



West Munster BAU 8 Strategic Plans

2016 - 2020

Foreword

I have great pleasure in publishing Coillte's West 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 "Bernárd Burke". The signature is written in a cursive style and is underlined with a single horizontal line.

Bernárd Burke
Business Area Manager
West Munster

¹ Growing, cultivating and Felling 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, monitoring and appropriate training.
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.

Bernárd Burke

Business Area Manager

² FSC licence code FSC- C005714

Table of Contents

<hr/>	4
1. Coillte and the BAU Strategic Plans		4
<hr/>	14
2. West Munster BAU		14
<hr/>	22
3. The West Munster BAU Strategic Plan.....		22
<hr/>	34
4. Sustainable Forest Management Policies and Proposals		34
Appendix I - Summary of Archaeological Sites in West Munster BAU		46
Appendix II - Habitats and species in West Munster BAU		48
Appendix III – Recreation Facilities in the BAU		55
Appendix IV – Monitoring		57
Appendix V – Forest Details		59
Appendix VI – BAU Map		62

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.

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.

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

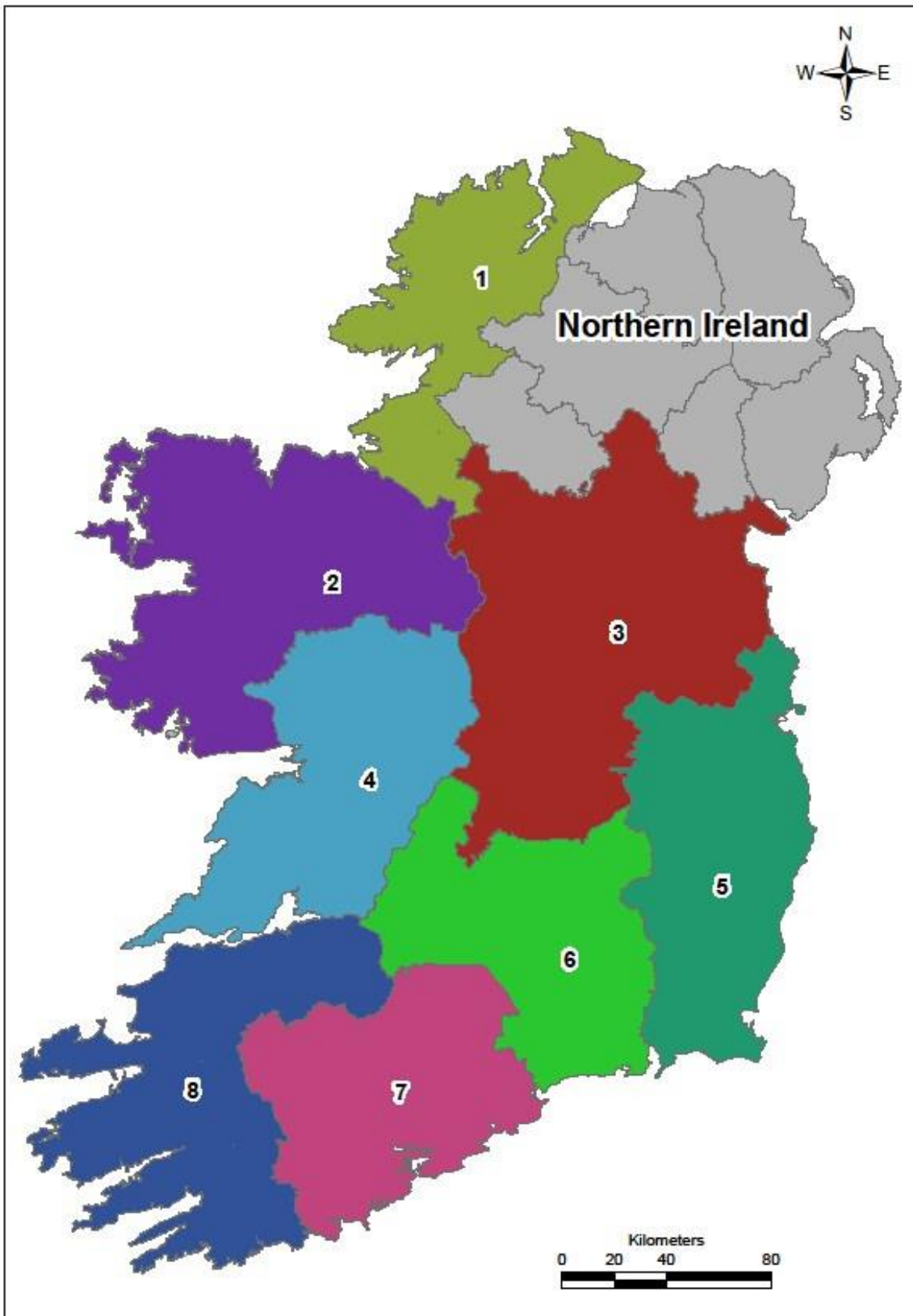
Coillte will liaise closely with Forest Service with regard to this significant potential threat to our Ash woodlands and will respond immediately to any mitigation measures proposed.

