvesting issues, and a wish to see Coillte becoming involved in biomass production;
- Respondents wishing to see Coillte implementing a more sympathetic approach to harvesting in order to avoid dramatic changes to the landscape;
- Sales of land by Coillte was raised as a concern;
- Reducing carbon emissions, and increasing broadleaf planting were expressed as areas for Coillte to continue working on;
- Recreation and forest parks were of great interest to people, amongst suggestions raised here were, a wish to see more and better signage on forest areas for recreation, more interpretative panels to enhance the visitor experience and improving forest tracks and roadways.

3. The South Central BAU Strategic Plan

We are very fortunate in the BAU in the richness and pristine quality of much of our environment, our wild natural resources and the presence of habitats and landscapes that are cherished both at home and internationally. We aim to maintain and enhance these assets while balancing the requirement to realise for the state and its people the enormous investment that has been made in Irish forestry over the years.

3.1 Vision

The long-term vision for the BAU is of forestry management at an intensity that is appropriate to the environmental sensitivity and productivity of its land resource. By adopting policies that ensure our efforts are concentrated on timber production in some areas and on habitat restoration in other areas we will maximise the benefits to the environment, local communities and the timber processing industry.

This vision includes:

- forestry will be a vibrant industry in the area, integrated into the local economy, providing employment opportunities in the forest, the timber industry and in many down stream activities;
- broadleaves will account for 11% of the gross area of the BAU;
- natural and semi-natural habitats are protected and enhanced through appropriate management;
- there is continuity of forest habitat for rare and threatened species;
- the public will gain health and well-being benefits from enjoying a range of recreation activities in the forests.
- forest recreational sites will be a part of the tourism infrastructure and will be an important contributor to the tourism economy;
- there will be a shared vision between the BAU and local communities on expectations from the forests and how they are managed.

3.2 The forest resource and the timber business

Coillte realises its timber sales through planting and felling on its own estates and through planting partnerships with others.

The Coillte estate

It is Coillte's policy to achieve the maximum volume potential of the estate consistent with sustainable forest management principles (see Section 4).

Key objective 1

1.76m cubic metres will be produced cumulatively over the 5 year period.

1.12m cubic metres of this will be provided through felling

0.64m cubic metres of this will be achieved through thinning

These timber supply targets are based on the forest management plans (FMP), thinning plans and national targets.

Coillte does not intend to acquire new lands for forest planting in the South Central BAU during the 2011-2015 period.

Timber supply comes from two main sources, clear felling and thinning.

- **Clear felling** is a natural part of forest management where mature crops are removed and replanted immediately with a new crop. The extent of clear felling annually is strictly controlled both externally and internally. Externally, the extent of annual clear felling is subject to statutory control by the Forest Service. Internally, control is exercised by the Coillte policy of '**Sustained Yield**'. Sustained yield allows our forests to grow and be harvested at a level that is capable of providing a continuous supply of timber for current and future generations. Coillte has introduced a number of Low Impact Silvicultural Systems (LISS) which will apply to some forests in the area. The clear fell system will, however, remain the dominant silvicultural system in the BAU during the plan period. This involves the removal of all marketable trees from an area at the end of the rotation (usually at between 35 to 45 years of age). At clear fell time considerable effort is now put into adjusting felling coupe size and shape to satisfy both environmental and landscape design purposes. Low Impact Silvicultural Systems (LISS) such as '**Small Coupe Felling**', '**Change to Broadleaf**' and '**Continuous Cover Forestry**' are in use in the BAU and it is intended to expand this level where possible during the plan period.
- **Thinning** is also a natural part of forest management and it involves staged removals of a proportion of trees in a forest over a rotation, and it is a necessary part of standard forestry practice worldwide. Thinning improves the quality of the forest by regulating the space and light provided to trees as they grow. In line with international best practices, Coillte aims to thin where possible all forests to maximise the quality and volume returns from the estate. Thinning will occur where the practice can be sustained, namely in forests with no stability threat from high winds.

All felling is controlled by the Forest Service which issues felling licences as appropriate under the 1946 Forestry Act. Coillte will ensure that all harvesting operations meet Forest Service license requirements and are planned at site level, with full assessment of environmental impact, landscape sensitivity, local consultation requirements and relevant site issues.

All felling proposals for either clear felling or thinning will be consulted on in advance with local authorities, Inland Fisheries Ireland and also the National Parks and Wildlife Service; their recommendations are then fully considered.

Forest Roads are an essential element of forest infrastructure. They provide access for management, harvesting and transport of timber and enhance the recreational potential

of forests. A number of kilometres of new road are constructed each year in the South Central BAU and there is also the need for maintenance of the existing road network. Our policy is to give each local authority a schedule of areas for harvesting and associated timber volumes, for the next five years and agree designated timber haulage routes with them. Our engineering staff has indicated the optimum layout of our road network and we are gradually extending the roads to this point. This work is ongoing and will not be complete within the timeframe of this plan.

The priority for the road infrastructure over the duration of this plan is to:

- construct of new roads where necessary in our forests;
- maintain the existing road infrastructure;
- extend spur roads where necessary to access timber stands due for harvesting in the period of the plan;
- develop road access to areas that are currently inaccessible.

Key objective 2

In the South Central BAU Coillte aims to construct forest roads where necessary to extract available timber

Factors affecting timber supply

A number of considerations affect the volume of timber that Coillte can achieve from its forests:

- **Accessing timber crops** can be challenging with both internal (right-of-way issues, poor internal access) and external (right-of-way issues, the state and nature of county council roads/bridges etc). To address the access issue a list of all difficult areas is currently compiled and these will be prioritised on the basis of timber supply and a plan put in place to address these issues by assigning relevant personnel. The BAU will consider the use of partnerships to help resolve/contribute to access difficulties on a site by site basis. In addition, a review of the road infrastructure will occur and all new haulage routes will be identified in conjunction with Kilkenny / Waterford / Laois / Tipperary / Limerick Co Councils with a view to improving access.
- **Nutrient deficiencies** The South Central BAU is primarily very fertile, however there are a small number of areas around Slievenamon and Littleton which require a treatment of manure. This treatment will be carried out following consideration of environmental sensitivities and an economic cost/benefit analysis along with the necessary foliage analysis. If the silvicultural argument is strong in terms of fertilisation we will proceed to apply for a licence to aerial fertilise those areas and conduct consultation with all relevant bodies with regard to safeguarding watercourses and comply fully with Forest Service guidelines on aerial fertilisation.

- **Meeting increasingly challenging environmental standards** requires Coillte to review its practices and assess the risks on a regular basis. Coillte has achieved sustainable forest management certification and is committed to ensure that there is continual professional development and refresher training for all staff, personnel and contractors to ensure a high environmental awareness and work standard is maintained. This will incorporate a wide range of training days and courses on all environmental issues and continued co-operation with all statutory stakeholders.
- The provision of a harvesting **infrastructure** that can respond to the environmental challenges will require ongoing training and monitoring of contractors and engaging in all relevant updates on developments in harvesting technology and machine capabilities. This is seen as a central requirement for all contractors wishing to operate in the South Central BAU.
- Sometimes the **popularity of forests for recreation** affects our capacity to fell timber.

