



South Munster BAU 7 Strategic Plans

2016 - 2020

Foreword

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

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 practicing sustainable forest management Coillte's aim is to develop its forests in a way that is environmentally sustainable, socially sustainable and economically sustainable. Coillte has applied the principles of environmental impact assessment and risk management to the potential interactions between forest activities and standard receptors in compiling these plans.

The topics covered in the BAU strategic plan include:

Commercial Planning:

- 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

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

A handwritten signature in black ink, appearing to read "Pat Carroll".

Pat Carroll

BAU Manager

¹ Growing, cultivating and felling of trees

Statement of Compliance with Principles of Sustainable Forestry Management

The Coillte estate is a rich, high quality environmental resource, with the potential to interact with people, landscape, water and biodiversity. As such, Coillte recognises and seeks to minimise any potential adverse impacts of our business on the environment through responsible environmental management. We are committed to the prevention of pollution.

As part of our commitment to the stewardship of our forests, we seek and welcome comments and suggestions from stakeholders with regard to environmental issues. Through this partnership approach we also encourage co-operation from our stakeholders.

As a prerequisite to all our operations, Coillte is committed to the protection of the environment. The scope of this policy covers the operations and activities associated with our forestry, property sales and energy businesses.

Our objectives are to:

1. Adopt an organisation wide system for managing environmental issues. The Director of Stewardship and Public Goods has responsibility for managing the implementation of this policy and our environmental management system (EMS).
2. Manage our business in full compliance with all applicable laws, directives and regulations, as well as voluntary external accredited schemes to which we subscribe e.g. the Forest Stewardship Council^{®2} (FSC[®]) and the Programme for the Endorsement of Forest Certification (PEFC[™]).
3. Prevent negative environmental impacts through a system of operational controls that include communication, written instructions appropriate training and monitoring.
4. Continually improving environmental performance by setting and reviewing objectives & targets related to significant environmental risks and putting into effect programmes to reduce those risks.
5. Communicate, as appropriate, our Environmental Policy to Coillte staff and stakeholders, contractors and their employees and the communities within which we operate.

Pat Carroll

BAU Manager

² FSC licence code FSC- C005714

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1. Coillte and the BAU Strategic Plans

1.1 Coillte

Coillte is Ireland's leading natural resources companies 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 oriented, forestry and forest products business, with interests in renewable energy. The company has three operating divisions - Coillte Forest, Coillte Panel Products and Coillte Enterprise.

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

1.2 Renewable Energy

Coillte is committed to the development of sustainable energy in Ireland, as we move towards a sustainable future with enhanced energy security. As the largest provider of high quality sites to the renewable energy sector, Coillte is making a significant contribution to Ireland's 2020 target of achieving 40% of its electricity consumption from renewable sources. Coillte is fully aligned with government and EU policy in terms of the role we plan in relation to renewable energy development in Ireland.

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. Reducing Ireland's reliance on fossil fuel imports, reducing our greenhouse gas emissions and improving domestic fuel security are key pillars for developing a green economy.

Coillte has already made a significant contribution towards the development of renewable energy in Ireland over the last 20 years. Over the course of the BAU Strategic plan period and beyond, Coillte has a very important role to play, both as a developer and a land owner, in helping Ireland reach its 2020 renewable

energy targets and in helping reduce Ireland's carbon emissions. Coillte proposes to do this through facilitating the development of multiple renewable energy technologies.

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

- Open and transparent public participation and consultation with stakeholders and local communities.
- Best in class Environmental Impact Assessment and Appropriate Assessment that enhances and preserves local ecology and the habitats therein.
- Complying with all relevant environmental legislation, health and safety legislation, regulations and other requirements as they arise.
- Minimising the impact of wind farm development on the surrounding landscape and surrounding forestry in so far as that is possible through careful siting and design.
- Considering the impact on recreational users, and also the opportunity there may be when developing a wind farm to develop enhanced recreational facilities.
- Mitigating against the risk of pollution and conducting our business in an environmentally friendly way.

1.2.1 Public Participation and Consultation

Coillte supports proper planning and sustainable development and fully recognises that the development of renewable energy projects must afford appropriate protection to the social, environmental and economic pillars of sustainability. We are committed to ensuring that people are aware of our plans and policies and that we present all of our information in a clear and understandable manner.

Coillte's policy is to consult widely with national and local stakeholders in all stages of the wind farm development from pre-planning, development and operational phases. In addition, all projects developed by Coillte provide a Community Benefit mechanism as part of the project.

While not a statutory requirement of the Irish planning system, Coillte insists that, in all instances where wind turbines are proposed on the Coillte estate, the relevant host community is consulted about that proposal prior to any Planning Application being lodged with the relevant Planning Authority. As part of Coillte's commitment to the responsible stewardship of its forests, it seeks and welcomes comments and suggestions from stakeholders about how it manages its forests in the most responsible way for the benefit of society and future generations.

1.2.2 Wind Energy

Coillte's lands possess some of the best onshore wind regimes in Ireland due, inter alia, to its altitude, aspect and location. It is also often particularly suitable for wind farm development due to its remoteness, accessibility, distance from dwellings and visibility relative to areas with high scenic amenity.

Coillte is aware that wind energy is a proven technology and according to the Irish Wind Energy Association (IWEA), it provided 24% of our Irish electricity demand in 2015. As outlined in the White Paper 'Ireland's Transition to a Low Carbon Energy Future 2015-2030', Coillte too recognises that "*onshore wind will continue to make a significant contribution*"³ to meeting Ireland's energy needs.

³<http://www.dcenr.gov.ie/energy/SiteCollectionDocuments/Energy-Initiatives/Energy%20White%20Paper%20->

Due to the fact that there are many myths concerning wind energy developments, Coillte has developed a Frequently Asked Questions document on this subject matter. Should you require further information regarding Coillte's involvement in the wind energy industry, please consult our Frequently Asked Questions document as it appears on the Wind Energy Section of the Coillte web site⁴ and do not hesitate to contact us at windenergy@coillte.ie.

1.2.3 Biomass

The key guiding principle for Coillte's vision is that Ireland's biomass is a limited and valuable indigenous resource and should be harnessed in a way that maximises value throughout the supply chain. Coillte does so by providing competitive, long term and secure biomass fuel supply contracts for its woodchip clients and also assists in the evaluation of both the technical and commercial viability of projects for large scale industrial energy users.

Coillte is now playing a key leadership role in delivering sustainable biomass energy solutions to the Irish biomass industry through its new supply model. We operate a number of regional biomass fuel supply hubs throughout the country. Coillte provide full chain of custody from forest to boiler ("stump to steam") and all wood chip is produced strictly in accordance with quality specifications set out in I.S. CEN/TS 14961: 2005, with a significant emphasis on optimisation of wood flow to minimise haulage distances for all transportation required.

Coillte has developed a new partnership model aimed at unlocking the potential of the bio-energy sector here in Ireland and is currently rolling this model out nationally through its new biomass processing hubs. Each Coillte processing hub now supports a range of supply chain jobs and underpins significant annual energy and carbon savings for its clients. Should you require any further details regarding Coillte's involvement in the biomass industry, please do not hesitate to contact us at biomass@coillte.ie.

1.2.4 Other Renewable Technologies

In addition to playing a leadership role in wind energy and biomass production, Coillte is currently engaged in a process to assess the potential opportunities for solar energy on the Coillte estate. Coillte is also assessing recent technology developments in the area of energy storage. Furthermore, the potential for hydro energy may also be considered on the estate along with any other emerging technologies. Work is underway to understand these technologies and their potential application for Coillte, either being integrated into our existing energy projects or developed as standalone projects in the future.

1.3 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. In 2013 this project moved into implementation phase and, after a successful pilot programme, has now been adopted as the primary planning tool for Coillte forest.

[%20Dec%202015.pdf](#)

⁴ http://www.coillte.ie/coillteenterprise/renewable_energy/wind_energy/wind_energy_faq/

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 local level

As the model was developed and refined each BAU was 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.

A major benefit of the approach to Coillte is the speed with which a new national activity schedule is 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 are reflected into the model and form the basis the BAU plan.

Once these principles are agreed, each model run during the lifetime of the BAU Strategic Plan will comply with the principles, as will the ensuing harvest schedule. The harvest activity levels are available to view on our Webmap , these draft activity levels are based on an initial run. Where changes occur due to public feedback or from other influences e.g. environmental or policy, which cause an increase of over 20% in activity within a property these areas will be published on Coillte's website as having changed significantly since initial publication.

1.4 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.

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.

1.5 Meeting External Challenges and Constraints

Coillte and all of its forests and lands are subject to a number of key external factors. Typically these arise as policies or legislation relating to forestry which drive change and can have a major influence on our future. Understanding and anticipating these factors is vital in order to manage change proactively rather than responding to it reactively and Coillte work proactively with our key statutory and non-statutory regulators. 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 according to agreed targets.</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 and biodiversity management.</p>
<p>EC Habitats Directive and EC Birds Directive</p> <p>(92/43/EEC) as transposed into Irish law under the S.I. No. 477 of 2011 EUROPEAN COMMUNITIES (BIRDS AND NATURAL HABITATS) REGULATIONS 2011.</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 are assessed under the criteria outlined as required by the 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, ensuring that status does not deteriorate in any waters. The summary timetable and work programme for the production of the second cycle of River Basin Management Plans (RBMPs) 2015-2021 was published in July 2015. In addition a Significant Water Management Issues (SWMI) report will be published and will be open to public consultation until December 2015. This will feed into the draft River Basin Management Plans for 2015-2021 to be published in December 2016. The RBMPs will be open to further public consultation with a view to publish an updated and final version in December 2017.</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/PEFC) with compliance assessed by way of independent audits by the Forest Service and the FSC and PEFC.</p>
<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>Coillte is fully committed to a policy of sustainable management of all of its forests and forest lands. Coillte applied for FSC certification of its forests in 2000 and were awarded an FSC certificate in 2001. Coillte applied for PEFC certification of its forests in 2013 and were awarded a PEFC certificate in 2014. These external forest management certification schemes endorse Coillte's policy of sustainable forest management, balancing the social, economic and environmental aspects of forest management.</p>

Coillte also respond 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 fraxina* 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.

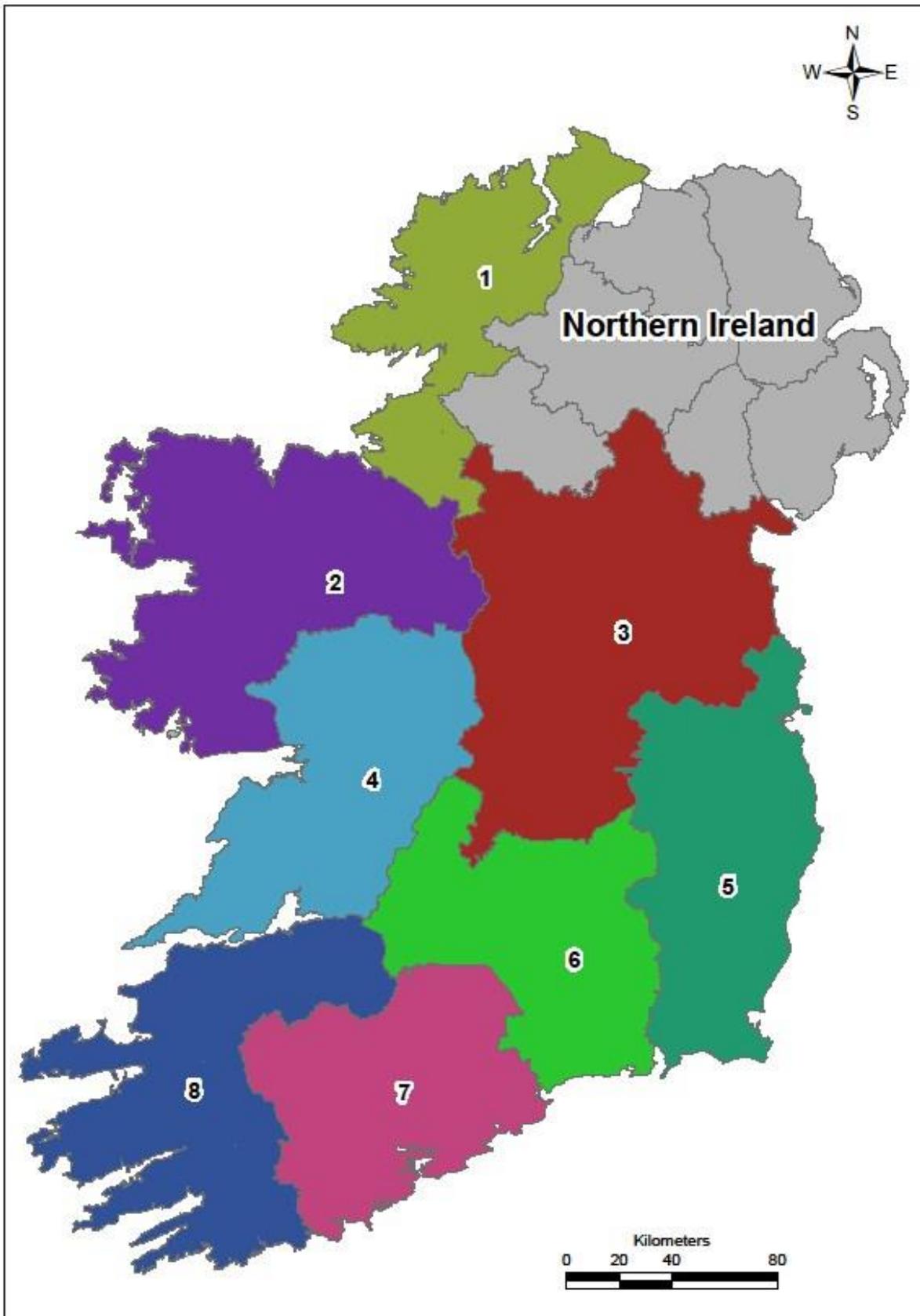
Coillte will liaise closely with Forest Service with regard to this significant potential threat to our Ash woodlands and will respond immediately to any mitigation measures proposed.