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 8 Business Area Units (BAUs)



Coillte has developed plans for each of these BAUs, called BAU strategic plans which describe Coillte's forests and other assets in the area, and set out a vision for their management. The last planning cycle was for 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. West Munster BAU

2.1 The West Munster BAU

All BAUs play important roles in achieving Coillte targets and objectives. The West Munster BAU of Coillte Forest encompasses the area of West Cork and West Limerick and the entire county of Kerry. It is the third largest BAU covering 905,466 hectares of Ireland. Within this area, Coillte owns 42,616.44 hectares (4.71%) of which just over three-quarters is forested with the remainder mostly moorland, mountains, marsh and lakes.

There are two Gaeltacht areas within the BAU, Gaeltacht Muscraí and Gaeltacht Uíbh Ráthach. This BAU boasts the greatest concentration of mountains in any of Coillte's 8 BAU's, including Carrantuohill, Ireland's highest mountain.

The climate for forestry operations is challenging, with high rainfall, rugged rocky landscape and some very wet ground conditions. The area normally experiences relatively mild winters and it has many days of wind.

One of the biggest constraints to commercial forestry in the BAU is crop stability with some areas predisposed to windblow. We have seen some major storms in recent years, i.e. in 1974, 1987, and in 1997 over 250,000 m³ of timber was blow in Southern Ireland and in 2014 over 1.5million m³ of timber was blow during Storm Darwin.

2.2 Forests and Forest Products in the West Munster BAU

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

During the 2011-2015 period the BAU, produced approximately 1.5 million cubic metres of wood (2015 figures estimated) . This wood was primarily sold to GP Wood (SFE - Graingers Sawmill, Enniskeane and Palfab Sawmill, Lissarda), Glennon Brothers Timber Ltd Sawmill, Fermoy, and Spellmans, Killarney.

Over 20,000 cubic metres of Stake went mainly to Adhmaid Cill Na Martra Teoranta and to John Galvin Sawmills, Coppeen. Over 600,000 cubic metres of Pulp wood was supplied to Coillte's Panel Board Mills – SmartPly Europe Ltd, Waterford and Medite Europe Ltd, Clonmel, and over 25,000 cubic metres was sold to a Firewood Sales and Energy Wood market that has increased steadily over the past five years.

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 37 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 West Munster BAU

Coillte has a long association with the communities, clubs and individuals who use the extensive forest network. The development of recreational facilities and 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 West Munster BAU recreational activities complement the lakes and mountains within its boundaries and contribute to the social and economic life of Cork, Limerick and Kerry.

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:

- **Glanteenassig Wood** - originally managed for timber production, but which in recent years, has provided recreation for the adjoining town of Castlegregory and for the wider community. During the period, from the mid 2000's the woodland was managed for the purpose of developing amenity woodland – felling and restocking with more diverse species and the addition of a 2km board walk along with other walks.
- The development and enhancement works to the walks and trails in **Foynes**, most of which have views of the magnificent Shannon. The flagship of these improvements is the trail which links the town by means of a 1.2 km woodland walk through the Coillte estate.
- **Curragh Chase Forest Park** - consists of some 313 hectares of mainly broadleaf and mixed woodland with some mature conifer stands, parkland and with some of the area under water. The estate was maintained and operated by the Department of Forestry and Wildlife up until 1989 when it passed on to Coillte. Curragh Chase House was the home of the De-Vere family for almost three hundred years dating from 1657. This partnership with Coillte, Fáilte Ireland and Limerick County Council, included a very comprehensive development that took place during the latter part of 2007 and in 2008 with the upgrading of the present trails and the addition of new trails and facilities.
- **Guagán Barra Forest Park** – originally managed for timber production - Guagán Barra Forest Park was the first Forest Park opened in Ireland in 1966. A very comprehensive development took place during 2007 and 2008 with the upgrading of the present trails and the addition of new trails and facilities in conjunction with Fáilte Ireland and the Forest Service Neighbourhood Scheme and was re-launched in October 2008 by Mr. Eamon Ó Cuív TD, Minister for Community, Rural and Gaeltacht Affairs.
- The Neighbourhood Scheme was also utilised in developing walking trails in **Rathbarry**.
- A walking trail was developed in **Carrigfadda** in conjunction with Fáilte Ireland, Local Reenascreena Community and Cork County Council.
- **Dromillihy** – was upgraded in 2012/2013 with funds from the Neighbourhood Scheme, a national scheme administered by the Forest Service and the Community Fund administered by Cork County Council and funds from the Gwendoline Harold Barry Trust. This amenity project was carried out in partnership with Connonagh Community group.
- **Glanageenty** - The Glanageenty Valley walkway consists of 4 miles through woodlands steeped in mystery and folklore, a place where even amid the peacefulness and silence you can still sense the nostalgia of days gone by. It consists of an old butterroad, a holy well and the site of an old Desmond Castle plus numerous monuments and signs telling of the history of the people of "the Glen", this site is developed in partnership with North East Kerry Development.

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.

This BAU has a number of designated areas for recreational activity, and these are detailed on the Coillte website www.coillteoutdoors.ie and are also listed in 'Discovering Ireland's Woodlands' (Coillte) booklet under counties Cork, Limerick and Kerry. See [Appendix III](#) with table describing the recreational values of the BAUs sites.

There are also a number of Waymarked Ways passing through Coillte property in the BAU. These include:- The Dingle Way, The Kerry Way, The Beara Breifne Way and the Sheep's Head Way.