Farm Partnerships / Afforestation Services

Coillte Forest is no longer engaging in the following areas:

Farm Partnerships Schemes

Afforestation services (private planting)

Any current partnerships/agreements still in operation which relate to the above areas will be managed over the duration of this plan by the BAU.

Replanting

Under the terms of felling licences, Coillte will fulfil its obligations to replant clearfell areas.

Key objective 3

In the South Central BAU Coillte aims to replant 3,598 ha of forest by 2015.

Overall production targets in the South Central BAU 2011-2015

Coillte's proposed operating targets for the South Central BAU for the period of the plan-2011-2015 are summarised in the following table.

South Central BAU main production targets 2011 – 2015

Annual Totals	2011	2012	2013	2014	2015
Establishment					
Planting (ha)					
Regeneration planting (r/f) (Replanting after felling)	734	546	1139	512	665
Total Planting	734	546	1139	512	665
Harvesting Programme					
Harvest categories (000m3)*					
Thinnings	80	148	136	147	129
Regeneration felling (P,C,W) felling	273	226	218	238	173
Total	353	374	354	385	302

3.3 Coillte's non-timber businesses in South Central BAU

3.3.1 Telecommunications

As one of the most significant and diverse landowners in the country Coillte has played a key role in supporting Mobile Telecommunications Infrastructure in Ireland over the past 20 years. In the early years this business originated from customer led requests for leased sites to support the roll-out of mobile telephony infrastructure. More recently Coillte has taken a more proactive role with its involvement in supporting the requirements of the National Broadband Scheme. Coillte provided sites and infrastructure for approximately 100 mast sites across the country, equating to 25% of one of the most important infrastructure programs in Ireland in this decade. Coillte is committed to ongoing investment in infrastructure in support of Ireland's objective to achieve top tier status in respect of critical telecommunications infrastructure and access to broadband.

Coillte has significant commercial relationships with the four Mobile Network Operator's in Ireland, namely; Vodafone, O2, Meteor & 3Ireland. We expect the mobile market to continue to be dominated by the four mobile network operators over the next decade as they have reached market saturation in terms of new customers. The Irish market has achieved the highest level of mobile telephony penetration in the EU. The main area of growth for the current customer base will be the provision of high speed mobile broadband services. This will be achieved through the following key initiatives:

- Allocation of additional frequency spectrum by ComReg;

- Deployment of new technology in the form of Next Generation Networks;
- Fibre connectivity to Telecom sites.

At present there are 3 sites proposed for connection to fibre please see attached table. These developments are subject to Customer interest and Coillte consultation protocols.

The site locations are Glencoum, Crohaun and Ballydaw.

Key objective 4

In the South Central BAU Coillte will have connection to fibre on 3 masts by 2015.

3.3.2 Renewable energy projects

Coillte is developing wind farm projects in the South Central BAU, either on its own or through joint venture partnerships. In addition Coillte is working with third party developers who wish to purchase, lease or gain an easement through Coillte lands in the development of their projects. In working to develop the potential of its estate for wind power Coillte considers the social, economic and environmental impact a wind farm may have on the surrounding area.

Within this plan period Coillte proposes to develop or facilitate third party developers develop the following sites:

- Boolabrien Windfarm in Clonmel forest
- Glencarbry Wind Farm in Upperchurch forest
- Cullenagh Windfarm in Cullenagh forest
- Moanincha Windfarm in Templemore forest
- Baunmore Outer Windfarm in Lisdowney forest

All wind farms have been designed in cognisance of all designated sites, Coillte's own biodiversity and high conservation value forest areas, the importance of the receiving waters in the area and to blend into the existing landscape.

As part of the turbine siting process buffer zones were established around all environmental receptors and additional buffering was established between turbines and Natural Heritage Areas (NHA) and Special Areas of Conservation (SAC). Extensive peer review to the design was incorporated both within Coillte and externally.

Coillte will continue to seek out opportunities for wind energy development opportunities within BAU6 during the period of this plan.

Key objective 5

In the South Central BAU Coillte aims to continue the development of 5 wind farms in the period to 2015.

3.3.3 Land sales and development

Each year the BAU sells, leases or develops a limited area of land, for purposes other than forestry. Most sales are made in response to local demand and typically comprise house sites, isolated dwelling houses, small outlying forest properties, small areas of forest to neighbouring land owners, gravel pits, land to local authorities for infrastructure projects and land for development. Properties sold are those where their value greatly exceeds their value for forestry purposes. A signing-off committee within the company considers all land sales, with larger sales requiring the approval of the Board of Directors. Joint development approaches with local communities are favoured.

It is important to note that no development or lease of lands will be entered into until the consultation/planning process is completed. This includes consultation in particular with local people and communities.

In the course of the period of this plan, properties will be identified which are considered suitable for sale or lease and we will endeavour to consult with the people likely to be affected as these arise.

3.3.4 Licensed use of Coillte lands

Whilst Coillte has an open access policy for walking, it has a policy to develop the commercial potential of its lands by permitting its use by groups or individuals for other recreational and commercial activities. The company aims to maximise revenues from licensed use. Examples of such activities are mountain-bike events, shooting, pony trekking, off-road driving, orienteering and others as requested. The position in regard to these activities and which benefit both Coillte and the applicant is that permission is given under written licence from Coillte. The licence is the formal permission allowing the activity to take place on Coillte lands. It contains a number of conditions and some of these conditions are geared towards the activity and the particular location. Responsibility for issuing the licence, management, processing and safekeeping, rests with the manager at the location. A fee based on the activity is charged for each licence.

3.3.4.1 Licensed Hunting

Game hunting and deer stalking are amongst the oldest forms of forest recreation and continue to be legally enjoyed by many people across the country. Respecting the traditional nature of this activity and recognising the social, environmental and economic benefits which hunting can have, Coillte may permit certain types of hunting on designated areas of the estate. This is in line with Coillte's [Recreation Policy](#), and [Deer Management Policy](#) as well as supporting the principles of multiple use forestry.

Hunting is managed and regulated through the issue of licences which are subject to open public tender. Available areas are advertised bi-annually via the Companies website www.Coillteoutdoors.ie. Tender bids are [evaluated](#) by the relevant BAU personnel in accordance with a standard scoring matrix which acknowledges the annual fee offered,

the applicant's previous experience, their commitment to safety, as well as environmental and local interest considerations. Coillte is moving toward a position whereby only persons who have completed an approved competence assessment will be permitted to hunt on its lands. Currently this is a mandatory requirement for all those intending to hunt wild deer.

Coillte have produced [codes of practice](#) which establish minimum standards expected of all persons engaged in these activities alongside compliance with licence conditions and national legislation.