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, this has led to partnership based approaches to reducing dumping and littering.

1.6 Coillte BAUs

Coillte's estate is divided into eight 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 2011-2015. This consultation document refers to the incoming planning cycle 2016-2020.

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 and environmental issues, opportunities and concerns in the BAU.

1.7 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 requirement, for Forest Certification, is achieved through the BAU strategic plan process.

SF (Site File) is built when site-level planning is initiated for activity within each Harvest Unit 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 plans focus on the tasks/targets to be achieved during the year and outline the necessary resources (financial and human) required.

The BAU is the Forest Management Unit and is built from smaller spatial entities the largest of these being the Forest Unit. Key activity levels within each Forest Unit are further broken down in [Appendix V](#). Further to the appendix, a Webmap is available to view areas with proposed Clearfells and areas which have the potential to be thinned in the review period. [Click here](#) to access the Webmap.

2. South Munster BAU

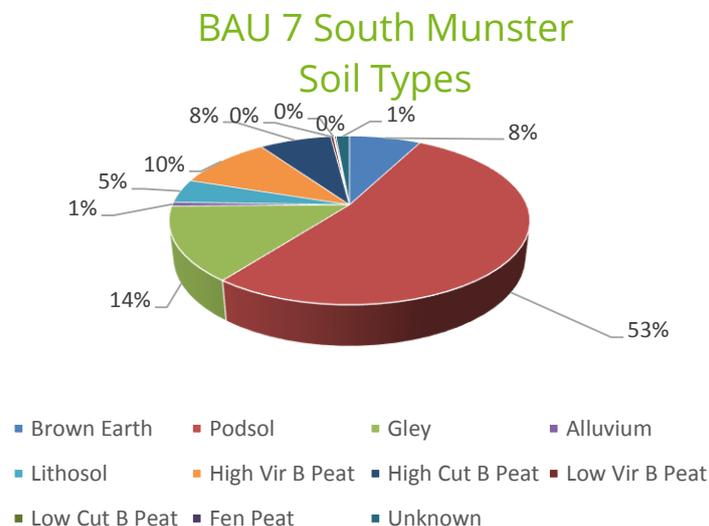
2.1 The South Munster BAU

All BAUs play important roles in achieving Coillte targets and objectives. The South Munster BAU of Coillte Forest encompasses the greater part of County Cork excluding West Cork, the Kilfinane area of South Limerick, South Tipperary and West Waterford. It is a large BAU covering 728,322.51 hectares of Ireland. Within this area, Coillte owns 62,521.43 hectares (8.58%) of which just over 80% is forested with the remainder mostly moorland, marsh, lakes and other unplanted areas.

Main population centres in the area include Tipperary Town, Cahir, Dungarvan, Cork City, Mallow, Fermoy, Middleton, Bandon and Macroom. The proximity of some of our forests to Cork City and other major urban centres coupled with a large section of coastline and resulting maritime conditions, affect the management of our forests and influence decision making.

The dominant influence on the climate is the Atlantic ocean. The BAU enjoys a milder climate than the more inland upland areas of Ireland with high rainfall and resultant wet ground conditions in some areas. Topography varies within the BAU from the rich lowlands to the mountainous regions. The Knockmealdowns, Galtees, Ballyhouras, Mullaghareirks, Nagles, and Boggeraghs are the main mountain ranges within the BAU. These are dominated by old red sandstone and the river valleys by carboniferous limestone.

The main soil types vary and include podsols, gleys, brown earths and peats. There are six main river catchments - Blackwater, Lee, Bandon, Feale, Suir and Lickey.



2.2 Forests and Forest Products in the South Munster BAU

A map of Coillte's Forests in the South Munster BAU can be viewed in [Appendix VI](#)

The BAU is the primary business unit within Coillte Forest, therefore, all revenue earned (and associated cost) by Coillte Forest is generated from the resource within the BAU through the activities undertaken on that resource. The primary revenue source within this BAU is from the sale of

timber within the BAU, a secondary revenue source is generated through grants, lettings, licences, leisure other resource related activities and alternative land use developments. The most significant costs within the BAU relate to accessing and bringing this timber to market and subsequently replanting any land which has been clearfelled. The business environment in which the BAU operates is becoming increasingly more competitive and a number of efficiency programmes are in place to reduce the cost base and optimise the use of new technologies to maintain and in time improve the financial return in the BAU.

During the 2011 - 2015 period, the BAU produced 1.7 million cubic metres of wood (2015 figures estimated). The main products produced consisted of sawlog, pallet wood, pulpwood, stake wood and firewood. Coillte's production supports major sawmills located within and on the periphery of the BAU, these include GP Wood with mills in Enninkeane and Lissarda, Glennon Brothers near Fermoy, as well as Coillte Panel Products mills at Medite in Clonmel and Smartply in Waterford. It also provided wood for three stake manufacturing mills, Cil na Martra Teoranta John Galvin Sawmills and Nyhan's in Drinagh.

Forest Products

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

Farm Partnerships

This scheme is where Coillte and a farmer form a joint venture by agreement whereby Coillte plants and manages the plantation for the life of the crop; ownership of the land remains with the farmer. Currently we have 103 farm partnerships within the BAU. This number is not expected to increase in the lifetime of this plan, as we are no longer engaged in this area. We will continue to support our existing partners.

2.3 Community, Recreation and Tourism Facilities in the South Munster BAU

Coillte has a long association with the communities, clubs and individuals who use the extensive forest network. The development of recreational facilities activities in line with Coillte's Recreation policy are some of the many ways Coillte can contribute towards the "public good" value of the estate. This can be achieved through partnerships, permits and ongoing relationships that respects the sustainable use of our forests for future generations. The South Munster BAU recreational activities contribute to the social, environmental and economic life within the BAU boundaries.

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 listed below:

- **Aherlow Nature Park** - Aherlow Fáilte has a long term lease of a Scot's Pine stand adjacent to the Christ the King Statue. The Aherlow Nature Park is a series of walking trails, with information panels on the flora and fauna of the area. The Ballyhoura Way also passes through this site. This site was developed in conjunction with Aherlow Fáilte and FÁS Rural Social Scheme.
- **Ballyhoura Mountain Bike / Trail Centre** - Located close to Ardpatrick village, this is the hub of the recreation network at Ballyhoura and one which has become very popular and is attracting record numbers of bikers. Facilities include - car parks, toilet and shower facilities, bike wash, 90KM of mountain bike trails, numerous way-marked walking trails and picnic facilities. There are a number of National Looped Walks and a National Way-marked Way (NWMW) passing through this forest. There is up-to-date signage in place. This mountain biking trailhead and trails were funded by Fáilte Ireland and support from both Cork and Limerick County Councils.

Ballyhoura Development Group have marketed and promoted this venture since its completion 2009.

- **Colligan** - A woodland and riverside amenity area with a car park, National Looped Walks, arboretum, picnic area and up-to-date signage. This project was developed in partnership with Waterford County Council.

The BAU has a high recreational usage with a number of National Way-marked Ways traversing Coillte property. These include sections of The Munster Way i.e. "The Blackwater Way", "The East Munster Way", The Avondhu Way, The Duhallow Way and The Ballyhoura Way.

Coillte has also developed a number of looped trails in conjunction with local communities and others. The most popular are: the Glen of Aherlow providing spectacular views of the Galty Mountains, Glengarra Wood at the foot of the Galtee Mountains, Corrin / Glenabo Wood near Fermoy, Mount Hillary in North Cork, in the Ballyhouras on the Cork/Limerick border and Glenshelane in Waterford.

There are two of Coillte's forest parks located within the BAU. Farran on the banks of Inniscarra Lake and the Ballyhoura Mountain Trail Park.

Many Coillte forests in this BAU are expansive and offer multiple activities such as walking, hiking, multi access and long distance trails cycling on new bike trails, fishing, picnicking, watching wildlife, canoeing, field archaeology or simple enjoyment of the outdoors. There is considerable infrastructure in place and maintained by Coillte across the BAU to support these activities.

This BAU has designated areas for recreational activity, these are detailed on the Coillte website www.coillteoutdoors.ie and in [Appendix IV](#).

Coillte actively engages with local communities and other partners to resource the management and maintenance of this valuable recreational offering.

The National Centre for Mountain Biking is located at the Ballyhoura Trails complex on the Cork/Limerick border and is a significant amenity in the BAU, the centre is extremely popular and is attracting record numbers of mountain-bikers.

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. Coillte developed an off-road cycling strategy, published in 2012, and is available on [Off-Road Cycle Strategy](#). Further queries can be directed to recreation@coillte.ie.

2.4 Cultural and Archaeological Heritage in the South Munster BAU

Coillte is aware of some 243 archaeological sites and sites of cultural significance in its landholdings in the South Munster BAU, some of which were discovered based on local knowledge. Breakdown of monuments per county as follows: Cork – 181, Limerick – 27, West Waterford – 19 and South Tipperary – 16.

There is an important hill fort site at Corrin, near Fermoy and examples of clusters in the Knocknagoun Mountain area, and north of Macroom, all which are located within Coillte lands. These sites provide valuable information about our history and represent an important educational and recreational resource. The main monument types in the BAU are fulacht fia's, standing stones, enclosures, cairn's, megalithic tombs, bronze age burial mound, ring forts and holy wells. Monument locations are recorded on Coillte's Geographical Information System. A summary of archaeological sites in the BAU is provided in [Appendix I](#).

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 highlighted 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 hill fort at Duntryleague, ice houses at both Castlemartyr and Rostellan Woods, charcoal pit at Shippool Wood, the famous 'Kerryman's Table' located on the famed Kerry to Cork 'butter road' and a summer house located at Currabinny Wood. The BAU 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 Munster 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 identified and mapped Coillte lands in the BAU where it was considered most appropriate to manage for conservation value. This area is distributed in over 189 locations. 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. Additional biodiversity areas were subsequently identified as biodiversity areas by forest managers, e.g. riparian zones. As a result, the total area included in biodiversity areas in the BAU is 10,885ha (17% of Coillte land in the BAU).

Management plans have been developed for these areas to ensure their 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. 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) e.g. Cahir Park, Dromana and Rincrew 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 open mountain lands in the upland areas of the BAU. 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 table below shows statutory designated areas and HCVF in the South Munster BAU. Areas shown are in hectares (Ha).

Designation	Area (ha on Coillte lands)
HCVF	8,735
NHA* - Natural Heritage Area	53
SAC* - Special Area of Conservation	1,072
SPA* - Special Protection Area	6,688
Nature Reserve	0
pNHA	1,439

(*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 Munster BAU achievements in relation to nature conservation include the following:

- five Native Woodland sites located at Bansha West (Slievenamuc Forest), Garryclogher (Cahir Forest), Gralagh (Dungarvan Forest), Reanahoun (Mullaghareirks Forest) and Shippool Wood (Bandon Forest);
- 4,960 ha is being managed as OWS to retain their semi-natural characteristics;
- areas of native woodland where woodland structure and composition is good, will also be managed as natural reserves, e.g. Lismire, Ballard, Dromdeer;
- nine hectares of Yew woodland at Caher Park restored under EU LIFE project;
- one Peoples Millennium Forest, Glengarra Wood, in the BAU, 20 hectares planted with native species
- areas where heath, wet heath and blanket bog are dominant habitats e.g. Barrahourin (The Mossy Beds), Blackrock-Carrigagulla, Glandonohue, and Long Mountain; and
- habitats regulation assessments take place in relation to all works on designated sites.

There are a number of ways in which OWS will be managed into the future in the BAU.