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 has just completed the development of an off-road cycling strategy to examine the best potential locations for future trail development.

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

2.4 Cultural and Archaeological Heritage in the West Munster BAU

Coillte is aware of some 178 archaeological sites and sites of cultural significance in its landholdings in the West Munster BAU. These monuments include megalithic tombs of different kinds, ring forts, standing stones, Hut Sites and other enclosures. 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 identified when proposals for sales are being developed. They are evaluated in terms of their social and historical value and a plan implemented for their preservation.

The BAU will continue to support sites of cultural and literary heritage such as that at Curragh Chase House, Castlefreke, Killochloane Mass Rock and will identify, protect and record all new items of heritage which are discovered on its lands.

The BAU supports local initiatives such as the Sprigging School in Rathbarry in association with the tidy towns committee.

A limekiln close to Union Hall within the forest property of Bawnlahan has been restored by the local historical society.

2.5 Biodiversity and High Conservation Value Forests (HCVF) Within the West Munster BAU

Ecological surveys were carried out between 2003 and 2006 to identify areas of maximum biodiversity value and to 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 9,824ha (23% of Coillte land in the BAU).

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

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

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

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

HCVF areas may be quite large, such as Special Area Conservation (SAC 365 Killarney National Park, Macgillycuddy's Reeks and the Caragh River Catchment) in South Kerry, or the Special Protection Areas in the mountains of North Kerry and West Limerick for hen harrier conservation, or they may be quite small such as an old house within a forest which hosts an important roosting site for bats. They may also occur on non-forested lands such as the Atlantic blanket bogs in the west and the raised bogs of the midlands.

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

The table below shows statutory designated areas and HCVF in the West Munster BAU. Areas shown are in hectares (Ha)

Designation	Area (ha on Coillte lands)
HCVF	16,866
NHA* - Natural Heritage Area	241
SAC* - Special Area of Conservation	4,151
SPA* - Special Protection Area	12,776
Nature Reserve	428
pNHA	2,850

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

- 135 ha of peatland has been restored over 2 sites – Dromalonnahurt and Garrane.
- 6.9 ha has been restored to a Yew Woodland in Curragh Chase.
- 76.1ha Native Woodland sites has also been created.
- 1,560 ha is being managed as OWS to retain their semi-natural characteristics.
- Habitats regulation assessments take place in relation to all works on designated sites.

2.6 Species and Habitats in the West Munster BAU

Within the BAU the predominant non forest habitats present are; blanket bog, wet heath, dry heath, woodland habitats i.e. the complex near Adare in Limerick, swamps and freshwater habitats, and in particular the Freshwater Pearl Mussel Catchments (FWPM). Some excellent examples of these semi-natural habitats are within Coillte ownership.

Notable mammals in the area include the Lesser Horseshoe Bat, the Hen Harrier the Pine Marten and Red Deer. Other Annex II species include Kerry slug, Natterjack Toad, Chough, Hen Harrier and Fresh Water Pearl Mussel.

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 Sika deer that are currently posing significant problems for the establishment of broadleaves and the regeneration of old woodland sites.

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

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

2.8 Water Quality and Protection in the West Munster BAU

In terms of water, the BAU is dominated by 3 great lakes, Lough Leane, Lough Currane and Lough Caragh, there is also a number of substantial lakes, Derriana Lough, Lough Allua, Ganmore Lake, Glenbeg Lough.

The main river bodies within the BAU are the Deel, Feale and upper reaches of the Blackwater (Cork) the Maigue, the Laune, the Inny, Roughty, Ilen, and the Lee.

The BAU lies within the South Western River Basin District and the Shannon River Basin District. The SWRBD & SRBD Management Plans 2009-2015 "Water Matters –Our Plan" are in place.

This plan outlines the status of waters of the RBD's area with objectives and the programme of measures for the protection, maintenance and enhancement of the status of inland, coastal and ground waters by

- Preventing further deterioration to aquatic ecosystems and terrestrial and wetland systems dependent on them;
- Promoting sustainable water use;
- reducing discharges and emissions of hazardous or potentially hazardous substances; and
- Reducing pollution of ground water.

The most sensitive with regard to forestry are the Management Units containing the six Freshwater Pearl Mussel Catchments; Kerry Blackwater, Caragh, Sneem Cumberagh Inny, Upper Bandon, Laune Upper, Beara North and The Blackwater encroaches into the BAU north of Ballyvourney.

The Upper Lee and the other Management units all contain important salmonid catchments in the BAU.

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 West 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: security, litter, waste dumping, illegal use by motorised vehicles, inappropriate recreation, anti-social behaviour.

Issues are logged on the Issues and Consultations Register, assigned to the relevant personnel and dealt with accordingly.

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

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 55 % 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 8**

Deer Species Present (hectares)			
Density Classification	Red	Fallow	Sika
Low	1,509	0	10,932
Moderate	736	736	5,826
High	540	0	4,355
Total area	2,785	736	21,113

3. The West 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. We aim to maintain and enhance these assets while balancing the requirement to realise for the state and its people the enormous investment that has been made in Irish forestry over the years.

3.1 Vision

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

The 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.