3.4 Community, recreation and tourism Proposals

Coillte's proposed recreation priorities for the South Central BAU between 2011 and 2015 include:

- engaging with local community groups and where possible agreeing partnership arrangements for the maintenance and enhancement of existing facilities and possible development of new ones;
- managing and maintaining all existing recreation sites including waymarked ways to the highest standards;
- sourcing funding and developing new **infrastructure including 'access for all'** on a based on needs identified in conjunction with stakeholders and funding agencies, and to enhance local tourism potential;
- managing unauthorised usage of the recreation infrastructure in line with best management practice and security policy;
- Continuing our exploration of the development of amenities with all relevant County Councils;

It is anticipated that a BAU recreation plan will be developed for the South Central BAU during the lifetime of this plan.

Key objective 6

In the South Central BAU Coillte aims to Continue development of amenities for community and recreational use.

Develop a BAU recreation plan.

3.5 Cultural heritage and archaeology measures in the South Central BAU

Coillte, as manager of the **State's forestry estate**, has a duty to respect the cultural heritage attached to it. With support and advice from the NPWS it has developed a code of practice in order to protect this archaeological and cultural heritage.

The BAU will continue to protect archaeological sites on its lands and to note any new sites located during surveys. All recorded archaeological monuments are highlighted during the planning stage of operations. They are identified and fenced off on site by the

forest manager to ensure their protection. Pedestrian access from the nearest public road is provided for such sites. Unrecorded archaeological monuments when located are immediately protected and reported to the Environmental Officer. The Forest Service Archaeologist is also notified who advises accordingly. The BAU will continue to support sites of cultural and literary heritage and will identify, protect and record all new items of heritage which are discovered on our lands.

3.6 Environmental enhancement measures

The following environmental enhancement measures are proposed for the period 2011 - 2015.

3.6.1 Diversification of species

Coillte policy is to encourage species diversification in order to maintain and enhance the productive potential of its estate and to increase biodiversity in its forests.

Coillte has developed a species diversification strategy based on the requirements of the FSC Standard. This requires that the BAU target proportions are as follows:

Category	Target	Current (2010)	
	%	%	Ha
*Primary species	<65%	57.9%	24,552
^Secondary species	>20%	20.1%	8,536
Broadleaves	>10%	16.4%	6,969
Open space	>5%	5.5%	2,338

* sitka spruce ^ norway spruce, douglas fir, scots pine, etc.

To reduce or eliminate the need for artificial fertilisation programmes, a more cautious species selection is being applied within the BAU, so that the species planted will not need supplementary fertiliser over its rotation. This effectively means we are pursuing a policy of planting lodgepole pine or pine/spruce mixtures on the low yielding sensitive sites. Diverse conifer species such as Scots pine can also be used in areas of shallow peat. Riparian zones are either left as open space or planted with suitable native broadleaf species.

Key objective 7

In the South Central BAU Coillte aims to:

Maintain and enhance the percentage of broadleaves in the BAU managed for biodiversity

Vegetatively improved Sitka spruce to be planted to increase productivity

3.6.2 Biodiversity

At present 9.3% (4,509 ha) of the Coillte land area in the South Central BAU is designated and managed for biodiversity. A further 2,171 ha has been identified by Coillte management within the BAU as suitable for biodiversity management thus bringing the total area managed for biodiversity to 13.87%. Species diversification (see section 3.6.1) and particularly the increase in broadleaved planting to 11% accounts for this. These proposals have been detailed and consulted on in each forest through the forest management planning process during 2009/2010.

Principal methods of retaining biodiversity in the BAU will include:

- **Retention of Old Woodland Sites (OWS)** which have supported woodland cover since at least 1830 and which have particular importance as reservoirs of native biodiversity. The BAU has 5,302 ha identified as old woodland. This represents 11% of the Coillte land in the BAU and 20% of the old woodland identified on Coillte's estate nationally. The management of these areas will be in line with Coillte's old woodland sites policy which includes assessing the value of any OWS before felling and high impact operations for designation as high nature value forests, and reviewing all sites that received a good rating from ecologists in the biodiversity survey in 2001-2005 for HCVF potential.
- **Continuing the introduction of riparian buffer zones** as part of the FMP process along all permanent watercourses, typically these will consist of a 10m unplanted strip on either side of the watercourse.
- **Retaining dead wood** in all forests managed by Coillte, consistent with health and safety requirements. Ecologically, dead trees are as important as live ones in natural forest ecosystems. They are important structural elements in forest, providing a wide range of decay classes, which support a wide range of invertebrate and vertebrate animals and epiphytic and saprophytic plants and fungi. Dead and decaying wood can provide habitats for more than one-fifth of the woodland fauna. In the UK, 34% of scarce invertebrates depend upon dead wood. Dead and decaying wood also influences the flow rate and organic debris in forest streams and rivers. The intention is that the concentration of deadwood will be the highest in semi-natural woodlands (old woodland sites and broadleaved stands) where large trees will be allowed to grow old and die off on site. On all sites being surveyed by inventory staff, deadwood stems are being recorded.
- Carrying out **survey and monitoring** of important species and habitats, and of water quality to ensure that we are making progress.
- Participating in **biodiversity action plans** for priority species and habitats in partnership with others.

- Long term **water quality improvement** through changes in practice and the reduction in use of chemicals
- Monitoring sites that were the subject of **EU LIFE projects** during the period of the last BAU strategic plan, and engaging with partners in developing new habitat management projects.
- **Controlling invasive species** (such as Rhododendron) on the Coillte estate, through planting of appropriate species.
- Coillte are committed to implementing a maintenance program for the **native woodland sites** over the duration of the plan.

Key objective 8

In the South Central BAU Coillte aims to maintain the current percentage of 13.87% in the BAU managed for biodiversity

4. Sustainable forest management policies and proposals

Sustainability is the key principle on which all Coillte planning is based which requires meeting four closely related objectives:

- wise use of natural and cultural resources;
- effective protection of the environment;
- sustainable production of forest products (wood and non-wood);
- working with people.

These are embodied in the **Forest Stewardship Council's (FSC)** International Forestry Standard.

Coillte is committed to sustainable forest management and has worked for and achieved Forest Stewardship Council Certification for its Coillte Forest operations. Coillte manages its forests to this standard and forest certification verifies that sustainable forest management is being practiced. FSC principles used in certification are shown in Appendix III.

Coillte has adopted the FSC principles in full and has been awarded Forest Stewardship Certification. Key components of the approach taken by Coillte to Sustainable Forest Management during the BAU strategic plan period will be:

4.1 Long term retention of some mature trees

To practice long term retention of some stands of timber to enhance environmental, landscape and social benefits of our holdings.

There are 55 Stands designated for retention in 17 forests in BAU totalling 546 ha.

Scots pine is the only conifer tree regarded as a native species and it is our policy to retain them long term where its possible and safe to do so.

4.2 Practicing Low Impact Silvicultural² Systems (LISS)

To practice low impact silvicultural systems as appropriate to the felling situation in order to minimise environmental impacts of felling

The table below explains the various silvicultural systems that collectively are known as low impact silvicultural systems (LISS). All are regarded as alternative methods of silvicultural management to clearfelling. The introduction of LISS systems can only be achieved gradually and can take up to a rotation length to complete.