- Existing native woodland is being retained in some areas e.g. Monaduanna, Lismire, Dreenagh, Dromdeer.
- Conifer stands are being restored to native woodland where ecological reports recommend a good reason to do so e.g. Gurteen, Island wood, Cappagh.
- There are areas of broadleaf commercial production, Gurteen, Dromdeer, Glenabo.
- There are areas of commercial production of light-crowned conifers (pines, larches, Douglas fir), Greenwood, Mount Hillary, Garretstown, Shippool, Thomastown
- There are areas of spruces, where sites are not suited to light-crowned conifers, Streamhill, Warrenscourt, Ballyknock

2.6 Species and Habitats in the South Munster BAU

The predominant non-forest habitats within the BAU consist of heath, wet and dry, blanket bog and freshwater habitats together with the open moorland on the Galtee/Galty and Knockmealdown mountains ranges and along Munster Blackwater. Some excellent examples of these semi-natural habitats are within Coillte ownership.

Notable species in the area include the Fresh Water Pearl Mussel, Hen Harrier, Little Egret, Nightjar, Wood ant and badger together with flora species Wood spruce and Wood millet.

Detailed tables have been provided in [Appendix II](#) 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 ponticum* and a significant deer herd in areas of the BAU which are currently posing major problems for the establishment of broadleaves and the regeneration of old woodland sites. A significant problem with regard to *Rhododendron ponticum* is the illegal harvesting for the European wreath manufacture, particularly in the South Tipperary area of the BAU. In line with international best practice, when controlling invasive species (including *Rhododendron*), the BAUs resources are focused on priority sites based on:

- The site's uniqueness (e.g. whether or not they are Priority habitats, as per EU Habitats directive),
- Whether the presence of *Rhododendron* is likely to facilitate the spread of the exotic disease *Phytophthora ramorum*,
- The site's intrinsic ecological/biodiversity value (e.g. are they High Conservation Value Forests or Old Woodland Sites)
- 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 Munster BAU

The BAU lies within the South Western River Basin District (SWRBD), The South Eastern River Basin (EWRBD) and the Shannon River Basin (SRBD) Districts. The main rivers are The Blackwater (Munster), The Lee, The Bandon (SWRBD), The Suir (SERBD) and The Feale (SRBD). These rivers support important salmon and trout fisheries which play an important part in the local economy.

There are four Fresh Water Pearl Mussel (*Margaritifera, margaritifera*) (FPM) catchments within the BAU, Munster Blackwater, Licky, Clodiagh and the Bandon / Caha. The Munster Blackwater Catchment, including its tributaries Lickey and Clodiagh, largely affect the BAU with the Bandon / Caha catchment impinging on a small area to the western side of BAU.

Adherence to Forest Service Guidelines and Code of Best Forest Practice is mandatory. The programme of measures outlined in the SWRBD Management plan and the supplementary measures as outlined in the Sub-Basin Catchment plans are taken on board, the protection of these rivers and their tributaries is of paramount importance and every effort is made to ensure water quality is maintained and enhanced.

Water quality is one of the key indicators of the health of the environment and as such must feature significantly in the BAU monitoring programme. There are six permanent Coillte water sampling sites within the BAU and located at Ballintober, Ballynageehy, Carrigagulla, Glenakeel, Lismore and Rossadrehid. Samples are taken at these sites at least twice times a year or more frequent in the presence of forest operations. In addition water monitoring is conducted by U.C.C. in Kilworth and Cork County Council in Bottlehill.

Water sampling is also conducted on high impact operational sites, for example ground preparation, road making and harvesting. Samples are taken before, during and after operations, samples are usually taken above, within and below the operational site. The provision of sediment traps is now standard practice where there is any risk of siltation occurring. A pollution control plan is in place and a pollution control kit is on site for all high impact operations.

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 Munster 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:

Estate security / Trespass, litter, waste dumping, deer poaching, fire, illegal use by motorised vehicles both two and four wheeled, inappropriate recreation and anti-social behaviour.

Coillte has recently introduced a set of bye laws to assist in controlling these activities. Also issues are recorded on Coillte's 'Issue and Consultation Register'.

2.9.1 Deer Management

Wild deer are present on 60% of the Coillte estate. Through browsing and bark-stripping trees, deer can have a considerable negative impact on tree species selection as well as the quality, yield and survival of forest crops. Deer can also impact land use objectives on neighbouring lands.

It is Coillte's policy to manage deer in accordance with accepted principles of Sustainable Deer Management (SDM) whereby, the conservation, control and use of the species, will be balanced in order to achieve an integrated and collaborative solution to maintaining viable deer populations across the estate at levels which are in harmony with their environment. To this end Coillte maintain Deer Management Plans (DMP) for all areas where deer are present. Coillte's summary deer management policy can be viewed at www.coillteoutdoors.ie

Deer are wild animals free to roam across large areas of multiple land ownerships, they are a protected species, and one which attracts considerable attention and differing views as to how they should be "managed". A key aspect of successful deer management is therefore establishing a collaborative approach between all key stakeholders within the deer's range at landscape level. A considerable element of this process is the acceptance of shared responsibility by all landowners in the area of their role and to ensure the effective management of the deer utilising their lands.

Coillte have demonstrated considerable commitment and leadership management in recent years in developing collaborative deer management and the establishment of training standards for deer hunters. At National level the Company was instrumental in the establishment the Hunter Competence Assessment programme and the Irish Deer Management Forum. At Regional, and local level Coillte are active participants in a number of deer management partnerships and groups.

It is estimated that wild deer are present in over 50 % of Coillte's estate in this BAU. A breakdown of deer species abundance in this BAU is shown in the table below. Damaging impacts to Coillte's crops are generally localised, predominately in areas with high deer numbers. Damage is mainly confined to the browsing of broadleaved trees and some more palatable conifers such as Scots pine, Douglas fir, larch and Norway spruce . Deer populations are principally controlled through the issue of hunting licences.

Deer species abundance in **BAU 7**

Density Classification	Deer Species Present (hectares)		
	Red	Fallow	Sika
Low	111	14,665	1,084
Moderate	0	6,434	0
High	0	1,207	0
Total area	111	22,306	1,084

3. The South Munster 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. The main landscape characteristics include fertile farmland in the valleys, stretching up the lower slopes of the adjoining mountains and hills. The large blocks of forests are mainly situated above the farmland, across the mid-elevation on the higher mountain ranges, for example Galtee/Galty, Knockmealdowns, Mullaghareirks, Nagle and Ballyhoura Mountains.

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;
- a diverse range of species;
- 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.

The Coillte estate

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

South Munster

The silvicultural systems used across the BAU include clearfell, continuous cover forestry, conversion to broadleaf, long term retention and small coupe felling. The management objective will either be timber production or biodiversity. Management decisions are site specific and generally based on stability, soil type, species and growth rates. Prescriptive thinning followed by clearfell at economic rotation age is the adopted regime across the BAU due to the stable nature of productive sites. Up to 70% of stands are envisaged to receive three thinnings or more, with only 6% classified as no thin in the BAU.

Key Objective 1

In the South Munster BAU, Coillte aims to produce approximately 2,294,000 cubic metres of wood from its forests between 2016 and 2020.

1,726,000m³ will be provided through felling and 568,000m³ will be achieved through thinning.

Coillte does not intend to acquire new lands for forest planting in the South Munster BAU during the 2016-2020 periods.

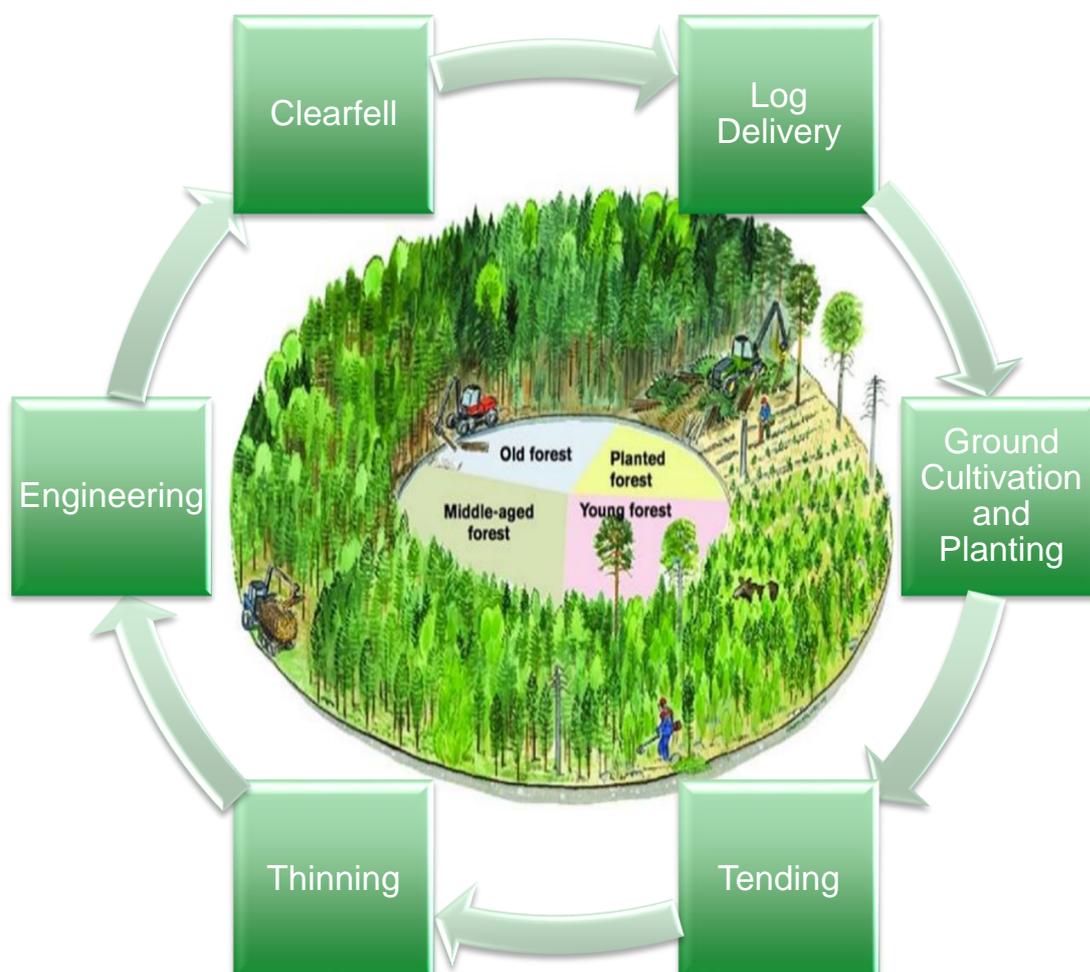


Figure 1: The Forest Cycle

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

- **Clearfell** is the most common silvicultural system used in Ireland and the UK due to the prevailing forest culture and has predominated over the past century characterised by the establishment of new forest plantations. 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). Due to the poor fertility and the exposed and unstable nature of our sites there is very little scope for alternative systems that remove mature trees more gradually. At clearfell time considerable effort is now put into adjusting felling coupe size and shape to satisfy both environmental and landscape design purposes. 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 only occur where the practice can be sustained, namely in forests with no stability threat from high winds. High winds and exposure in the BAU is a limiting factor to thinning and consequently thinning is effectively concentrated in certain areas of the BAU where it is not as exposed and deemed to be more stable. Historically, because of stability concerns, there is limited standard thinning prescriptions used in this BAU with most thinning events having 2 or 3 interventions. The experience in the BAU to date is that thinning interventions of 3 or more often result in wind blow and are therefore not recommended in certain areas of the BAU.

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. The BAU outlines a list, in local newspapers annually, of the clearfell and regeneration plans for the following year.

Planting

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

Key Objective 2

In the South Munster BAU, Coillte aims to replant approximately 5,049 ha by 2020.

Forest Roads

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 Munster 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 54 km of new roads in our forests
- upgrade 205 km of existing road network
- 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 3

In the South Munster BAU, Coillte aims construct 54 km of new forest roads by 2020.

Factors affecting timber supply

The volume targets for the BAU must be achieved in order to meet company, customer and stakeholder requirements. Targets will reflect forecasted volume production for the BAU; forecasted volumes will be monitored on an ongoing basis. There are several issues that may affect timber supply, for example, the increasing environmental restrictions on aerial fertilisation will affect the maximum growth potential of marginal stands; the unavailability of sustainable harvesting machines for thinning, especially on steep sites, is restricting the maximisation of the estate's full potential; failure to negotiate access to landlocked sites will also have a negative impact on future timber supplies.

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, these will be prioritised on the basis of timber supply and a plan put in place to address 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 Cork, Limerick, Tipperary and Waterford County Councils with a view to improving access.
- **Environmental restrictions** on aerial fertilisation will affect the maximum growth potential of marginal stands. Important factors are Hen harrier designations which limit operational period and FPM catchments, i.e. Munster Blackwater, which require special consideration.