The Coillte Estate

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

Key Objective 1

In the West Munster BAU, Coillte aims to produce approximately 1,845,000 cubic metres of wood from its forests between 2016 and 2020.

1,606,000m³ of this will be provided through felling and 239,000m³ will be achieved through

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

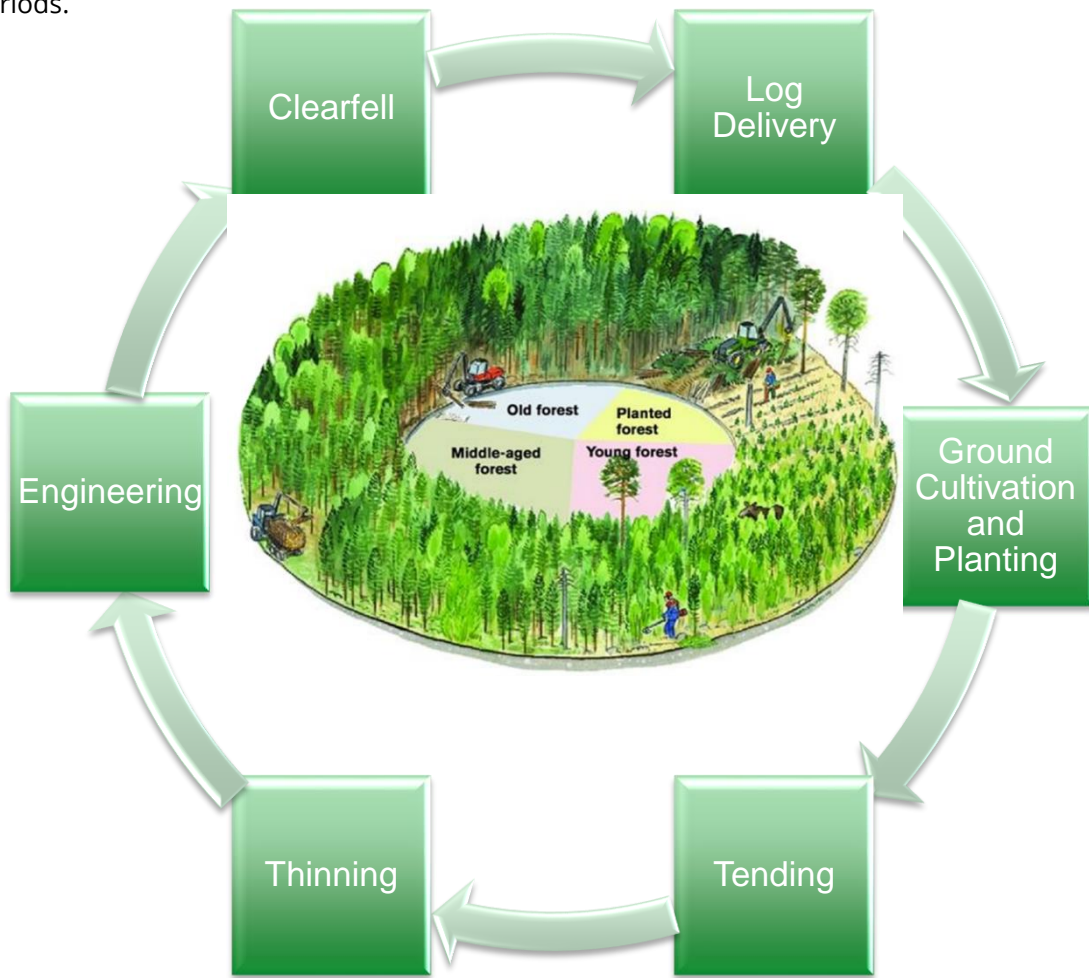


Figure 1: The Forest Cycle

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 characterized 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. Low Impact Silvicultural Systems (LISS) such as 'Small Coupe Felling', 'Change to Broadleaf' and 'Continuous Cover Forestry' are in use in the BAU and it is intended to expand this level where possible during the plan period.

- **Thinning** is also a natural part of forest management and it involves staged removals of a proportion of trees in a forest over a rotation, and it is a necessary part of standard forestry practice worldwide. Thinning improves the quality of the forest by regulating the space and light provided to trees as they grow. In line with international best practices, Coillte aims to thin, where possible, all forests to maximise the quality and volume returns from the estate. Thinning will 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.

New planting and replanting

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

Key Objective 2

In the West Munster BAU, Coillte aims to replant approximately 4,360 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 West 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 along with the designated timber haulage routes for them. Our engineering staff have 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 approx. 49km of new roads in our forests,
- maintain the existing road infrastructure,
- extend spur roads where necessary to access timber stands due for harvesting in the period of the plan,
- develop road access to areas that are currently inaccessible.

Key Objective 3

In the West Munster BAU, Coillte aims to construct approximately 49km of new forest roads by 2020.

Factors affecting timber supply

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

- **Accessing timber crops** can be challenging with both internal (right-of-way issues, poor internal access) and external (right-of-way issues, the state and nature of county council roads/bridges etc.). To address the access issue a list of all difficult areas is currently compiled and these will be prioritised on the basis of timber supply and a plan put in place to address these issues by assigning relevant personnel. The BAU will consider the use of partnerships to help resolve/contribute to access difficulties on a site by site basis.
- **Nutrient deficiencies** Most of the Iveragh Peninsula has been designated acid sensitive. This could have far reaching effects on coniferous forests into the future in this area.
- **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 West Munster BAU.
- Restrictions of carrying out operations in **Hen Harrier SPA's** within the nesting period.
- The **proportion of low production forests** in the West Munster BAU is an issue in meeting production targets and the BAU will examine alternative uses in some of these forests as a result.