² Growing, cultivating and felling trees

LISS method	Description
Continuous cover forestry (CCF)	Crop is removed from the stand in stages over time and the successor crop is allowed to establish itself, before the final removal of the mature crop.
Low Impact Regeneration (LIR) Natural regeneration	Regenerate the successor crop using minimum cultivation techniques and a reduced number of stems. Remove the crop either by clear felling, or by a series of thinnings and allow the successor crop regenerate naturally
Small coupe felling	Crop is removed in small felling coupes (2 to 5 ha) with a minimum of 3 yrs between coupes. A variation of CCF
Convert to broadleaves (CTB)	Removal of a conifer crop over time and replace with broadleaves.

The BAU will be using the most appropriate of these options as the silvicultural management system in the BAU for biodiversity areas including old woodlands.

4.3 Using forest design

The BAU recognises its responsibilities to ensure that its forests are planned and managed in a manner that enhances the landscape. All of the BAU team members have been trained in forest landscape techniques and design. All of the forests (and associated properties) have been given a landscape sensitivity designation of high, medium or low. Each forest therefore requires attention to a greater or lesser extent based on these ratings. The production and implementation of a landscape plan is a constantly evolving process which is under continuous review. The majority of forestry within the BAU is not located in areas of high landscape sensitivity.

A number of factors will be addressed when drawing up a landscape plan. Felling coupe size is one of the most important of these. As a general rule, felling coupes should not be any greater than 20ha. To this extent, BAU team members have identified coupes which were greater than 20ha and redesigned/restructured these areas as necessary. There may be situations where felling coupes of greater than 20ha will be necessary, and these will be treated on an individual basis, with the appropriate assessment and consultation process carried out prior to any felling taking place. Other factors and constraints which need to be considered are; age and structural diversity, limited species selection, soil type, windthrow risk, elevation, deer abundance and buffer zone management. These factors are by no means exhaustive. For example, in recent times the disease *Phytophthora ramorum* has spread in certain locations in Ireland. The disease can kill Larch species, which was always considered a valuable species in terms of providing colour in a landscape. This disease has been detected in this BAU and it is having an impact on species selection when planning landscape design.

Much of our forest design plan centres around buffer and riparian zone management. As current coniferous crops are clear felled, opportunities arise to create riparian areas both

within and around the forest properties. These new areas will be managed as a mixture of open space and native broadleaf species such as Rowan, Birch, and Willow.

4.4. Water protection

Coillte's Policy on water protection and water monitoring is outlined in "Water Protection and Forest Operations Guidelines". The procedures for protection and management of Riparian zones are contained within these guidelines.

Adherence to Forest Service Guidelines and Code of Best Forest Practice is mandatory. As conifer plantations are clearfelled and replanted buffer zones of broadleaves and broadleaf scrub are being established along all waterways. The provision of sediment traps is now standard practice where there is any risk of siltation occurring. A pollution control plan is in place within Management Unit Site File (MUSF) and a pollution control kit is on site for all high impact operations.

Apart from short-term water sampling of 'high impact' forest operations described in Section 2.8, a number of long term fixed sampling sites on selected rivers has been established. The purpose of this sampling is to determine the cumulative impact of forests and associated forest practices have on water quality. Sampling is conducted at least three to four times a year, increasing to at least 6 times in areas of intense forest activity is taking place. Samples are taken at these areas at least three times a year.

Finally, BAU consults with its stakeholders on the topic of water, e.g. representation on the South Western River Basin District Steering Groups. Regular consultations with Inland Fisheries Ireland (formerly the Regional Fisheries Boards), NPWS and Co. Councils on forest operations etc.

4.5 Reducing use of chemicals

Coillte uses an integrated pest management approach; a core principle of FSC. As such, Coillte is committed to reducing its chemical pesticide usage and, where possible, to using non-chemical methods to control pests and weeds. Chemicals are applied only when absolutely necessary due to environmental considerations and cost. The decision to apply a chemical is based on a site assessment, and only taken where non chemical control options are unlikely to give sufficient protection at a reasonable cost. When chemicals are required, only pesticides approved for use in forestry by the Pesticides Control Service in the Department of Agriculture Fisheries and Food (the regulatory body for pesticide use in this country) and FSC are used. All spraying is targeted, using hand operated sprayers only.

Where chemicals are required, their storage, usage and disposal all comply with national pesticide legislation, FSC policies and health and safety guidelines.

Vegetation control can be a problem on the more fertile sites and on these sites herbicides are often the most effective and efficient method of crop protection.

Application of fertilisers to areas to be restocked is only carried out where site fertility is low. Where tree crops develop nutrient problems in later years, foliar analysis is undertaken to determine the quantities of fertiliser to be applied. Where required, aerial fertilisation is carried out on thicket stage crops. Approval from the Forest Service is required for aerial fertilisation.

4.6 Working with people

Coillte's policy is to consult widely with stakeholders in formulating its forest management plans, policies and objectives. Examples of how Coillte consults with its stakeholders are outlined below:

- consultation on our BAU felling plans takes place on a formal basis with the Forest Service, Fisheries Boards, National Parks and Wildlife Service and County Councils within the BAU;
- Coillte consults at national level on new policies in relation to its forests, at BAU level on its BAU strategic plans and at all levels on its forest management plans. The BAU strategic plan and forest management plans are currently on a five year cycle;
- Coillte has a BAU social and environmental panel which meets regularly as part of Coillte's continuing consultation and engagement. This forum allows Coillte, and environmental, social and community interests to discuss issues of common interest. The minutes of these BAU panel meetings can be viewed at the BAU head office if required;
- Coillte continues to explore opportunities to improve public participation in forest management;
- a comprehensive stakeholder list is held in each of the BAUs. This includes names of local community groups, statutory organisations, non governmental organisations, farm partners, contractors, customers, complainants, and many other stakeholders. Coillte carry out an annual update of our stakeholder list to ensure that our records are as accurate as possible;
- Coillte also welcome any member of the community and stakeholders in general to view our website www.coillte.ie to find out more about what we do, or to contact us in person so that we can answer their queries, or respond to their issues.