- **Nutrient deficiencies** across the South Munster BAU, particularly in the upland areas of the Ballyhouras, Mullaghareirks, Nagles, Knockmealdowns and Galtee mountain ranges there are indications of Sitka Spruce going into 'check', mainly in second rotation crops where pine was the original species. A rigid foliar analysis programme will be continually pursued and an aerial fertilisation programme will be followed for areas where it is practicable and possible.
- **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 Munster BAU.
- Restrictions of carrying out operations in **Hen Harrier SPA's** within the nesting period.
- The BAU will identify the extent of **low production forests** and breakdown the planned rationalisation into land types (e.g. buffer zones, bog restoration, forest design etc.). Consideration of alternative land use e.g. wind farm development will be included and will be in line with the agreed strategy document with the Forest Service. Public and statutory consultation will be carried out prior to submissions to the Forest Service for approval.
- Sometimes the **popularity of forests for recreation** affects our capacity to fell timber.

Farm Partnerships

In relation to existing farm partnerships Coillte will:

- develop 10 year plans for farm partnerships that have been in existence for 10 years
- hold annual management meetings with farm partners
- thin farm partnership sites regularly and on time
- carry out an inventory on farm partnership sites
- if required construct/upgrade roads to access timber

Key Objective 4

In the South Munster BAU, Coillte aims to manage its 103 Farm Partnerships.

Overall production targets in the South Munster BAU 2016-2020

Coillte's proposed operating targets for the South Munster BAU for the period of the plan- 2016-2020 are summarised in the table below.

South Munster BAU main Coillte production targets 2016 – 2020⁵

Annual Totals					
Year	2016	2017	2018	2019	2020
Planting (ha)					
Regeneration planting (r/f) (Replanting after felling)	1,222	1,532	943	699	653
Harvesting Programme					
Harvest categories (000m3)					
Thinnings	128	92	104	113	131
Regeneration felling (P,C,W) felling	359	327	332	365	343
Total	487	419	436	478	474
Felling area (ha)	1,052	760	739	750	737
Roading Programme					
Roading (km)					
New	15	9	11	11	8
Upgrading	45	43	41	39	37
Total	60	52	52	50	45

3.3 Coillte's Non-timber Businesses in South Munster BAU

3.3.1 Renewable Energy Projects

Coillte is developing renewable energy projects both on its own, in conjunction with co-development partners and with third party developers who require the lease or purchase lands from Coillte in order to facilitate these developments or an easement over the estate to develop their projects.

⁵ Source: Forecast 2016 – 2035 obtained from Coillte Strategic Plan. Actual volumes may vary resulting from an annual refresh of the strategic plan. On an annual basis, over the plan period, Coillte will identify and publish areas where significant differences occur to figures originally published.

In working to realise the potential of its estate for renewable energy development, Coillte carefully considers the social, economic and environmental impact a project may have on the surrounding area.

All wind energy proposals that concern the Coillte estate are assessed by Coillte in the first instance via a screening exercise approvals process that includes an environmental impact appraisal. If negative impacts are found, Coillte does not facilitate a situation where these proposals could be put forward to the relevant Planning Authority for their assessment.

However, Coillte is not a Planning Authority for the purposes of undertaking an Environmental Impact Assessment and granting planning permission in accordance with the Irish Planning and Development Acts (as amended). In the interests of proper planning and sustainable development, the suitability of wind farm development proposals on Coillte property is a matter for the relevant Planning Authority.

Within this BAU Strategic Plan period, Coillte proposes to develop or facilitate a third party develop the following 3 planning permitted projects on the Coillte estate:

Proposed planning permitted projects on Coillte estate – correct as at January 2016			
Name of Wind Farm	Location	Status	No. of wind turbines
Ballyhoura	Ballyhouras Forest, Co. Cork	Planning permitted	6
Boggeragh Phase 2 / Knockduff	Macroom and Bweeng Forests, Co. Cork	In construction and base areas sold	19
Castlepook	Ballyhouras Forest, Co. Cork	Planning permitted	14
Total			39

Coillte is directly involved in the development of the planning permitted Castlepook Wind Farm. This project will have the capacity to produce clean electricity for the equivalent of approximately 17,000 households. The project includes a Community Benefit Scheme that will provide funding to local projects and initiatives. For more information regarding Castlepook Wind Farm please consult the dedicated project web site⁶.

⁶ <http://www.castlepookwindfarm.ie/>

Also, within this BAU Strategic Plan period, planning permission will be sought by a third party for the following 3 projects:

Proposed projects that are seeking planning permission on Coillte estate – correct as at January 2016			
Name of Wind Farm	Location	Status	No. of wind turbines
Ardglass	Midleton Forest, Co. Cork	In planning	4
Esk	Bweeng Forest, Co. Cork	In planning	6
Knocknamona	Dungarvan Forest, Co. Waterford	In planning	8
Total			18

Over the course of this BAU period, Coillte will continue to seek out opportunities for small, medium and large scale renewable energy developments on sites that are either designated as being open for consideration or suitable for this type of development. In all instances, Coillte will avoid impacts on nationally designated sites, protected habitats, Coillte’s own biodiversity areas, receiving waters and high conservation value forest areas.

Depending on project specific circumstances, turbulence felling or the realisation of relevant habitat management plans may be required as part of that project. In all relevant instances, turbulence felling will be kept to a minimum and only occur where it is required in order to ensure the safe and efficient operation of a wind farm project. In all instances where premature felling is required, Forest Service requirements regarding the provision of replacement lands will be complied with and for turbulence felled areas, a restocking management plan will be implemented that will involve the re-establishment those areas in place of the crop that is felled.

Key Objective 5

In the South Munster BAU, Coillte aims to facilitate the development of 6 renewable energy projects in the period to 2020

Biomass Production

On a number of wind farm sites, particularly in the Boggeraghs and Rockchapel areas, felling of mature timber is necessary in order to avoid wind turbulence. Restocking plans are being implemented to establish short rotation slow growing Lodge pole pine, this material will be harvested for the wood energy market.

Fast growing eucalyptus will also be grown on suitable sites in the BAU with a view to producing increased volumes of wood for the energy market. In 2011 three sites (38 ha.) in Knockanore Forest were identified, one site (29 Ha.) in Kilworth Forest and one site in Ballynoe Forest have been identified. During the period of this plan further sites may be selected.

Coillte will consider renewable heat supply opportunities as they arise.

Forest Residue Project

Suitable sites within the BAU were identified and evaluated on the economic, environmental and social impact of recovering forest residue brash from clearfell sites using the bundling method for use as wood energy. This operation will reduce the costs associated with restocking. During the period of this plan suitable sites will be identified as potential bundling sites.

3.3.2 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 with local people and communities.

In the timespan 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.

To put the BAU's property sales in context, it is worth noting that in the South Munster BAU which has a total area of 62,521 hectares, the total area sold (including wind farm lands) during the last five years period 2011-2015 was 429.5 hectares or less than 1% of total area.

Coillte also recognises the importance of having its property portfolio registered on the Land Register maintained by the PRA. Coillte will continue to work with the PRA and relevant parties in this regard.

3.3.3 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.

3.3.3.1 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 Company's 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 Munster BAU between 2016 and 2020 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.
- managing unauthorised usage of the recreation infrastructure in line with best management practice and security policy.
- 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. The key projects in this BAU over the period of this plan are: (NOTE please include your key pipeline projects).
- Continuing our exploration of the development of amenities with Cork, Limerick, South Tipperary and Waterford County Councils including:
 - a. Glensheskin Wood, near Kilworth Village.
 - b. Ballyannan Wood, adjacent to Midleton.
 - c. Glenbower Wood, located in Killeagh Village.

Key Objective 6

In the South Munster BAU, Coillte aims to:

- **Provide a high quality recreation offering to the public.**
- **Maintain all existing recreation sites to the highest standards.**
- **Work in partnership with proactive communities to upgrade amenity site.**

3.5 Cultural Heritage and Archaeology Measures in the South Munster 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 such as Summer House, Curraghbinny and St. John's Well, Musherá Duntryleague and Tooreen 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 2016 -2020.

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.

To reduce 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.

3.6.2 Practicing Low Impact Silvicultural Systems (LISS)

The selection of a silvicultural system on a forest site will be based on a number of different factors. The decisions will be based on: site stability, the management objective of the site (i.e. timber production or biodiversity), and the surrounding landscape.

The list below explains the area where the various silvicultural systems that collectively are known as low impact silvicultural systems (LISS) are adopted. Low Impact Silviculture Systems such as Continuous Cover Forestry, 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. Currently 17% of the productive area of the BAU, is managed under LISS.

Sites on Coillte Estate managed under LISS

1. Old Woodland Sites (OWS)
2. All Broadleaf High Forest (BHF) stands are to be managed under CCF
3. Amenity sites
4. Agreed Biodiversity Areas where current or target habitat is woodland where appropriate according to Biodiversity Management Plan
5. Management Units currently listed for management under LISS, where silvicultural system equals Small Coup Felling (SCF), Continuous Cover Forestry (CCF), Long Term Retention (LTR), Natural Regeneration (NRE)
6. CCF demonstration sites
7. Scots pine stands, where stability and vegetation provides for Natural regeneration

Key Objective 7

In the South Munster BAU, Coillte aims to maintain and enhance the current level of broadleaves in the BAU managed for biodiversity.

3.6.3 Biodiversity

At present 17% of the Coillte land area in the South Munster BAU is designated and managed for biodiversity.

Due to the current position regarding ash dieback disease (*Chalara fraxinea*) the replanting of ash has been suspended by Forest Service. This will result in species changes in biodiversity areas relative to broadleaf plantings during the period of this plan.

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 4,964.29 hectares identified as old woodland in different locations across the BAU. This represents 8% of the Coillte land in the BAU or 18.6% 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 planning process along all permanent watercourses, typically these will consist of a 20m unplanted strip on either side of the watercourse and then broadleaf planting for 10m-20m behind the bare strip. Aquatic buffer zones are established primarily for water protection purposes, and not for timber production.

- **long term retention** of some stands of timber is practiced to enhance environmental, landscape and social benefits of our holdings. The target for the period is to set aside 1% of the gross area of the BAU for long term retention. Stands designated for retention are in Ballydrehid (Cahir Forest), Colligan (Dungarvan Forest), Glengarra (Glengarra Forest), Mountanglesby (Knockmealdowns Forest), Ballyannan and Castlemartyr, (Ballynoe Forest) and Island Wood (Newmarket Forest). Scots pine is the only conifer tree regarded as a native species and it is our policy to retain them long term where it's possible and safe to do so.

- **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.
- Endeavour to engage 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 Munster BAU, Coillte aims to review, manage and maintain the areas of biodiversity.

4. Sustainable Forest Management Policies and Proposals

Coillte manages its forests to FSC and PEFC Forest Certification Standards, ISO 14001 Environmental Management Standard and OHSAS 18001 Occupational Health and Safety Standard.

4.1 Using Forest Design

The BAU recognises its responsibilities to ensure that its forests are planned and managed in a manner that enhances the landscape. 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.

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 adhere to Forest Service regulatory guidelines, at the time of publishing is a maximum of 25ha. To this extent, BAU team members have identified coupes which were greater than 25ha and redesigned/restructured these areas as necessary. There may be situations where felling coupes of greater than 25ha 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 BAU. The disease can kill larch species, which was always considered a valuable species in terms of providing colour in a landscape, therefore, alternative species giving the maximum aesthetic impact will now need to be considered.

Parts of the BAU are highly scenic and have the potential to evolve into high amenity areas. The proximity of some of our forests to Cork City and other major urban centres affect the management of our forests and influences decision making. Accordingly it is imperative that landscape planning and design should take particular account of the primary viewpoint from which the forest can be seen.

Given the overwhelming occurrence of streams and waterways in the forests in this BAU, 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.

4.2 Water Protection

Coillte's Policy on water protection and water monitoring is outlined in "Water Protection and Forest Operations Guidelines". This document outlines current best practice in minimising the impacts of forest operations on water quality.

Compliance with the Forest Service's Code of Best Forest Practice, which includes a series of Requirements, Guidelines and Notes, the following are the most relevant to water protection; Requirements on the Freshwater Pearl Mussel and Aerial Fertilisation, Guidelines on Water Quality and Harvesting and an Information Note on Appropriate Assessment Procedure is strictly adhered to.

Through the implementation of the Environmental Risk Assessment procedure under the Environment Management System, the most sensitive sites are identified and additional mitigation measures above and beyond to what is routinely adopted are recorded and implemented during the course of the forest operations.

Amongst the suite of mitigation measures that can be selected by the forest operations manager, one of the most important is the establishment of buffer zones on all significant watercourses within the forest. If not already in place from the time the forest was initially planted, a naturally vegetated buffer zone should be established either at thinning or clearfell & restock stage. On very sensitive sites, such as in the prioritised Top 8 Freshwater Pearl Mussel Catchments, the buffer zones are actively managed and small groups of native broadleaves are planted to hasten the development of a mixed open space/scrub woodland habitat.