Thus the BAU will actively consider alternative land uses such as wind farm development, one-off property sales and the continued adoption of the Western Peatland Protocols for the alternative management and restocking of these low production sites.

- 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,
- Construct new roads where necessary,
- thin farm partnership sites regularly and on time,
- carry out an inventory on farm partnership sites.

Key Objective 4

In the West Munster BAU, Coillte aims to manages its 37 Farm Partnerships

Overall production targets in the West Munster BAU 2016-2020

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

West 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)	1,169	1,206	872	606	507
Harvesting Programme					
Harvest categories (000m3)					
Thinnings	50	55	48	45	41
Regeneration felling (P,C,W) felling	369	280	350	327	280
Total	419	335	398	372	321
Felling area (ha)	1,143	684	832	769	554
Roading Programme					
Roading (km)					
New	14	10	9	9	7
Upgrading	18	17	16	15	15
Total	32	27	25	24	22

3.3 Coillte's Non-Timber Businesses in West 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. 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.

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.

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 4 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
Coolknoohil	Kilgarvan Forest, Co. Cork	Planning permitted	1
Cordal	Brosna and Cordal Forests, Co. Cork	Planning permitted and base areas sold	26
Glanta Commons 3 / Extension	Ballydehob Forest, Co. Cork	Planning permitted	1
Killaveenoge	Skibbereen Forest, Co. Cork	In construction and base area sold	1
Total			29

Also, within this BAU Strategic Plan period, planning permission will be sought Coillte or by a third party for the following 6 projects:

Proposed projects that are seeking planning permission on Coillte estate – correct as at January 2016			
Name of Project	Location	Status of wind turbines	No. of wind turbines
Aghamore	Casheen River Forest, Co. Cork	In planning	1
Carrickareirk	Lee Valley, Co. Cork	In planning	3
Cleanrath	Reinanaree Forest, Co. Cork	In planning	1
Derragh	Reinanaree Forest, Co. Cork	In planning	3
Kippagh	Rosscarbery Forest, Co. Cork	In planning	1
Shehy More	Lee Valley, Co. Cork	In planning	7
Total			16

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 West Munster BAU, Coillte aims to facilitate the development of 10 renewable energy projects in the period to 2020

Biomass Production

The BAU is situated outside the immediate catchment of the two major pulp processing plants, Medite in Clonmel and SmartPly in Waterford. While at present most of pulp is delivered to these mills every consideration will be given to any pulp requirement/ biomass utilisation plants that may arise in the BAU area e.g. the Astellas pharmaceutical facility in Killorglin, Co. Kerry serving a worldwide market for *Prograf* – a drug used in treatment of organ rejection in transplant surgery. The BAU has a contract to supply biomass material for an industrial heat application. Biomass can play an important role in reducing greenhouse gas emissions and mitigating climate change and this contract will displace fossil fuels from use at the Astellas facility. Coillte will consider other renewable heat supply opportunities as they arise.

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 particularly in the Kerry side of the BAU.

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 in particular with local people and communities.

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

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.

Key Objective 6

In the West 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 sites.

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

3.6 Environmental Enhancement Measures

The following environmental enhancement measures are proposed for the period 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 19% 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 West 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 23% of the Coillte land area in the West Munster BAU is designated and managed for biodiversity.

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 1,560ha identified as old woodland in many locations. This represents 4% of the Coillte land in the BAU or 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 10 to 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 minimum 1% of the gross area of the BAU for long term retention.** Some examples of stands designated for retention are; Coomroe, Coomarkane, Mallabracka, Dromtine, Gleensk, Glensharrold, Curragh Chase. Scots pine is the only conifer tree regarded as a native species. This tree has limited distribution 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.
- **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 West 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, which 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 have 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 Ireland. The disease can kill Larch species, which was always considered a valuable species in terms of providing colour in a landscape. The disease has been detected in the BAU, and it will have an impact on species selection when planning landscape design.

The BAU boasts the greatest concentration of mountains in any of Coillte's 8 BAUs, south Kerry alone has Carruntuohill, Irelands highest mountain (3,414 feet) and 8 other peaks rising over 3,000 feet. West Cork on the other hand is renowned for its rugged rocky landscape. The main landscape characteristics within the BAU therefore are rolling moor-land and mountains. The "Ring Of Kerry", the Beara peninsula and the West Cork coast line are the dominant landscape features within the BAU. Notable forest landscapes include Gougane Barra Forest Park, Curragh Chase Forest Park, Killarney National Park and Glanteenassig. Most of the areas on the peninsulas, along the coastline and on the county boundaries, are in tourist routes and are given a high rating in County council Development plans. The low ratings are to be found in the low lying and remote forests of the BAU.