Stakeholders should note that Coillte on occasion have to make adjustments or amendments to our felling plans for reasons such as silvicultural, landscape design, restructuring, market conditions, forest disease and windblow. These changes are **consulted on in line with Coillte's consultation policy.**

4.7 Monitoring and evaluation

Coillte continues to monitor the achievement of its objectives and targets using the performance set out in Appendix IV. The results of this monitoring will be available in Coillte's sustainability reports on the Coillte website www.coillte.ie

4.8 Coillte consultation on our BAU strategic plans

It is Coillte's policy to consult widely with stakeholders in formulating its management plans and part of this was a review of our strategic plans which took place during 2010/2011. During this process Coillte actively engaged with stakeholders, in the following ways:

- national newspaper adverts
- mail shots to our listed stakeholders
- **consultation via Coillte's website**
- regional newspaper adverts, regional radio adverts
- flyers and notices about our consultation process at amenity site entrances
- open public meetings which allowed further feedback

Coillte received a relatively good response in relation to consultation on these strategic plans with upwards of 175 consultation submissions received overall. Coillte endeavoured to take on board inputs into our plan creation, however we had to attempt to balance all contributions received in relation to the management plans. Please see below for amendments which have been made to this BAU strategic plan as a consequence of consultation with our stakeholders. Coillte would like to thank all our stakeholders for their valuable contributions. Following this consultation process and a **similar consultation process on our forest management plan's during 2008/2009, a summary of submissions and Coillte's response was made available to our stakeholders for their information.** This can be viewed as follows: http://www.coillte.ie/coillteforest/plans/BAU_strategic_plans/

4.8.1 Consultation in South Central BAU

Following our consultation process in this BAU, we received a small number of consultation submissions under various headings such as recreation, biodiversity, community initiatives, environmental, deer/game management, etc.

After considering all consultation submissions, the following amendments/notes are being made to this BAU strategic plan.

Section referenced in document	Changes made to this BAU following consultation
Section 1.2 - Renewable Energy (submission prior to re-alignment of BAU boundaries)	Coillte is committed to helping reduce Ireland’s carbon emissions and achieving the Governments renewable energy targets. Coillte is involved in a range of wind energy projects throughout Ireland either on its own or with venture capital partners. The Cullenagh, Dooary area outside of Timahoe in Co. Laois is presently being investigated as to its suitability for such a venture. Information meetings with stakeholders and local communities have recently been held in Ballyroan and Timahoe. The proposal is at an early stage. Coillte’s policy with all such developments is to have open and transparent consultation.
Section 1.2 – Renewable Energy (submission following re-alignment of BAU boundaries)	Text addition suggested by Mountaineering Ireland to be added to section 1.2 Renewable Energy <ul style="list-style-type: none"> • Minimising the landscape impact of wind farms through careful siting and design. • Considering the impact on recreational users, and also the opportunity there may be when developing a wind farm to put in trails or other recreational facilities.
Section 1.2 - Renewable Energy (submission following re-alignment of BAU boundaries)	<u>Submission by Tipperary Energy Agency (TEA):</u> We would encourage the following to be completed by Coillte, in consultation with the bio-energy industry: <ul style="list-style-type: none"> • Strategic plan on how Coillte can realise it’s share of the heat market by 2020, and a road map to meet those objectives. • Local Wood supply: <ul style="list-style-type: none"> ○ Wood chip hubs should be established, in partnership with the wood chip industry. ○ Wood log hubs for local collection and distribution

Section referenced in document	Changes made to this BAU following consultation
	<p>to the domestic market in conjunction with local processors.</p> <p><u>Response by Coillte:</u></p> <p>Coillte recognizes that in today's economic climate, Irish businesses cannot afford to ignore the high cost of energy. Ireland's dependence on imported fossil fuel has left energy consumers vulnerable in terms of energy security, energy price volatility and exposure to carbon taxes. The Irish biomass resource plays an important role in contributing to the reduction in greenhouse gas emissions for Ireland. Forestry acts as a sink for the removal for CO2 from the atmosphere. Biomass can substitute for fossil fuels and be used to produce process heat and steam for industry, or in power production through Combined Heat and Power technologies. Switching to biomass renewable heat would not only reduce the cost base of Irish companies but would protect them from the price volatility associated with traditional fossil fuels.</p> <p>Coillte would welcome an opportunity to engage with the Tipperary Energy Agency in an attempt to address local industry concerns regarding energy security and energy costs. Subject to commercial evaluation and appropriate scale, Coillte would be keen to explore the possibility of a biomass energy supply hub in the region.</p>
Section 2.7 - Invasive Species	Japanese knotweed presence was reported by members of the public in two locations within the BAU. The knotweed is not native to Ireland and causes damage to walls, buildings and has a negative effect on biodiversity.

Section referenced in document	Changes made to this BAU following consultation
Section 2.9 – Forest Management Issues	<p>Stakeholders have complained about dumping in certain parts of the BAU. Staff are very concerned about these issues and work actively to deal with them on an ongoing basis. It costs money to clean up such areas. With the help of the Councils litter wardens, prosecutions have been secured. In repeat areas we have introduced the use of security cameras and this new initiative is already showing results.</p> <p>The relevant authorities such as Gardai, Litter Warden and Coillte will pursue prosecutions in the normal way and Coillte will pursue all associated costs with removal and disposal of the rubbish.</p>
Section 3.1 – Vision (submission following re-alignment of BAU boundaries)	<p>Text addition suggested by Mountaineering Ireland to be added to section 3.1 Vision</p> <p>“The public will gain health and well-being benefits from enjoying a range of recreation activities in the forests”</p>

Appendix I - Summary of Archaeological Sites in South Central BAU

Type of Monument	No. In BAU	SMRS Number *
Architectural fragment	1	WA004-028----
Barrow - ring-barrow	4	WA006-027----,WA006-022001-,TN033-051----,TN033-038----
Bawn	1	TS078-028001-
Booley hut	1	WA006-014003-
Boundary stone	1	WA024-045----
Bridge	1	KK014-014----
Building	6	KK029-033007-,KK029-033006-,KK029-033005-,KK029-033004-,KK029-033003-,KK029-033002-
Bullaun stone	1	WA004-023----
Burial ground	1	TN027-124----
Cairn	10	WA023-004----,TS079-024005-,TS071-052----,TS045-014---,TN040-039002-,TN038-018----,TN033-002----,TN027-140002-,KK040-019----,KK033-015----
Cairnfield	1	WA006-014001-
Castle - motte	1	TS054-054----
Castle - tower house	1	KK033-027001-
Castle - unclassified	3	KK031-028----,KK007-001001-,KK005-021----
Cave	1	KK036-040----
Church	1	KK022-019001-
Cist	2	WA006-022004-,TN040-039001-
Cross	1	TN028-092----
Deerpark boundary	1	TS054-071----
Designed landscape - folly	1	KK033-027003-
Earthwork	7	WA017-053----,WA017-052----,WA013-014----,WA013-003----,TS048-024----,TS043-033----,KK007-001002-
Ecclesiastical enclosure	2	LA029-046002-,KK022-019002-
Ecclesiastical site	1	LA029-046001-