Other routine measures, include the restriction of when operations can occur in the year, the provision of silt traps, the minimisation of machinery movement in the buffer zone, extraction route layout and use of brash and the design and location of temporary bridging over watercourses within the operations site, Furthermore, to address the risk of oil spillages from forest machinery, a pollution control plan is included in the Site File (SF) and a pollution control kit is on site for all high impact operations.

Forest operations are actively managed and monitored. On the most sensitive of sites, daily visual monitoring is conducted of all watercourse exiting the operation's site and records kept. On a selection of these sites, short-term water sampling of 'high impact' forest operations described in Section 2.8 is carried out. In addition, a network of long term fixed sampling sites on selected rivers have been established in each BAU. 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.

The BAU facilitates a number of ongoing nationally funded Forests and Water Projects, conducted by UCD and UCC, such as HydroFor and CROW, by allowing regular access to upland headwaters located in the BAU forest properties. Monitoring at these study sites entails a wide variety of ecological surveys, including vegetation monitoring of established aquatic zones and biological and physio-chemical assessments of waters draining active forest operation sites. The findings from this national research will test the efficacy of the current Water Guidelines dating from 2000 and suggest where they can be updated to take account of changes in forest practice over the last 13 years.

Finally, the BAU when planning forest operations consults with regulatory, statutory and interested stakeholders on the topic of water, including the National Parks and Wildlife Service, the Inland Fisheries Ireland and Co. Councils

4.3 Reducing Use of Chemicals

Pesticides

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

Where pesticides are required, their storage, usage and disposal all comply with national pesticide legislation, EMS, FSC and PEFC guidelines and Health and Safety guidelines.

FSC Implications

Coillte is currently certified under the Forest Stewardship Council (FSC) forest certification scheme, a voluntary international forest certification scheme. Under this scheme cypermethrin is classed as 'highly hazardous' and can only be used in FSC-certified woodlands, under a derogation from FSC International. Coillte's cypermethrin derogation extended to October 2015. Therefore Coillte has applied to FSC international for the continued use of cypermethrin, for treating newly planted trees in the forest. Details of this application can be found at this link

http://www.coillte.ie/fileadmin/user_upload/pdfs/Application/Republic_of_Ireland-application_form_for_cypermethrin_derogation-2015.pdf

A public consultation process has been completed with stakeholders on the derogation for continued use of cypermethrin. This robust public consultation process included direct contact with five hundred stakeholders over a 45 day period, the derogation application was also publically available on Coillte's website for the duration of the consultation period. In addition, a representative from the FSC and Soil Association, visited Ireland to review the derogation process and met six stakeholders to discuss the issues around the use of cypermethrin. As part of this process, the use of cypermethrin in Coillte's nursery at Ballintemple and in the forest was also fully reviewed. In addition the representative looked at a number of trials on the use of alternatives to cypermethrin, which are ongoing in the forest. They also reviewed Coillte's environmental and safety procedures. FSC will in time make a decision on the application for the continued use of cypermethrin by Irish FSC forest management certificate holders and Coillte await that decision.

PEFC Implications

Coillte is currently PEFC certified and the PEFC Irish Standard allows use of cypermethrin, as it is legally registered for use in Irish forests by the Pesticide Registration and Control Division of the Department of Agriculture, Food and the Marine.

Fertilisers

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. This requires the submission of detailed plans and consultation and agreement from the County Council, Fisheries Board and NPWS. Adherence to the Forest Service Guideline on aerial fertilisation is mandatory. A forest crop is described as 'in check' when tree growth is negligible or has ceased altogether. This usually occurs before canopy closure on nutrient poor sites, when the forest is still incapable of recycling the limited amount of available nutrients within the crop.

4.4 Working With People

Coillte's policy is to consult widely with stakeholders in formulating its 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 forest operational level in advance of all high impact operations. The BAU strategic plans are currently reviewed on a five year cycle;

- Each BAU have a social and environmental panel which meets annually 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. For more information on the panels, click on http://www.coillte.ie/aboutcoillte/about_coillte/coillte_consultation/social_and_environmental_panels/
- 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 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. Coillte also encourage stakeholders to make contact with us so that we can answer queries, consider views and respond to any issues raised.

Coillte's consultation process on its BAU strategic plans

It is Coillte's policy to consult widely with stakeholders in formulating its management plans. The BAU strategic plans set out a vision for the forests in each business area unit, and also, how Coillte policies and objectives will be implemented at Business Area Unit level during the period of the plan.

The purpose of Coillte's BAU strategic plans is to set out plans for forest management activities that take place in each of our BAU's. In compiling these plans Coillte apply principles of environmental impact assessment and risk management on potential interactions between forest activities and receptors such as water and soils, biodiversity, archaeology & cultural heritage, landscape, people and material assets.

Some of the topics covered in a BAU strategic plan include the following: commercial planning, timber harvesting, timber sales, community facilities and benefits, environmental enhancement measures etc.

During the consultation process on these BAU strategic plans, Coillte actively engage with stakeholders, in the following ways:

- national newspaper adverts
- regional newspaper adverts
- consultation via Coillte's website
- mail shots to our listed stakeholders
- flyers and notices about our consultation process at amenity site entrances
- forest office meetings (by appointment) which allow further feedback

The consultation process is carried out in two stages (scoping and draft plan stage) to take input from the public in relation to its BAU strategic plans. A map is produced as part of the consultation process, which reflects the areas targeted for clearfelling. This map forms the basis of public consultation and if concerns are raised about particular areas they are addressed at this time. Coillte endeavour to take on board inputs during this consultation process, while also balancing diverse opinions and contributions from the public in relation to these plans.

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. Any changes are consulted on in line with Coillte's consultation procedures.

Incorporation of results of consultation in this BAU

Following Coillte public consultation processes, submissions received are acknowledged, logged on our internal system, and assigned to the relevant BAU or team for consideration and possible incorporation into our plans.

The detail in the following table outlines incorporation of changes, responses following consideration of consultation submissions for this BAU strategic plan as a result of submissions received from stakeholders/public during Coillte's public consultation stages (scoping and draft plan) carried out during 2015.

Incorporation of changes, response in this BAU Plan	
Section reference in plan	Detail incorporated
Foreword	<p>Coillte agreed to make the following changes to its plans following consultation with Mr. Neil Foulkes</p> <p>The following statement was added <i>"In practicing sustainable forest management Coillte's aim is to develop its forests in a way that is environmentally sustainable, socially sustainable and economically sustainable"</i>.</p>
1.2 Renewable energy	<p>Following the many wind energy submissions received by groups and individuals, Coillte considered each submission and ultimately responded to each submission through the preparation of a detailed Frequently Asked Questions document that was issued to each respondent and uploaded onto the Coillte web site:</p> <p>http://www.coillte.ie/coillteenterprise/renewable_energy/wind_energy/wind_energy_faq/</p> <p>Coillte also updated Section 1.2 through the addition of specific focused sections regarding fossil fuels, Coillte's approach to public participation and consultation, wind energy, biomass and other renewable technologies.</p>
3.3.1 Renewable Energy Projects	<p>In response to some of the wind related submissions received, most notably one received from Mr. Anthony Cohu, Coillte updated the text in each BAU Strategic Plan such that it provides information that is correct as at January 2016 regarding the number of planning permitted projects and proposed projects that concern the Coillte estate. The information is now presented in an easy to reference table that provides details regarding the status of each project at the time of writing in addition to the number of wind turbines/MW proposed as part of that renewable energy project. In addition, wherever relevant, information is also provided about wind energy projects where Coillte has a direct involvement and those projects include a Community Benefit Scheme and / or additional benefits for the host communities.</p>

3.6.2 Practicing Low Impact Silvicultural Systems	Coillte considered the inclusion of areas managed under LISS in each BAU plan, however this data is currently being actively reviewed and will be completed in the coming months. When completed Coillte will upload this data to its website.
3.6.3 Biodiversity	Key objective 7 in the Midlands plan was reviewed and updated.
4.2 Working with people	Coillte added a link to this section to provide further information about its Social & Environmental Panels.
4.3 Reducing Chemicals	Additional data was added to section 4.3 concerning Coillte's application to FSC for a derogation for the use of Cypermethrin.
3.2 Clearfelling	<p>Following Coillte's consultation with WOI (Woodlands of Ireland) the following changes were made to Coillte's plans</p> <p>Coillte agreed to change current text <i>"Clear felling is a natural part of forest management"</i> to <i>"Clearfell is the most common silvicultural system used in Ireland and the UK due to the prevailing forest culture and has predominated over the past century characterized by the establishment of new forest plantations"</i>.</p>
3.6.3 Biodiversity (Continuing the introduction of riparian buffer zones)	Coillte clarified the statement in its text referencing that <i>"Buffer zones will not normally have a timber production target"</i> .
Appendix 2, Column 5	Coillte amended a misprint <i>"Issues to be Assessed"</i> , now corrected to read <i>"Issues to be addressed"</i> .
2.9 Forest Management Issues	<p>Following public consultation and engagement with the Irish Farmers Association (IFA). Coillte are also involved in the National deer management forum, The Wicklow Deer Management Partnership and other deer management groups in BAU South East.</p> <p>Coillte have included additional information in terms of how it manages its deer population and statistics on deer species abundance in each BAU.</p>
3.3.2 Land Sales & Development	<p>The following text addition agreed with Property Registration Authority (PRA) following consultation</p> <p><i>"Coillte recognises the importance of having its property portfolio registered on the Land Register maintained by the PRA. Coillte will continue to work with the PRA and relevant parties in this regard."</i></p>
1.2 Renewable Energy	<p>Following consultation with Mountaineering Ireland (MI)</p> <p>Coillte's windteam propose to send Mountaineering Ireland a personalised notification about all wind farm projects that concern the location of wind turbines on the Coillte estate from February 2016 onwards.</p>

4.4. Working with people	Coillte have agreed to hold an annual meeting between Coillte's head recreation team and MI to discuss any areas of concern, and any possible proposals which could provide mutual benefit.
Specific to BAU 7 - South Munster	
3.2 Forest Resource and Timber Plans	<p>Following submission by stakeholder suggesting a number of inclusions should be built into the BAUs' future Plans:</p> <p>Areas referred to in this submission included:</p> <ul style="list-style-type: none"> - The ownership and management of Coillte's estate on behalf of the Irish people, not only as a source of timber, but for the management of water conservation, CO2 reduction and its influence on climate. - Continued access to forests as a vital space for inspiration and recreation. - Forest areas/diversity should increase – not confined to poorer soil types. - Integration of BAU Strategic Plans with those of other state/semi-state bodies to ensure sustainable development <p>Response by Coillte:</p> <p><i>The ownership of the company is a matter for the company's shareholders the Minister for Agriculture, Food and the Marine and the Minister for Public Expenditure and Reform rather than the company itself. Accordingly while we understand the sentiment expressed we do not feel it's appropriate to refer to the ownership of the company at the level of a forest management plan.</i></p> <p><i>In relation to points 2-5 Coillte has always operated an open forest policy where visitors are welcome across our whole estate and this will continue to be the case. Currently we manage approximately 20% of our forests primarily for biodiversity and nature conservation and we are looking closely at how we manage those areas to ensure we protect and enhance the best ones.</i></p> <p><i>We recognise and actively manage our forests to deliver multiple benefits and engage with other state land owners such as National Parks and Wildlife, Bord na Mona and ESB to deliver our plans. For example we are working closely with Bord na Mona and Offaly County Council at the moment to examine the potential to develop cycling infrastructure in Offaly. This will continue to be part of how we look to manage our estate. However, your point relating to integrating our plans with other state and semi-state bodies has been noted.</i></p>
3.6.3 Biodiversity	<p>Following submission was received from Stakeholders in relation to invasive species:</p> <ol style="list-style-type: none"> 1. Control of invasive species in particular ragwort and Himalayan balsam, to foster good relationships with adjoining landowners and maintain Coillte's reputation as a good neighbour. 2. Notice at Salterbridge, Cappoquin, with signage stating it is an 'Observation Post Protect Zone. Some trees were not felled and have since blown. Site was left unplanted and trees left to rot. If it is no longer a protect zone, site should be cleared, planted and sign removed.