Also, given the occurrence of streams and waterways in the forests, 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 has 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 wide range of aquatic studies, conducted by the various national universities, the purpose of which is to further the knowledge on the interaction of forests on water quality. One of the most important, that has just started in July 2014 is the EU funded KerryLife project, which is trialling novel forest management measures in the prioritised Top 8 catchments, Kerry Blackwater and Caragh in Co. Kerry, for the conservation of the freshwater pearl mussel.

The findings from this research will assist in updating the current Forest Service Water Guidelines dating from 2000.

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.

As stated previously most of the Iveragh Peninsula has been designated acid sensitive. This could have far reaching effects on coniferous forests into the future in this area as application of fertiliser to this area is prohibited.

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, responses in this BAU Plan	
Section reference in plan	Detail incorporated, responses made
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	<p>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.</p>
3.6.3 Biodiversity	<p>Key objective 7 in the Midlands plan was reviewed and updated.</p>
4.2 Working with people	<p>Coillte added a link to this section to provide further information about its Social & Environmental Panels.</p>
4.3 Reducing Chemicals	<p>Additional data was added to section 4.3 concerning Coillte’s application to FSC for a derogation for the use of Cypermethrin.</p>
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	<p>Coillte clarified the statement in its text referencing that <i>“Buffer zones will not normally have a timber production target”</i>.</p>

riparian buffer zones)	
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> <p>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.</p>
4.4 Working with people	
Detail specific to BAU 8 - West Munster	
Appendix II - Habitats and species in West Munster BAU	<p>Protected or Rare Species in West Munster BAU - Kerry Slug</p> <p>The following has been included "Monitoring of sites ongoing in KY12 in conjunction with GMIT research project".</p>
2.3 Community, Recreation and Tourism Facilities in the West Munster BAU	<p>Submission by Stakeholders: Request that additional resources could be put into the recreational elements of the parks. In particular CurraghChase Caravan Park, Kilcornan, Co. Limerick.</p> <p>Response by Coillte:- Our Core purpose is to manage our forests in an economically, socially and environmentally sustainable manner including the aforementioned areas. We endeavour to continuously improve areas we have designated for recreation and work closely with local community groups to provide further local recreational facilities where possible.</p> <p>We currently have 2 playground areas area's containing swings and climbing walls. Following from the recent health and safety inspection we had to do some upgrade works, mainly re-surfacing with certified material. These works amounted to over €20k and took a big chunk of our budget for the park maintenance this year. We are also planning to further upgrade some of the damaged trails over the next few weeks also.</p>

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

Submission by Stakeholders

1. 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.
2. managing and maintaining all existing recreation sites including waymarked ways to the highest standards.
3. sourcing funding and developing new infrastructure including 'access for all' based on needs identified in conjunction with stakeholders and funding agencies, and to enhance local tourism potential.
4. managing unauthorised usage of the recreation infrastructure in line with best management practice and security policy.
5. continuing our exploration of the development of amenities with County Councils

Response by Coillte:-

1. I see the partnership approach key to facilitating developments on Coillte lands, a recent example of this in the area is the KerryLIFE project.
2. We have recently upgraded the trails overlooking Caragh Lake, and also have upgraded the amenity site in Gleensk, along with upgrading section of the Kerry way. We have also put new signage at the 'Peat Chimney in Kimego', if there are any specific areas that are of concern can you please revert to me on same.
3. I have recently meet with KCC along with a few of my colleagues from our Public Goods team and proposed to develop opportunities for co-operation and a model for a partnership approach.
4. A staggered approach in our forest properties you may notice new signs regarding bye-laws in place for access and use of these forests, please see the link for more information in relation to the bye-laws. http://www.coillte.ie/fileadmin/user_upload/pdfs/BYE_Laws_2009.pdf
5. I am part of the Infrastructure Tourism Strategy Working Group. The Infrastructure Working Group comprised representatives of Kerry County Council's operations, tourism and infrastructure units, the aviation sector, and public transportation companies, Fáilte Ireland, IT Tralee, Irish Farmers Association, Net Feasa and Coillte Teo. The insights from these representatives together with those gleaned from public meetings and individual submissions have informed an action plan. It covers many areas including air access, road infrastructure, public transportation links, communications infrastructure, accommodation, and product development, quality of the environment, and water and wastewater facilities among others. It also includes the area of staff training and development.