Type of Monument	No. In BAU	SMRS Number *
Enclosure	40	WA014-061----,WA014-058001-,WA001-005----,TS079-024004-,TS079-024003-,TS064-004----,TS055-037----,TS054-056----,TS054-055----,TS051-038----,TS051-013---,TS045-020----,TS045-012----,TS043-044----,TS043-023---,TN038-017----,TN033-041002-,TN026-010----,TN019-029----,LI025-017----,LI024-176----,LI024-165----,LI024-042----,LI023-027----,LI014-136----,LI014-037----,LA014-044----,KK039-006----,KK035-103----,KK033-048----,KK028-033----,KK028-015----,KK024-076----,KK013-131---,KK013-034----,KK008-105----,KK008-086002-,KK008-086001-,KK005-018----,KK005-006---
Field system	1	TS079-024002-
Fulacht fia	8	WA023-066040-,WA023-066039-,WA015-076----,WA006-025----,WA004-016----,KK032-051----,KK023-050----,KK008-143----
Hillfort	3	TS079-027----,TS079-024001-,TN027-140001-
House - 16th/17th century	2	WA015-059002-,TS078-028----
House - 18th/19th century	2	WA001-037----,KK014-007----
House - indeterminate date	1	WA014-054----
Hut site	6	WA015-059003-,WA014-058004-,WA014-058003-,WA014-058002-,KK033-049----,KK029-032002-
Kerb circle	1	WA006-024001-
Megalithic structure	1	TN032-007----
Megalithic tomb - portal tomb	1	KK039-044----
Megalithic tomb - unclassified	1	TN038-022----
Megalithic tomb - wedge tomb	3	TN039-014----,TN039-007----,KK035-114----
Mine	2	WA007-088----,WA005-058----
Moated site	5	WA015-059001-,TS055-038----,TS043-041----,TN023-060---,KK029-033001-
Mound	3	TS052-016----,TN028-033----,LA023-018----
Quarry - medieval	1	LA029-027----
Ring-cairn	1	WA006-014002-

Type of Monument	No. In BAU	SMRS Number *
Ringfort - rath	29	WA015-002----,WA002-036----,WA002-035----,WA002-012----,WA002-006----,WA001-006----,WA001-004----,TS082-053----,TS078-003001-,TS077-024----,TS069-043----,TS055-036----,TS049-033----,TS043-032----,TS043-029---,TN028-017----,TN027-136----,TN023-051----,TN023-022002-,TN023-022001-,TN023-021----,TN019-037----,TN019-028----,TN011-024----,KK032-029----,KK013-039---,KK010-023----,KK008-002----,KK008-001----
Ritual site - holy tree/bush	1	KK032-026----
Ritual site - holy well	3	TN028-031----,LI023-028----,KK006-002----
Road - road/trackway	2	TS048-043----,TS045-023----
Road - togher (primary)	1	TS036-051----
Road - togher (tertiary)	2	KK008-151002-,KK008-151001-
Sheepfold	1	WA014-059----
Souterrain	1	TS078-003002-
Standing stone	10	WA014-062----,WA014-060----,WA006-039----,WA006-024002-,WA006-023002-,WA006-022003-,WA002-008----,TN033-040----,TN023-067----,TN023-022003-
Standing stone - pair	2	TN033-041001-,TN019-040----
Stone row	3	WA006-023001-,WA006-022002-,KK033-005----
Sweathouse	1	TN032-010----
Water mill - unclassified	1	TN019-003----

* The SMRS numbers listed in the above table can be used to view and search for these monuments using The National Monuments Service Mapviewer available at www.archaeology.ie. When the number of monument types exceeds 10 only the first 10 SMRS numbers are listed.

Appendix II - Habitats and Species in South Central BAU

Special habitats in South Central BAU

Petrifying springs (FP1)				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
Laois: Knocknatrina	Part of a stream-beech-alluvial woodland complex.	Maintain quality by maintaining existing conditions		

Eroding/Upland rivers (FW1) & Depositing/lowland rivers (FW2)				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
River Suir and tributaries – SAC 2137		Protection and preservation of rare species within these rivers by the creation of buffer zones		Avoidance of siltation and eutrophication

Dry Heath (HH1)				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
Cooneen, Ballyhourigan, Barnabaun, Bauraglanna, Bunkimalta, Coolruntha, Middlequarter	Dry Heath	Retain existing unplanted dry heath habitat. Increase area of open dry peat habitat. Restore open riparian zones.	Retain open areas. Fell, do not replant areas	Felling licence – permission not to replant
Shanrahan Foildarrig Killeatin Gortacullin Kildanoge Knockballiniry Knockalisheen	Good quality dry heath habitat in relatively natural condition.	Retain existing unplanted dry heath habitat. Increase area of open ground. Restore open riparian zones.	Retain open areas. Fell, planting by agreement with NPWS.	Monitor grazing and burning.

Wet Heath (HH3)				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
Knocknamoheragh TY03	Good quality wet heath	Retain existing unplanted wet heath habitat. Restore open riparian zones.	Retain open areas. Restore riparian zones	Maintain boundary integrity

Raised Bog (PB1)				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
<p>Scohaboy Bog – Sopwell Property TY01</p> <p>Derrybreen Bog TY01</p>	<p>Raised bog minimally impacted by anthropogenic activity.</p> <p>Deep Bog areas forested but suitable for restoration.</p>	<p>Retain existing unplanted Raised bog habitat. Restore open riparian zones. Some sites in the District have been selected for restoration under Coillte's Life-Nature Raised Bog Restoration Project.</p>	<p>Retain open areas.</p> <p>Block drains.</p> <p>Implement ongoing monitoring of Life-Nature Project sites.</p>	<p>Regeneration of Birch in areas where forest has been removed.</p>
<p>Aughamucky</p>	<p>Moderate sized area of bog. Rare habitat in locality. Good flora.</p>	<p>Retain habitat. Prevent drainage / damage.</p>	<p>Prevent water run-off.</p>	<p>Consult with local landowners.</p>

Blanket Bog (PB2)				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
<p>Dromdeeven Upland blanket bog (NHA) Keeper Hill TY03</p> <p>Mauhersleive Mountain TY05</p>	<p>Blanket bog minimally impacted by anthropogenic activity.</p> <p>Deep Bog areas forested but suitable for restoration.</p>	<p>Retain existing unplanted blanket bog habitat.</p> <p>Restore open riparian zones.</p>	<p>Retain open areas.</p>	<p>Regeneration of Birch in areas where forest has been removed.</p>
<p>Croghtenclogh</p>	<p>Moderate sized largely intact blanket bog. Associated with riparian salmonid habitat (River Dinnin). Possible SAC in future</p>	<p>Retain existing unplanted blanket bog habitat. Increase area of open blanket bog habitat at expense of conifers. Block drains. Follow SAC management guidelines.</p>	<p>Block off drains. Monitor area for water run-off.</p>	<p>Consultation with adjoining land owners re effect of blocked drains to their property.</p>

Rich fen and flush (PF1)				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
Foulkscourt	Moderate sized semi-natural habitat. Calcareous fen (Annex I) with rare plants. Associated with turlough and riparian habitat (River Gaule). Small area of wet woodland and conifers	Retain fen habitat. Restore conifer woodland to WN4.		Adhere to Forest Service guidelines.