	<p>Response by Coillte:</p> <ol style="list-style-type: none"> 1. <i>Coillte does have a policy on the management and control of invasive species on Coillte estate. A base line survey was carried out in 2013 and ongoing surveys will be carried out to monitor extent and progress on management of control of invasive species. Japanese knotweed is included for reporting within the survey and there is a facility to add in other species like Himalayan Balsam.</i> 2. <i>Under the EU Plant Health Directive and in accordance with Commission Directive 92/70/EEC the Forest Service carries out surveys of the national forest estate for specific pests and diseases. In this regard, and in the context of the European internal market, Ireland has been granted a special Protected Zone status with regard to 11 harmful forest pests and diseases. A Protected Zone is essentially an area in the EU where a pest or disease of quarantine significance, which is established in other parts of the EU, is not present despite favourable conditions for it to establish. In order to maintain Ireland's Protected Zone status for these harmful forest pests and diseases, the Forest Service carries out annual surveys at a national network of observation points. The network of observation points is used as a source of survey information to help prove on an annual basis that Ireland continues to be free from these harmful organisms. In this regard 32 locations in Coillte's forest estate have been randomly selected for inclusion in the network of observation points and will be visited by the Forest Service as part of the annual survey.</i>
<p>1.2 Renewable Energy</p> <p>3.3.1 Renewable Energy Projects</p>	<p>Following submission was received from Stakeholders in relation to Wind Energy:</p> <p>Submission related to two areas – one specific to BAU 8 West Munster in relation to pedestrian access to archaeological features and which was responded to by BAU 8 South Munster; the other in relation to wind energy BAU 7 South Munster and BAU 8 West Munster.</p> <p>In relation to wind energy stakeholder was concerned that Coillte has little control over the EISs produced by developers for the planning process, which, at times ignored conditions on the ground i.e. recent application for a wind farm at Shehy More, Inchigeelagh (CO 13/551) – BAU 8 West Munster. In line with Coillte's high environmental principles, stakeholder felt Coillte should take a greater part/interest in the environmental consequences of such developments.</p> <p>Stakeholder also felt that there were too many wind farms on Coillte lands and this was impacting on their 'open forest policy'. Concern was also voiced in relation to access tracks becoming part of walking paths.</p> <p>Response from Coillte</p> <p><i>In relation to your concerns raised about wind energy, I believe you received an initial response from Jude Byrne, Director of wind energy. In that letter he states "Please be informed that Coillte is currently in the process of reviewing and considering all of the wind energy related responses received. Having carefully considered each of the issues raised, Coillte will provide a response document answering all matters raised in the submissions".</i></p>

	<p><i>I know that this wind team are currently drafting this response document and will issue as soon as possible directly to you.</i></p>
	<p>Following submission was received from stakeholder in relation to deer management:</p> <p>Submission related to deer control programme. Stakeholder adjoining landowner at Cappagh, Co. Waterford, with forest plantations, one of which is due for clearfelling and replanting with broadleaves. At times he has seen deer grazing on his land and in the past has had to use deer guards on newly planted broadleaves. Queried as to whether deer assessments had been carried out into deer population in Blackhill area and if a more effective cull of females will be carried out.</p> <p>Response by Coillte:</p> <p><i>Thank you very much for your submission. The area in question, namely Ballylemon property, is currently licenced for deer stalking up until 2017, after which it will be retendered. I have already arranged for a full deer survey to be carried out in 2016 to ascertain the actual deer numbers in this area. The results of this will have a bearing on the cull numbers expected within the licence.</i></p>

3.3.2 Land Sales & Development

Following submission was received from stakeholder in relation to forest management and licenced activities on Coillte lands:

Submission was made by Cork Orienteering Club (COC) in relation to orienteering on Coillte's lands. COC is a large recreational user of Coillte lands particularly in BAU7 South Munster, BAU 6 South Central and BAU 8 West Munster. Orienteering is an adventure sport for all ages and promotes fitness, map navigation skills, and a love of the outdoors. Approximately 25 orienteering events take place throughout the year with c.1,500 recreational users. Over the past 34 years we have had a good relationship with Coillte and we hope to continue to do so.

Concerns included:

Access and Permits: As an amateur sport all organiser time is donated; event entry charges barely cover costs (mapping, map printing, equipment, insurance, overheads, Coillte permits etc.). COC queried the Coillte's administration charge and any increase in this charge would lead to both cancelling of events/review the future use of Coillte's properties. Parking fees were also a concern.

COC adhere to forest operations notices at all times with regard to access restrictions; these restrictions usually are confined to limited areas. Cancellations of planned orienteering events due to forestry operations are rare. Access on web site to upcoming felling/restrictions would be welcome.

Sustainability:

COC believe in sustainable land use and replanting of forests. Clearfelled areas are difficult to run/navigate through due to tree debris/stumps as it takes many years before a replanted reached sufficient maturity to allow orienteering/running. Thinning opens up blocks and at times improves the forest for orienteering purposes. Forest features such as ruined walls, earth banks or large boulders are used as orienteering features and should not be removed.

Diversity of species together with natural features adds to the forest landscape and make it a more interesting and scenic place to orienteer. Orienteers need these "features" as navigation points on orienteering courses. They use a map to find the specified "features" and run as quickly as possible between them.

COC expressed how important it was that primary Coillte forest areas are not significantly clear felled - e.g. Farran, Curragh Wood, Ballyannon, Glenbower, Currabinny, Warrenscourt, Tracton, among others. Recreational value of the woods with 50km of Cork city is huge for urban dwellers and the clearfelling of such woods would have a negative impact.

Increasing access costs are also an ongoing concern for this club. Pay access barriers to certain woods can act a deterrent to competitors, as orienteering events already have an entry charge to cover costs (map printing, equipment, permits etc.)

	<p>Response by Coillte:</p> <p><i>Thank you for the acknowledgement of the good relationship between Coillte and Cork Orienteering Club. I take note of the main body of the submission and I will address the issues outlined in the conclusion.</i></p> <p><i>Coillte is an export oriented, forestry and forest products business, with interests in renewable energy. We strive to meet this objective in a socially and environmentally sustainable way. To this end we advertise all upcoming clearfell and reforestation events each year in the local newspapers to give due notice to the general public. We also have a web viewer facility on the Coillte.ie website that shows all upcoming clearfell and thinning operations. Harvesting felling areas are designed so as to have minimal impact on the landscape. All forests regardless of whether they are commercial plantations or forest recreation areas require ongoing management in the normal forest cycle.</i></p> <p><i>Under Coillte's recreation policy access to the Coillte estate is free for those on foot. However, a parking charge does apply to forest parks to help defray the higher costs of management and maintenance of facilities in these areas.</i></p> <p><i>Under the current permit system the normal basic administration charge advised per event is €150 but for Cork Orienteering Club the charge has been reduced to €50. We will take on board your comments if there is a national review of our recreation charging policy.</i></p> <p><i>Coillte have also acknowledged a submission from the Finn van Gelderen, Irish Orienteering Association which will be responded to in due course from our central team.</i></p>
<p>2.3 Community Recreation and Tourism</p>	<p>Following submission was received from stakeholder in relation to recreation:</p> <p>Submission received on behalf of the Kilworth Community Council (Muintir na tire) outlining observations and suggestions relative to BAU 7 South Munster Strategic Plan with particular emphasis on the woodlands located Glensheskin, Kilworth, Co. Cork, which attracts large volumes of visitors annually.</p> <p>There have always been woodlands, mainly broadleaf, at Glensheskin on the banks of the Douglas river approximately 5 km from Kilworth village. The Douglas river, flows in to the Araglin river and then the Blackwater and is Special Area of Conservation (SAC). The woods at Glensheskin were identified in the 2011-2015 BAU as warranting recreational status (p. 46) and this has been achieved since the publication with threshold sign and maps within the car park area Given the extent of current use, the proximity to the village and the suitability of the wood at Glensheskin to a multitude of recreational activities, we would take this opportunity to state that we in the community would foresee continuous growth in recreational activities both by individuals and groups at Glensheskin. If possible, we would like to see the BAU recreational plan for the area if one exists.</p> <p>Throughout 2016 numerous were held in the woodlands including team based challenge, children's themed walk, Dawn Chorus event and Kilworth festival with children's entertainments and stalls. Many other clubs and groups use Glensheskin on an ongoing basis.</p>

At present Kilworth Community Council are currently involved in the final phase of construction of a footpath connecting the village with the woodland entrance in conjunction with Cork County Council.

As regards communication and collaboration between the Kilworth Community Council and Coillte we would appreciate very much to be kept up to date with any possible developments and or harvesting / planting plans for Glensheskin in a timely manner. As it is very much part of our community lives in Kilworth we would foresee the Community Council seeking to further develop amenities in conjunction with Coillte into the future. We would like to know what (if any) part of the wood is protected from harvesting by means of a direct communication. Also should an opportunity arise, we would call for Coillte to increase the broadleaf cover in Glensheskin to support the biodiversity of the river system.

We would like to take the opportunity to thank Coillte for the relationship and cooperation we have enjoyed down through the years and look forward to continuing the mutually beneficial partnership we have had to date.

Response by Coillte:

Thank you for your submission and the many positive observations of the ongoing relationship between Kilworth Community Council and Coillte in relation to Glansheskin. To answer your queries;

- 1. Planting of broadleaves beside the Douglas River - Coillte have classified the forest areas in immediate proximity to the Douglas river and associated streams as 'Agreed Biodiversity'. The long term plan for these areas is broadleaf forest management. There are no finalised plans for the remainder of the property as of yet but Coillte advertise all proposed harvesting plans on annual basis in local newspapers.*
- 2. BAU recreational plan - there is not a specific recreation plan for Glansheskin but rather annual maintenance inspections are carried out which form the work programme for the year. Improvements and upgrades in recent years have included, some of which you have noted, the installation of the threshold and trailhead sign, replacement of the footbridge on the East Munster Way, annual upgrade to the forest road that goes from the county road to the main car park, repair of the stone bridge in the car park, hedge cutting supply of materials to the Blackwater/Avondhu TÚS workers. The post and rail fence at the entrance close to the pump house will be replaced before the end of year.*
- 3. Events - Coillte is happy to facilitate community and Club events under permit. You will understand as the landowner that Coillte has to ensure that all events that take place in the estate are carried out responsibly and are appropriately insured and that Coillte are indemnified. We would appreciate your ongoing co-operation in this regard along with communicating this message to other bodies.*
- 4. Further developments - the current working relationship between Coillte & Kilworth Community Council is working well in terms of the maintenance of the forest recreation area. We will consider all written proposals as they are submitted.*

	<p>5. <i>Communication & collaboration - the proposed felling plans for 2016-2020 are available on our public MapViewer. I have included a guidance document which outlines the link and the process involved in registering for access. Coillte are proactive in communicating our annual felling plans through the local newspapers. A note has also been put on the files to consult with yourselves regarding clearfelling in Glansheskin property within the plan period of 2016-2020.</i></p>
<p>4.3 Reducing Chemicals</p>	<p>Following submission was received from Stakeholder in relation to Coillte's Forest Plans 2016-2020</p> <p>Submission by stakeholder in relation to Coillte's use of herbicides.</p> <p>Concern was expressed re use of herbicides and stakeholder would prefer if other methods were used. In absence of any manual management large areas of ground become over grown and spraying is seen as the solution. Coillte's contractors should be encouraged to use alternative methods of control.</p> <p>As Coillte is responsible for the biodiversity of its estate and as such should manage it to promote nature and biodiversity and should be addressed in the creation of its 2016-2020 plans. Also sought when the Forest Plans 2016-2020 will be available.</p> <p>Response by Coillte:</p> <p><i>In relation to Coillte's chemical policy, Coillte uses an integrated pest management approach; a core principle of Coillte's Environmental Management System and both the FSC and PEFC certification bodies. As such, Coillte is committed to reducing its pesticide usage and, where possible, to using non-pesticide methods to control pests and weeds. Pesticides are applied only when absolutely necessary due to environmental considerations and cost. The decision to apply a pesticide is based on a site assessment, and only taken where non pesticide control options are unlikely to give sufficient protection at a reasonable cost. When pesticides are required, only those approved for use in forestry by the Pesticide Registration & Control Division (PRCD) of the Department of Agriculture, Fisheries and Food (the regulatory body for pesticide use in this country) and FSC listing of Hazardous Chemicals are used. All spraying is targeted, using hand operated sprayers only.</i></p> <p><i>Where pesticides are required, their storage, usage and disposal all comply with national pesticide legislation, EMS, FSC and PEFC guidelines and Health and Safety guidelines.</i></p> <p><i>Coillte 2016-2020 plans will be available through the Coillte website www.coillte.ie.</i></p>

4.5 Monitoring and Evaluation

Coillte continues to monitor the achievement of its objectives and targets using the proforma set out in [Appendix IV](#). The results of this monitoring will be available in Coillte's sustainability reports which will be published on the Coillte website www.coillte.ie