<p>2.4 Cultural and Archaeological Heritage in the West Munster BAU</p> <p>1.2 Renewable Energy</p>	<p>Submission by Stakeholders Submission regarding pedestrian access to archaeological features and wind energy.</p> <p>Response by Coillte:- Areas referred to in the submission are Cloghboola, and Rathgaskig, Ballingeary. These area's are not felled as yet, access paths will be planned to access these area's as part of the archaeological management plans that will be created for the felling operation. The creation of the paths will be carried out by the operations manager on re-establishment of the crop.</p> <p>Coillte's wind team then developed an in depth FAQ (frequently asked questions) response document based on the input from stakeholders. Each stakeholder was responded to and this document uploaded to Coillte's website: http://www.coillte.ie/coillteenterprise/renewable_energy/wind_energy/</p>
<p>3.2 The Forest Resource and the Timber Business</p> <p>Factors affecting timber supply</p> <p>Nutrient deficiencies</p>	<p>Submission by Stakeholders Submission re future plans of acid sensitive designation referred to in BAU plan particularly the Iveragh Peninsula</p> <p>Response by Coillte:- The protocol on acid sensitivity relates to Afforestation only, we are not in the business of planting bare lands and have not done so for over 10 years. We only restock our sites post felling as part of the condition of the Felling licence, under the Forestry Act.</p> <p>There are currently no conditions related to the restocking of acid sensitivity areas.</p> <p>In regard to fertilisation, there are no restrictions apart from Natura 2000 sites (including Top 8 FPM Catchments), also where the previous crop Was Sitka Spruce Or other species equivalent = or > YC 16, we do not apply fertiliser on these sites.</p> <p>There is currently a derogation from restocking in the Top 8 FPM Catchments also at the moment, and as part of the KerryLIFE project, we aim to complete a restock site at Gerah North this year.</p>
<p>1.2Renewable Energy</p> <p>4.4 Working With People</p> <p>Various Forest Management</p>	<p>Submission by Stakeholders Sustainable management of natural resources encompasses forestry and land management, but does not address deployment of renewable energy on Coillte lands.</p> <p>Response by Coillte:- Coillte's wind team then developed an in depth FAQ (frequently asked questions) response document based on the input from stakeholders. Each stakeholder was responded to and this document uploaded to Coillte's website: http://www.coillte.ie/coillteenterprise/renewable_energy/wind_energy/</p>

<p>2.3 Community, Recreation and Tourism Facilities in the West Munster BAU</p>	<p>Submission by Stakeholders</p> <p>At the outset I wish to compliment Coillte on the many fine recreational facilities that have been provided. They are a very vital part of the tourism/visitor product and are greatly appreciated. They also play an important part in the health and educational areas. Well done and I hope that that commitment to tourism and recreation will not only continue but will further develop.</p>
<p>4.1 Using Forest Design Forest Roads Hedge Cutting</p>	<p>Kerry and indeed other counties, especially along the west coast, are greatly dependent for their economic well-being on tourism and in this respect the visual aspect is of singular importance. Of course trees are planted in order to be ultimately cut but when cut there remains a terrible scar on the landscape, presenting almost as a 'moonscape'. If the front 4 or 5 metres of the plantation could be left growing the visual scarring would be greatly reduced.</p> <p>Many local communities depend on their very narrow minor road and the vital long built bridges for their commuting and their social interaction. Huge laden lorries do great damage to the roads and threaten the stability of the bridges that have been around for up to two hundred years. There are some 2,400 such bridges in Kerry. The collapse of a bridge can totally isolate a community and can also cost the local authority a great deal of money. Mutual respect and shared concern!</p> <p>Trees overhanging roadways are a very great hazard in some areas, particularly along narrow county roads. Branches do fall and lives are put at risk. I will draw your attention to just two problematic locations:</p> <p>[1] The L.3015 across the road from Loughquittane National School, Muckross, Killarney. [2] Road[s] at Leamyglissane, Gneeveguilla, Rathmore, Co. Kerry.</p> <p>Response by Coillte:- Coillte manage its forests in a responsible and sustainable way delivering social, economic and environmental benefits. The company has been awarded both FSC and PEFC forest certification. Coillte are subject to rigorous audits on an annual basis to ensure that these forest certification standards are maintained.</p> <p>In addition Coillte operate a Recreation policy which welcomes visitors on foot to all parts of the estate and on bicycle to designated tracks and areas. For a long number of years (particularly 2007 onwards) Coillte have been actively involved in the development of high quality recreation initiatives such as building mountain bike trails and boardwalks in a number of locations throughout the country. The locations of these sites are displayed on our website^[1]. These amenities have proved to be very successful in terms of the</p>

	<p>health benefits of getting people active in their communities as well as the indirect benefits associated with tourism to the economy. Indeed, an economic valuation commissioned in 2007 shows that €297M of economic activity annually, is due to the visitor infrastructure Coillte provided right across the country. There are more than 18 million distinct visits to Coillte lands annually and this places Coillte as the largest provider of outdoor recreation in the country by a considerable margin.</p> <p>Coillte manages the aesthetic and visual aspects of the estate through its landscape design policy. Part of this process involves evaluation of the various constraints and opportunities associated with individual landscape situations. There is no doubt that it is a difficult subject to address. The solutions lie in proper long term planning of our forest crops. Historically, many of the areas acquired for forestry were located in more upland areas associated with poorer agricultural land (many of these areas occur along the western seaboard). Species selection was and still is very limited in terms of developing a commercial crop of timber in such locations. It must be noted that Coillte are required by law to replant clear-felled areas within 2 years of felling. We take the opportunity at the replanting stage to restructure even age crops as well as introduce more diverse species which work more in harmony with the landscape.</p> <p>In relation to leaving 4/5 meters around a clearfell – this would become liable to windblow and thus create an additional safety hazard as many times the hardwoods left standing are not stable, we will endeavour to pollard these area's where safe to do so.</p> <p>We have recently done some work across from the school in Lough Guittane and I will look into the other area at Leamyglissane as soon as possible.</p>
<p>3.3.1 Renewable energy projects and Various Forest Management</p>	<p>Submission by Stakeholders</p> <p>A very detailed submission was made covering many aspect of the plan.</p> <p>Response by Coillte:-</p> <p>Coillte's wind team then developed an in depth FAQ (frequently asked questions) response document based on the input from stakeholders. Each stakeholder was responded to and this document uploaded to Coillte's website: http://www.coillte.ie/coillteenterprise/renewable_energy/wind_energy/</p> <p>Stakeholder was also met and an more indepth discussion was had on all areas made in the submission.</p>