Special habitats (non-forest) in South Central BAU

Oligotrophic Lakes				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
Monaincha – TY08	Good quality Oligotrophic water-bodies in acid peatland catchments.	Retain and monitor.	Retain and monitor.	N/A

Protected or rare species in South Central BAU

Bats				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
Gortarush - TY11	A Coillte-owned building in the International Scout Centre houses a colony of Whiskered bats and is an NHA, Dundrum 2096	Protect roost and maintain suitable foraging habitat.	The creation and/or maintenance of broad-leaved tree or shrub edges to certain forest tracks leading from the roost are part of the management plan for the Biodiversity Area.	Close liaison with NPWS on an ongoing basis.
Jeninstown	Old stone building, ex quern, in yard.	Maintain and protect old stone building		Be aware of current legislation
Woodstock	Ice house on Poyntz road	Maintain and protect Ice House – gate recently erected to protect bat roost		Be aware of current legislation

Hen Harrier				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
LK03, TY03, TY04, TY05, TY06, TY10 – (SPA 4165)	These SPA's are of good quality and provide a highly rated Hen Harrier habitats.	Maintain suitable foraging and nesting habitats.	Consultation with NPWS & FS, retain open space and restructuring plan.	Reduction of log supply to the industry, loss of revenue, additional costs.

Freshwater Pearl Mussel				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
All properties within the 6km zone such as: , Foulkscourt, Islands, Inchirourke, Knocknatrina, Coursewood, Coolcorberry, Kilmartin, Dunmore, Knockanoran/Bishop's Wood, Killeany,		To comply with all guidelines and directives. Follow Biodiversity Action Plan to prevent silting of pearl mussel rivers. Co-operate in the proposed captive breeding programme.		Be aware of current legislation
Licky, Clodiagh and Munster Blackwater Rivers and tributaries	Freshwater pearl mussel, Salmon, River, Brook and Sea lampreys, Otter (Annex II habitats Directive)	Manage all forest operations in an environmentally friendly manner. Adhere to all Forest Service guidelines and SOPs.	Carry out Appropriate assessments and complete EIA's on relevant sensitive Clearfell sites within the catchment of the pearl mussel of the Munster Blackwater in consultation with NPWS and Forest Service. Ensure minimal impact on soil and water quality during forest operations upstream of FPM populations through Coillte EIA procedure.	Maintenance of water quality.

Freshwater Pearl Mussel				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
<p><i>Margaritifera durrovensis</i></p> <p>Nore Catchment –</p> <p>TY07 - Longford wood, Gorteenashingaun (part of)</p> <p>TY08 - Monaincha, Sheehys, Timoney, Gortnagowna</p> <p>TY12 - Grangecrag, Kilcooly, Sallybog, Crab, Knockatooreen, Kilbraugh</p>	<p>These catchments are of good water quality and provide a highly rated pearl mussel habitat</p> <p><i>M. durrovensis</i> – hardwater spp., only occurs in Ireland, one small population in River Nore</p>	<p>Comply with FS FWPM Guidelines on.</p>	<p>Consider postponement of clear-felling on deep peat sites within the catchments of the pearl mussel in consultation with NPWS.</p> <p>Recommendations on Forest Service FWPM Guidelines and WFD Sub-basin FWPM Forestry Management plans to apply. Liaise with pearl mussel technical group of FS</p>	<p>Reduction of log supply to the timber industry loss of revenue.</p> <p>Increased cost of special protective measures.</p>

Otter <i>Lutra lutra</i>				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
<p>Otters are probably widespread on many rivers. Their presence was specifically indicated at Kilmartin (Laois)</p>	<p>Habitat includes the Nore and flowing drains through the plantation</p>	<p>Maintain a good riparian buffer zone. Where felling is necessary, stagger the felling dates and allow natural regeneration so that there is always good cover on at least one side of stream.</p>		

Crayfish				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
Aherlow and Suir rivers.				

Twaite Shad				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
Lower parts of Suir and Munster Blackwater rivers				

Native and mixed woodlands in South Central BAU

Oak-birch-holly Woodland (WN1)				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
Brown's Wood	Moderate sized mixed broadleaf woodland with some oak-birch-holly (WN1). Good flora. OWS.	Restore/increase area of WN1 woodland.	Non-intervention for next 5 years. Monitor for invasive species and remove if necessary.	

Oak-ash Woodland (WN2)				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
Glenmullen	Extensive area of mixed broadleaf and native woodland associated with sensitive catchment area and salmonid habitat (SAC). Good flora.	Retain semi-natural woodland and restore conifers to WN2. Protect riparian habitat.	Remove Douglas Fir in thinning.	
Laois: Knockanoran; Bishop's Wood Coursewood Knocknatrina	Extensive, but highly modified mixed woodland. Excellent potential for restoration Under conifers with native trees and shrubs		Removal of exotic species (mostly existing conifers); blocking of drains and channel management. There is a LIFE application pending. If successful, this can be achieved in the short term; if not then the time scale will be extended. Restore to native alluvial woodland during normal rotation. Manage as natural reserves	

Oak-ash Woodland (WN2)				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
Barnane TY07	Small to medium sized woods but in general of good quality, some problems with invasive exotics e.g. <i>Rhododendron ponticum</i>	Maintain areas of native oak canopy, facilitate expansion of oak wood, and remove exotics.	Utilise transformation to native woodland through thinning out conifers to retain woodland condition. Fell at rotation, replant with native broadleaves and Scots pine where appropriate. Address rhododendron control.	Cost of Rhodo removal and control of deer.

Wet woodland (Riparian-Wet Willow-Alder-Ash WN5/WN6)				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
Castlelough TY02	Small to medium sized woods but in general of good quality some problems with invasive exotics.	Maintain areas of native canopy, facilitate expansion of native wood, and remove exotics.	Address control and removal of exotic species.	Cost of removal of exotics.

Mixed broadleaved Woodland (WD1)				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
Brown's Wood	Moderate sized mixed broadleaf woodland with some oak-birch-holly (WN1). Good flora. OWS	Restore/increase area of WN1 woodland.	Non-intervention for next 5 years.	
Garranorish TY01 Knockanacree TY01	Mixed woodland, with areas of relict native ground flora. Some problems with invasive exotics e.g. Rhododendron and Cherry laurel	Restore some areas to broadleaf woodland in most suitable areas. Maintain woodland structure and species diversity in other areas. Implement Coillte OWS policy in these woodlands.	Manage under CCF. Utilise transformation to native woodland through thinning out conifers to retain woodland condition. Address Rhododendron and Cherry laurel control.	Cost of Rhodo and Cherry laurel removal. Control of deer

Mixed broadleaved/conifer Woodland (WD2, WD3)				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
Castlelough TY02 Coolbaun TY02 Laghile TY01 Castletown TY02	Mixed broadleaf/conifer woodland, retains areas of relict native ground flora. some problems with invasive exotics e.g. Rhododendron and Cherry laurel	Restore some areas to broadleaf woodland in most suitable parts of these woodlands. Maintain woodland structure and species diversity in other areas Implement Coillte's OWS policy in these woodlands.	Manage under CCF. Utilise transformation to native woodland through thinning out conifers to retain woodland condition. Fell, replant with broadleaf and light crowned conifer species where appropriate. Address Rhododendron and Cherry laurel control.	Cost of Rhodo and Cherry laurel removal. Deer browsing
Laois: Colt (42.9ha)	Large, mature site with diverse native species and good structure	Increase the native element; maintain the good structure. Gradual removal of many of the alien tree species		

Conifer woodland (WD4)				
Main Properties	Habitat Quality	Management Strategy	Management 2011-2015	Issues to be Addressed
Foulkscourt	Moderate sized semi-natural habitat. Calcareous fen (Annex I) with rare plants. Associated with turlough and riparian habitat (River Gaule). Small area of wet woodland and conifers.	Retain fen habitat. Restore conifer woodland to WN4. Protect riparian habitat.	Encourage hardwood regeneration along the 30m riparian corridor.	Adhere to Forest Service guidelines.
Croghtenclogh	Moderate sized conifer woodland and largely intact blanket bog. Associated with riparian salmonid habitat (River Dinnin). Possible SAC in future.	Retain existing unplanted blanket bog habitat. Increase area of open blanket bog habitat at expense of conifers. Block drains. Follow SAC management guidelines. Protect riparian habitat.		