Appendix I - Summary of Archaeological Sites in South Munster BAU

Type of Monument	No. In BAU	SMRS Number *
Architectural fragment	1	WA029-023002-
Barrow - ditch barrow	2	TS066-041004-, TS066-041003-
Barrow - mound barrow	1	CO123-004----
Barrow - ring-barrow	2	CO048-096----, CO043-001----
Barrow - unclassified	1	TS066-041005-
Booley hut	1	CO008-066----
Boundary stone	3	WA012-002----, TS091-021----, CO056-009----
Bridge	3	CO124-026----, CO083-124----, CO066-048----
Bullaun stone	3	WA029-023003-, CO066-037----, CO055-016002-
Burial	2	WA012-010----, CO042-082----
Burial ground	2	CO054-146002-, CO005-004----
Burnt mound	1	CO048-175----
Cairn - boundary cairn	5	CO008-025----, CO008-024----, CO008-023----, CO008-020----, CO008-019----
Cairn - burial cairn	1	LI055-043----
Cairn - radial-stone cairn	1	CO033-065001-
Cairn - unclassified	27	TS091-023----, TS090-005----, TS075-064----, LI055-031----, LI055-030----, LI055-029----, LI055-027002-, LI055-027001-, LI055-024----, LI055-023002-
Castle - tower house	1	CO064-109002-
Church	2	TS091-002001-, CO059-097----
Cist	4	CO054-093----, CO008-012004-, CO008-012003-, CO008-012001-
Clapper bridge	1	CO071-158----
Earthwork	6	TS087-031----, LI056-023----, LI048-066001-, CO064-109001-, CO051-009----, CO022-170----
Enclosure	33	WA029-031----, WA022-044----, TS091-008----, TS073-028----, TS067-106----, TS059-062----, LI058-018----, LI049-255----, LI049-164----, LI049-073----
Field boundary	1	CO094-131----
Field system	1	TS087-034----
Fulacht fia	30	WA038-060002-, WA038-060001-, CO085-012----, CO085-007----, CO083-018002-, CO083-018001-, CO071-033----, CO060-031----, CO059-096----, CO051-181----
Hilltop enclosure	1	CO065-061----
House - indeterminate date	1	CO050-150----
House - vernacular house	2	CO046-054----, CO041-111----
Hut site	3	CO048-183----, CO048-084----, CO048-082002-
Icehouse	1	CO077-052----
Kerb circle	1	CO033-064----
Kiln - lime	4	CO049-024----, CO040-086----, CO040-084002-, CO013-012----
Linear earthwork	1	WA029-071----

Type of Monument	No. In BAU	SMRS Number *
Mass-rock	5	TS073-035----, LI049-266----, CO123-069----, CO043-009---, CO017-028----
Megalithic structure	4	LI056-047----, LI056-030----, LI055-039----, CO034-058----
Megalithic tomb - passage tomb	1	LI049-077----
Megalithic tomb - portal tomb	1	TS075-045----
Megalithic tomb - wedge tomb	2	LI055-033----, CO094-022----
Midden	1	CO088-025----
Mill - corn	2	CO088-054----, CO035-039----
Millstone quarry	1	LI059-005----
Mine	1	WA035-009----
Moated site	1	CO035-047002-
Mound	5	WA039-009----, LI049-166----, CO094-111----, CO050-001--, CO013-009----
Promontory fort - inland	1	LI059A001----
Redundant record	14	WA030-075----, WA011-001003-, WA011-001002-, WA011-001001-, TS075-059----, TS068-138----, TS067-071----, CO071-046----, CO054-030----, CO024-170----, CO040-014----
Ringfort - cashel	1	CO040-014----
Ringfort - rath	25	WA034-002----, TS086-003----, TS081-011----, TS073-013---, TS066-040----, CO111-065----, CO096-033----, CO094-012----, CO075-032----, CO055-018----
Ritual site - holy well	14	WA035-006----, WA030-061003-, WA029-023001-, LI055-020----, CO124-036----, CO085-072----, CO064-025----, CO055-016001-, CO054-097----, CO048-085----
Road - road/trackway	1	TS091-001----
Souterrain	11	WA034-073----, LI048-066002-, LI048-062----, CO060-033---, CO046-053002-, CO045-128----, CO040-128----, CO035-079----, CO034-042002-, CO034-040002-
Standing stone	27	WA033-009----, WA013-021----, LI048-065004-, LI048-065003-, LI048-065002-, CO055-060----, CO054-112----, CO054-092----, CO054-044----, CO054-041----
Standing stone - pair	5	WA033-008----, LI048-039----, CO051-178----, CO041-113--, CO041-085----
Stone circle	1	LI056-052----
Stone circle - five-stone	2	CO051-018----, CO049-007----
Stone row	3	CO054-040----, CO049-023----, CO041-114----
Water mill - horizontal-wheeled	1	CO054-031004-

* 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 Munster BAU

Special habitats in South Munster BAU

Main Properties	Habitat Quality	Management Strategy	Management 2016-2020	Issues to be Addressed
FW1 – Eroding/Upland rivers & FW2 - Depositing/lowland rivers				
Blackwater and tributaries – SAC 2170		Protection and preservation of rare species within these rivers by the creation of buffer zones		Avoidance of siltation and eutrophication
Blanket Bog (PB2)				
Blackrock-Carrigagulla Barrahaurin Cummery Connell	Good quality blanket bog habitat in relatively natural condition.	Retain existing unplanted blanket bog habitat.	Retain open areas.	Turf cutting
Wet Heath (HH3)				
Ballyroe Ballyhaght Jamestown Glenanair West Glenanair East Long Mountain Coombs Toor Glandonohue Cummery Connell Glenamucklagh	Good quality wet heath habitat in relatively natural condition	Retain existing unplanted wet heath habitat.	Retain open areas.	Indiscriminate burning
Dry Heath (HH1)				
Shanrahan Foildarrig Killeatin Gortacullin Kildanoge Knockballiniry Ballyhaght Jamestown Glenanair West Glenanair East Long Mountain Coolfree	Good quality dry heath habitat in relatively natural condition.	Retain existing unplanted dry heath habitat.	Retain open areas. Fell, planting by agreement with NPWS.	Indiscriminate burning

Protected or rare species in South Munster BAU

Main Properties	Habitat Quality	Management Strategy	Management 2016-2020	Issues to be Addressed
Hen harrier				
Ballyroe Ballyhaght Jamestown Glenanair West Glenanair East Long Mountain Coombs Toor Glandonohue Cummery Connell Glenamucklagh	Good quality wet heath habitat, good hen harrier foraging habitat.	Retain open, unplanted habitat (foraging habitat) Ensure availability of pre-thicket stage reforestation (nesting habitat). Restore open habitat and broadleaved scrub in riparian zones	Fell selected riparian zones and do not replant Fell and delay replanting for retention of foraging areas as recommended by NPWS and subject to approval by Forest Service e.g. Bottle hill and Ballyhouras	Consultation with NPWS, Forest Service, Fisheries and stakeholders
Little Egrets				
Ballyannon Shippool	Good quality high woodland roosts adjacent to main feeding estuarine habitats.	Retain High Forest where Egrets have likely nesting sites	Retain old conifers for nesting sites	Consultation with Steering Group Members
Freshwater Pearl Mussel				
Properties adjacent to main channel of Munster Blackwater, The Licky and Clodiagh rivers and Tributaries Aherlow Rivers.	These River catchments are not on priority list but, a moderately rated pearl mussel, crayfish and sea lampreys habitat	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

Wood Spurge (Rare Plant)				
Bandon Valley	Damp Broadleaf woodlands of moderate naturalness retaining remnant relict native under storey vegetation	Conserve plant populations and habitats as recorded in ecological surveys.	Retain populations at known locations through maintenance of existing habitat.	Stakeholder consultation
Wood Millet (Rare Plant and Old Woodland indicator species)				
East Cork Woodlands	Broadleaf and Mixed woodlands of moderate naturalness retaining remnant relict native under storey vegetation	Conserve plant populations and habitats as recorded in ecological surveys.	Retain populations at known locations through maintenance of existing habitat.	

Native and Mixed Woodlands in South Munster BAU

Main Properties	Habitat Quality	Management Strategy	Management 2016-2020	Issues to be Addressed
Oak-birch-holly Woodland (WN1)				
Greenwood Inchleigh Lismire Curraghbinny Dukes Wood Ballard	Small sized woods but in general of good quality, some problems with invasive exotics e.g. Rhododendron	Maintain areas of antive oak canopy, facilitate expansion of oak wood, and monitor spread of exotic species.	Fell, replant with native species where appropriate.	Cost of invasive species removal
Mixed Broadleaved Woodland (WD1)				
Castlemartyr Glenbower Looney's Wood Cahir Park Castleblagh Gurteen Cappagh Rincrew Dromana	Mixed woodland retains areas of relict native ground flora. Some problems with invasive exotics e.g Rhododendron and Cherry Laurel	Restore native woodland in most suitable parts of these woodlands. Maintain woodland structure and species diversity in other areas. Implement LISS in these woodlands.	Fell, replant with native species Address rhododendron and cherry laurel control.	Cost of invasive species removal

Mixed broadleaved/conifer Woodland (WD2)				
Glensheskin Castleblagh Gurteen Cappagh	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 native woodland in most suitable parts of these woodlands. Maintain woodland structure and species diversity in other areas Implement LISS in these woodlands.	Fell, replant with native species Address rhododendron and cherry laurel control.	Cost of invasive species removal
Mixed conifer Woodland (WD3)				
Glenabo Graigue Castleblagh	Mixed conifer woodland retains areas of relict native ground flora. some problems with invasive exotics e.g Rhododendron and Cherry Laurel	Restore native woodland in most suitable parts of these woodlands. Retain some areas of Light crowned conifer species where ground flora is of good quality. Replant areas with Light crowned conifer species Implement LISS in these woodlands.	Fell, replant with native species and or light crowned conifer species. Address rhododendron and cherry laurel control.	Cost of invasive species removal

Appendix III – Recreation Facilities in the BAU

Location	Description
Aherlow – Glen of Aherlow	Slievenamuc/Gortavoher <ul style="list-style-type: none"> • Car park at Ardarou • 7 National Looped walks that are maintained by Aherlow Fáilte • Ballyhoura Way NWMW Northern slopes of the Galtys <ul style="list-style-type: none"> • Parking area at Glencoshabinna • Partnership with Mountain Meitheal South East in upgrading access points.
Ardarou / Glenville	River side walk including 2 timber footbridges. Car park and picnic facilities. Maintained in conjunction with Avondhu Blackwater Rural Social Scheme.
Ballyannan	Popular wood on the fringe of Middleton Town popular with walkers and joggers.
Ballyhoura Trail Park	<ul style="list-style-type: none"> • Trailhead facilities include; <ul style="list-style-type: none"> ○ access to 5 MTB trails ○ access to MTB skills and Category 4 trails ○ 3 waymarked walking trails ○ Ballyhoura Way ○ Trim trail ○ parking for approx. 80 cars, ○ bike hire (Trailriders) ○ bike wash ○ showers and changing facilities ○ picnic areas These facilities are maintained in conjunction with Ballyhoura Development Ltd.
Ballinaboola (close to Ballyhea on the western side of the Ballyhouras)	<ul style="list-style-type: none"> • Car park • 2 National Looped walks • Ballyhoura Way Maintained in conjunction with Ballyhoura Development Ltd.
Bansha Woods	Car park and picnic area with a pond.
Caher Park (close to Cahir)	<ul style="list-style-type: none"> • Parking area • Access to the Suir • Fishing stands for people with disabilities (project in conjunction with Tipperary Co. Co., Inland Fisheries, local Angling Club) • Tipperary Heritage Way • EU LIFE Site (priority woodland) - restore and maintain Yew woodland.
Castleblagh (close to Ballyhooly)	<ul style="list-style-type: none"> • Looped walk • Blackwater Avondhu Way Maintained in conjunction with Avondhu Blackwater Rural Social Scheme.

Location	Description
Castlemartyr	Two separate properties with; <ul style="list-style-type: none"> • 2 way marked trails • Picnic facilities • nature information • car park Maintained in conjunction with Castlemartyr Community Employment Schemes.
Claragh (close to Millstreet)	Has a section of national looped walk going through the property. The Duhallow Way is on it's boundary.
Colligan (close to Dungarvan)	<ul style="list-style-type: none"> • car park • Picnic facilities • 2 National Looped Walks
Corrin (close to Fermoy)	<ul style="list-style-type: none"> • 1 looped walk • Car park • Picnic facilities
Curragh (close to Midleton)	<ul style="list-style-type: none"> • 2 parking areas • Picnic facilities at the Ballynaclashy car park.
Curraghbinny (close to Carrigaline)	<ul style="list-style-type: none"> • Car park • 2 waymarked trails • Pagoda
Darragh Hills (close to Kilfinnane)	<ul style="list-style-type: none"> • 2 National looped walks with archaeological features and scenic views. Maintained in conjunction with Ballyhoura Development Ltd.
Dromana (close to Villierstown)	<ul style="list-style-type: none"> • Car park • Picnic area
Dromkeen (close to Innishannon)	<ul style="list-style-type: none"> • off-road parking • Waymarked woodland trails
Farran Forest Park	<ul style="list-style-type: none"> • 2 car parks • 2 waymarked trails • Permanent orienteering course • Wildlife enclosure • Toilet facilities • Zipit Aerial Trails • Volunteer Forest Park Rangers
Galty Castle (close to Kilbeheny)	<ul style="list-style-type: none"> • 1 National Looped walk • Car park • Picnic facilities Maintained in conjunction with Ballyhoura Development Ltd.
Garrettstown (close to Ballinspittle)	<ul style="list-style-type: none"> • 2 looped walking trails • Car park Maintained in conjunction with deCoursey.
Glannagear	Killavullen/Cork Road, forms part of national walking trail – Blackwater/Avondhu Way - with off road parking and picnic area
Glansheskin	<ul style="list-style-type: none"> • Car Park • Picnic Area • Blackwater Avondhu Way Maintained in conjunction with Kilworth Community Group.

Location	Description
Glenanair (close to Ardpatrick)	<ul style="list-style-type: none"> • car-park • picnic area • National Looped Walk. <p>Maintained in conjunction with Ballyhoura Development Ltd.</p>
Glenabo (close to Fermoy)	<ul style="list-style-type: none"> • Car park • Blackwater Avondhu Way
Glenbower (close to Killeagh)	Amenity area comprising of both Coillte and community woodland with walking routes, car park and picnic facilities.
Glengarra (close to Cahir)	<ul style="list-style-type: none"> • Arboretum • Millennium Woodland • LIFE conservation project to restore and maintain oak woodland. • 2 looped woodland walks • Car park • Picnic facilities <p>Maintained in conjunction with FÁS</p>
Glenshelane (close to Cappoquin)	<ul style="list-style-type: none"> • Car park • Picnic facilities • 4 walks all of which are serviced by a number of footbridges
Island Wood (close to Newmarket)	<ul style="list-style-type: none"> • Car park • Picnic facilities • Beara Way
Kilbarry (close to Coolagown/Fermoy)	Coolagown, east of Fermoy, amenity woodland consisting of car park, walking trails and viewing points/information panels.
Kilbrittain (close to Bandon)	Kilbrittain, consists of small parking area with walking trails.
Kilmurry (close to Macroom)	<ul style="list-style-type: none"> • Car park • Walks • Links with Warrenscourt
Knockmealdowns (northern flanks)	<ul style="list-style-type: none"> • 7 number of looped walks • Duck pond (Ardfinnan, Ballybacon, Grange and Newcastle (ABGN Gun Club) • Tipperary Heritage Way • East Munster Way • Blackwater Way • Kilballyboy car park <p>Maintained in conjunction with ABGN Gun Club and Knockmealdowns Active.</p>
Marlogue (Great Island of Cobh)	<ul style="list-style-type: none"> • car park • picnic facilities • access to the sea
Moanbaun (close to Watergrasshill)	<ul style="list-style-type: none"> • Parking area • Looped Walk
Mount Hillary (close to Banteer)	<ul style="list-style-type: none"> • 2 National Looped Walks • Parking at forest entrances <p>Maintained in conjunction with Integrated Resource Development Duhallow (IRD Duhallow).</p>
Mullinhassig (close to Aghabullogue)	<ul style="list-style-type: none"> • Parking spot • Popular unmarked riverside walk to waterfall
Oldcourt (fringes of Cork City)	<ul style="list-style-type: none"> • Woodland walks

Location	Description
Rostellan (East cork)	<ul style="list-style-type: none"> • Car park • Woodland walks
Tracton Wood (close to Minane Bridge)	<ul style="list-style-type: none"> • Parking area • woodland walks • Permit with MTB Club Cork
Warrenscourt (close to Kilmurry/Macroon)	<ul style="list-style-type: none"> • Car park • Picnic facilities • Woodland walks • Links with Kilmurry Recreation Area

Appendix IV – Monitoring

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
Environmental Parameters		
No.	Parameter	Measure
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

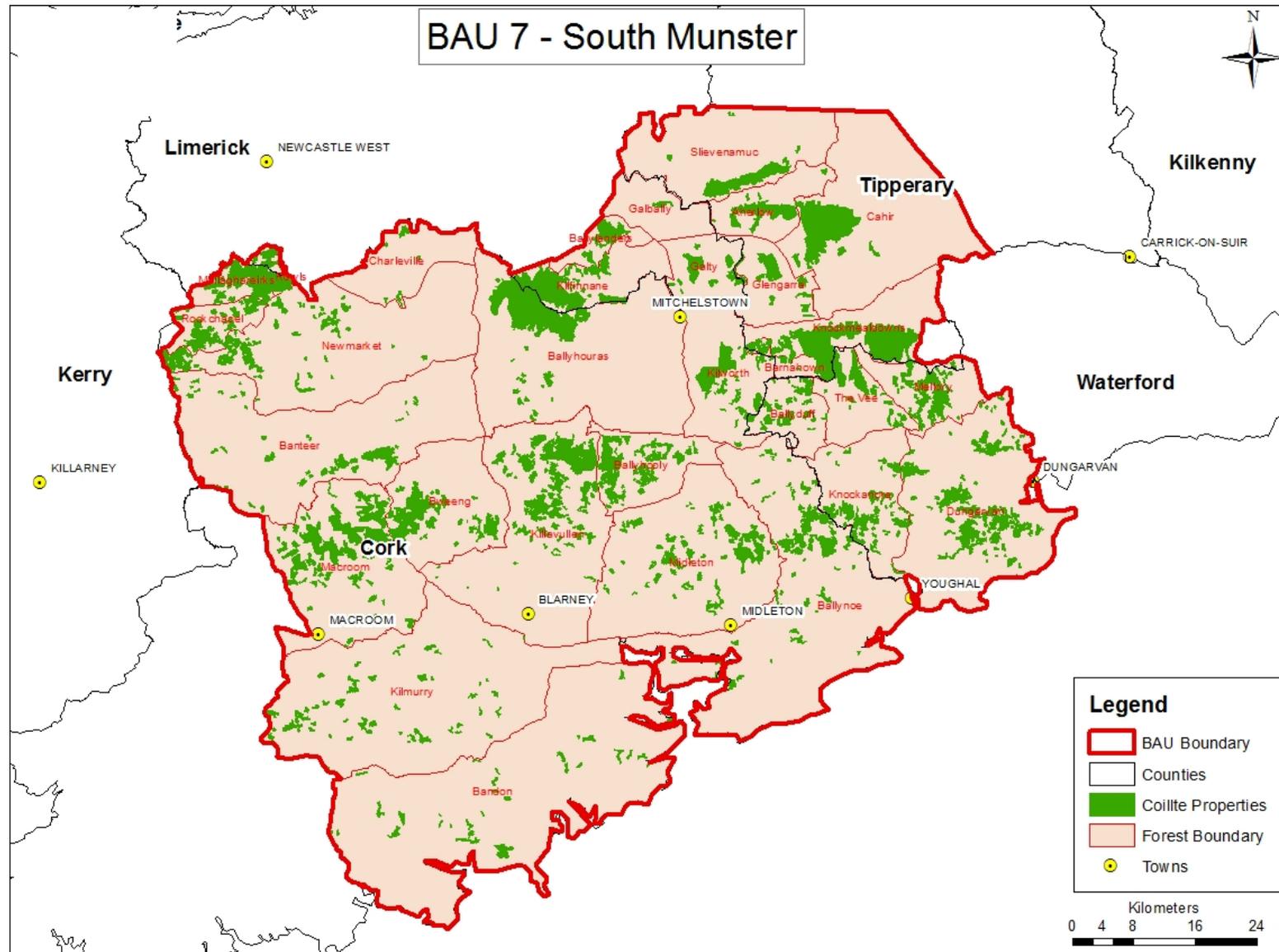
Water Monitoring		
31	Site Preparation,	no. of operations monitored
32	Aerial Fertilisation - Establishment	no. of operations monitored
33	Manual & mechanical fertilisation - Establishment,	no. of operations monitored
34	Aerial Fertilisation - later manuring	no. of operations monitored
35	Manual & mechanical- 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	meters
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

Appendix V – Forest Details

Forest	Forest Gross Area (ha)	Clearfell Volume m ³					Thinning Volume m ³					Clearfell Area (ha)				
		2016	2017	2018	2019	2020	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
CK01 - Mullaghareirks	2 169	-	14 661	5,727	5,317	6,260	762	2,129	1,843	2,095	4,987	-	37	11	10	18
CK03 - Rockchapel	1 343	10 145	-	1,221	12 127	2,218	3,534	4,128	499	2,375	3,337	22	-	2	22	3
CK04 - Newmarket	2 245	11 258	21 096	18 423	15 037	20 399	8,330	4,377	4,611	1,816	7,536	41	52	42	32	55
CK05 - Charleville	166	-	-	-	-	-	-	738	-	736	-	-	-	-	-	-
CK06 - Ballyhouras	4 456	8,003	26 967	8,624	6,260	15 259	12 373	7,100	5,345	3,792	9,468	28	54	18	11	33
CK07 - Kilworth	1 790	1,401	15 866	8,010	11 685	13 878	5,090	4,708	4,280	7,038	2,941	5	37	15	23	23
CK08 - Ballyhooly	2 306	29 171	8,974	12 222	3,501	22 244	5,639	3,542	8,257	6,069	7,718	69	23	35	10	56
CK09 - Bweeng	2 454	9,512	18 533	8,019	11 526	26 069	17 084	5,862	5,358	6,392	10 381	26	44	12	20	52
CK10 - Banteer	1 414	9,291	3,873	5,119	2,582	6,598	2,179	1,229	3,067	2,989	1,211	33	9	14	7	10
CK12 - Macroom	4 739	33 963	10 846	7,030	14 641	12 415	13 762	3,584	6,683	3,232	12 820	106	28	21	38	37
CK13 - Killavullen	4 580	13 242	33 995	59 581	37 330	46 270	13 290	11 244	11 597	13 584	12 574	46	77	119	66	101
CK14 - Midleton	2 417	12 653	15 509	3,000	20 701	7,161	2,886	8,729	6,679	15 638	7,322	36	42	12	58	25
CK15 - Ballynoe	2 298	8,091	14 412	31 896	26 885	8,806	3,857	6,324	3,027	4,602	4,175	16	36	78	50	18
CK16 - Kilmurry	1 262	14 437	6,263	8,739	14 780	1,168	3,229	1,240	3,704	6,336	3,450	36	13	21	32	5
CK25 - Bandon	913	8,191	-	3,641	1,023	1,755	-	-	-	-	-	18	-	10	3	10

Forest	Forest Gross Area (ha)	Clearfell Volume m ³					Thinning Volume m ³					Clearfell Area (ha)				
		2016	2017	2018	2019	2020	2016	2017	2018	2019	2020	2016	2017	2018	2019	2020
CK26 - Rowls	914	-	6,108	3,896	6,342	1,751	5,681	1,869	791	2,756	2,615	-	15	7	10	5
LK05 - Galbally	87	-	-	922	-	-	-	-	-	-	-	-	-	2	-	-
LK06 - Galty	941	11,255	715	5,477	2,143	3,440	-	1,451	4,409	1,213	2,470	38	2	18	7	11
LK07 - Kilfinane	2,902	2,708	10,155	14,513	49,106	22,129	7,369	4,545	3,104	2,707	6,046	6	27	45	99	37
LK10 - Ballylanders	880	12,112	1,504	1,003	17,598	367	2,377	398	327	1,347	1,134	30	4	3	48	1
TY15 - Slievenamon	1,544	7,520	5,427	8,180	2,382	1,929	2,719	1,813	3,007	3,886	1,827	29	12	15	4	7
TY16 - Aherlow	1,305	14,671	885	714	-	5,539	1,779	1,692	454	1,312	1,158	53	2	1	-	22
TY17 - Cahir	3,562	23,476	15,668	8,605	7,247	21,823	6,371	4,095	5,131	2,466	3,638	97	37	19	15	50
TY18 - Glengarra	874	8,705	3,861	15,692	2,563	3,217	-	2,890	3,119	3,008	2,252	22	11	33	7	7
TY19 - Knockmealdowns	4,652	36,421	35,092	12,722	7,237	32,463	10,983	1,620	3,844	3,024	4,979	85	73	25	13	57
TY20 - Barnahown	990	-	896	-	7,314	6,114	-	-	924	1,127	1,412	-	2	-	12	10
WD06 - Dungarvan	3,628	33,626	10,410	23,913	28,804	20,666	1,427	2,923	4,042	2,199	1,338	101	26	51	54	31
WD07 - Mellory	1,799	5,677	7,663	4,129	17,666	2,818	652	705	2,760	1,999	3,306	11	17	9	33	7
WD08 - The Vee	1,260	-	11,714	3,484	3,506	10,872	2,317	468	1,438	2,346	2,709	-	27	7	6	16
WD09 - Ballyduff	975	15,784	10,987	26,117	9,323	5,417	-	592	3,735	2,502	3,058	28	20	47	18	8
WD10 - Knockanore	1,673	22,722	14,715	21,722	20,590	14,376	-	1,998	1,587	4,605	5,305	50	32	49	43	21

Appendix VI - BAU Map



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