Species

In terms of species, notable species identified in the BAUs forests are listed below

Notable Species	Notable Species	Notable Mammals
Daboecia cantabrica	Platanthera bifolia	Lesser Horseshoe Bat
Lathraea squamaria	Thelypteris	(Rhinolophus hipposideros)
Neottia nidus-avis	limbosperma,	Pine Marten (Martes
Thelypteris palustris	Carex acuta	martes)
Listera cordata	Cephalanthera	Badger (Meles meles),
Saxifraga spathularis	longifolia	
Rhynchospora fusca	Carex limosa	
Rhamnus cathartica	Vaccinium oxycoccos	
Eriocaulon aquaticum,	Empetrum nigrum	
Eriophorum gracile,	Vaccinium oxycoccos	
Arctostaphylos uva-ursi, .	Cladium masiscus	
Juniperus communis	Carex lasiocarpa,	
Erica erigena	Ranunculus lingua	

Appendix III - FSC International Principles and Criteria for Sustainable Forest Management

Principle Number	Title	Description
1.	Compliance with laws and FSC Principles	Forest Management shall respect all applicable laws of the country in which they occur, and international treaties and agreements to which the country is a signatory, and comply with all FSC Principles and Criteria
2.	Tenure and use rights and responsibilities	Long-term tenure and use rights to the land and forest resources shall be clearly defined, documented and legally established
3.	Indigenous peoples rights	The legal and customary rights of indigenous peoples to own, use and manage their lands, territories, and resources shall be recognized and respected.
4.	Community relations and workers rights	Forest management operations shall maintain or enhance the long-term social and economic well-being of forest workers and local communities
5.	Benefits from the forest	Forest management operations shall encourage the efficient use of the forest's multiple products and services to ensure economic viability and a wide range of environmental and social benefits
6.	Environmental impact	Forest management shall conserve biological diversity and its associated values, water resources, soils, and unique and fragile ecosystems and landscapes, and, by so doing, maintain the ecological functions and the integrity of the forest
7.	Management plan	A management plan, appropriate to the scale and intensity of the operations, shall be written, implemented, and kept up to date. The long term objectives of management, and the means of achieving them, shall be clearly stated
8.	Monitoring and assessment	Monitoring shall be conducted, appropriate to the scale and intensity of forest management, to assess the condition of the forest, yields of forest products, management activities and their social and environmental impacts
9.	Maintenance of high conservation value forests	Management activities in high value conservation forests shall maintain or enhance the attributes which define such forests. Decisions regarding high conservation value forests shall always be considered in the context of a precautionary approach
10.	Plantations	Plantations shall be managed in accordance with Principles and Criteria 1-9. While plantations can provide an array of social and economic benefits, and can contribute to satisfying the world's needs for forest products, they should complement the management of, reduce pressures on, and promote the restoration and conservation of natural forests

Appendix IV – Monitoring

5.2 Monitoring Systems

Economic Parameters		
No.	Parameter	Measure
Establishment		
1	Afforestation	area established (hectares)
2	Afforestation - Farm Partnerships	area established (hectares)
3	Restocking	area restocked (hectares)
4	Establishment Area Aerially Fertilised	hectares
5	Later Manuring Area Aerially Fertilised,	hectares
6	Total kg/ha aerial fertiliser	
Harvesting		
7	Clearfelled area	hectares
8	Clearfell areas greater than 20ha in Upland areas.	no. of Sales Proposals
9	Clearfell areas greater than 5ha in Lowland areas.	no. of Sales Proposals
10	Thinning area	harvest area (hectares)
Silvicultural Systems		
11	Alternative to Clearfell sites	number of LISS sites
12	Alternative to Clearfell area	area of LISS sites (hectares)
Forest Design		
13	Forest Design Plans required	area of BAU where plan needed (hectares)
14	Forest Design Plans developed:	number of plans
15	Forest Design Plans: blocks restructured	number
Species Composition		
16	Primary species	% area of BAU
17	Secondary species	% area of BAU
18	Broadleaves	% area of BAU
19	Open Space	% area of BAU
Chemicals		
20	Chemical usage	Kgs active ingredient/ha
Land Transactions		
21	Area sold by BAU	hectares
22	Area acquired by BAU	hectares
Biodiversity		
23	Biodiversity area identified	% area of BAU
24	Biodiversity sites identified	number
25	Biodiversity management plans completed	number
26	Biodiversity features recorded	number
27	Long term retentions,	% area of BAU
28	Deadwood: Standing.	stems/ha in BAU
29	Deadwood: Fallen	stems/ha in BAU
30	Deadwood: Volume	total (m ³) in BAU

Economic Parameters		
No.	Parameter	Measure
Water Monitoring		
31	Site Preparation,	no. of operations monitored
32	Aerial Fertilisation - Establishment	no. of operations monitored
33	Manual & mechanical fertilisation - Establishment,	no. of operations monitored
34	Aerial Fertilisation - later manuring	no. of operations monitored
35	Manual & mechanical- later manuring,	no. of operations monitored
36	Harvesting	no. of operations monitored
37	Roading	no. of operations monitored
Forest Health		
38	BAU Forest Health Survey results	any damage recorded [y/n]
39	BAU Forest Health Survey	any action required to be taken [y/n]
Abiotic Damage		
40	Fires – stocked area damaged	hectares
41	Fire break production	metres
42	Windthrow area	hectares
Deer Culls		
43	Current deer cull return figures	number culled
Social Parameters		
No.	Parameter	Measure
Cultural Heritage		
44	Protected archaeological monuments identified	number
45	Local features/folk heritage recorded on GIS	number
Recreation		
46	Paintball	number licences issued
47	Car rallying	number licences issued
48	Pony trekking	number licences issued
49	Orienteering	number licences issued
50	Community walks/projects	number licences issued
51	Fishing	Number licences issued
52	Hunting	number licences issued
53	Other	number licences issued
54	Visitors to forest parks in BAU	Number estimated
Complaints		
55	Complaints received	number registered
56	Complaints addressed	number signed off
Community		
57	Community partnerships	number
Health and Safety		
58	Notifiable accidents	number