[1] <http://www.coillteoutdoors.ie/>

4.5 Monitoring and Evaluation

Coillte continues to monitor the achievement of its objectives and targets using the porforma 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 West Munster BAU

Type of Monument	No. In BAU	SMRS Number *
Anomalous stone group	1	CO091-026----
Barrow - ring-barrow	1	CO141-145----
Boulder-burial	1	CO114-061----
Bridge	2	KE085-037----, KE076-064----
Bullaun stone	3	KE110-004001-, KE092-030----, CO143-091----
Burial	3	KE045-046----, KE030-024----, CO107-030----
Burial ground	1	CO081-021----
Cairn - unclassified	2	LI011-115----, CO141-144----
Castle - tower house	1	KE092-033----
Castle - unclassified	1	LI011-119----
Causeway	2	LI035-008----, LI035-007----
Children's burial ground	2	KE101-001----, KE089-058----
Church	3	KE047-043----, CO142-114001-, CO131-018----
Country house	1	CO134-034----
Cross	1	CO143-073----
Enclosure	40	LI035-012----, LI030-098----, LI011-147----, LI011-118----, KE099-038009-, KE099-038008-, KE099-038007-, KE099-038006-, KE099-038005-, KE099-038004-
Field boundary	6	KE083-090----, KE081-020002-, CO092-060007-, CO092-060001-, CO080-023----, CO038-164----
Field system	1	KE080-052003-
Fulacht fia	8	LI018-106----, KE067-152----, CO092-060005-, CO092-060004-, CO092-060003-, CO092-060002-, CO069-047----, CO038-168----
Gate lodge	1	KE066-136----
Hut site	25	KE092-012----, KE091-068----, KE081-048002-, KE081-020001-, KE081-020----, KE081-012----, KE081-010----, KE081-007----, KE080-052002-, KE080-052----
Inscribed stone	1	KE047-060----
Kiln - lime	4	CO142-114002-, CO142-051----, CO068-001----, CO058-002----
Mass-house	1	CO093-092----
Mass-rock	5	KE047-061----, CO119-121----, CO107-056----, CO093-091----, CO081-013----
Megalithic structure	6	LI017-034----, LI017-032----, KE086-007----, KE080-067----, KE080-033----, CO081-050----
Megalithic tomb - unclassified	1	KE047-059----
Megalithic tomb - wedge tomb	9	KE085-001----, CO106-061----, CO093-076----, CO093-019----, CO093-017----, CO093-001----, CO090-018----, CO081-047----, CO058-075----
Military camp	1	CO128-039001-
Mine - copper	1	CO131-020----
Mound	2	LI017-035----, CO115-016----
Ogham stone	2	KE080-045----, CO094-073----

Type of Monument	No. In BAU	SMRS Number *
Redundant record	20	KE101-027----, KE094-051001-, KE094-051----, KE092-028----, KE092-017----, KE092-007----, KE091-072----, KE091-057----, KE091-054----, KE091-026----
Ringfort - cashel	5	LI030-096001-, LI011-117----, KE072-002----, CO092-012---, CO069-039001-
Ringfort - rath	10	LI037-088----, LI037-084----, LI030-097----, LI018-084----, LI018-029----, LI018-023----, LI018-008----, KE101-115----, KE101-001002-, KE045-042---
Ritual site - holy well	3	LI030-096002-, KE030-071----, CO107-029----
Road - gravel/stone trackway - peatland	1	KE091-113004-
Souterrain	7	KE101-001001-, KE091-099----, KE089-024----, KE063-006----, CO092-083----, CO090-032003-, CO069-039002-
Standing stone	13	LI020-139----, LI017-036----, KE089-016----, KE081-034----, KE080-035----, KE040-136----, CO132-020----, CO120-002---, CO119-030----, CO107-001----
Standing stone - pair	4	KE086-009----, KE080-044----, CO107-040----, CO059-069---
Stone row	3	CO107-067----, CO093-018----, CO092-013002-
Water mill - horizontal-wheeled	1	KE080-046005-

* 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 West Munster BAU

Special habitats in West Munster BAU

Main Properties	Habitat Quality	Management Strategy	Management 2016 - 2020	Issues to be Addressed
Blanket Bog (PB2)				
Mount Eagle Bogs NHA: Knockauncurragh - KY04, Scrahan - CK02, Glanowen - KY05 Dromalohurt - KY10 Garrane - KY10 Fordal - KY13	Blanket bog minimally impacted by anthropogenic activity. Blanket Bog forested areas which are suitable for restoration.	Retain existing unplanted blanket bog habitat. Restore open riparian zones. Some sites in the BAU have been selected for restoration under Coillte's Life-Nature Blanket Bog Restoration Project.	Retain open areas. Block drains. Implement ongoing monitoring of LifeNature Project sites.	Regeneration of Birch in areas where forest has been removed.
Lowland Blanket bog (PB3)				
Moyreen Lowland Blanket bog	Lowland Blanket Bog	Retain existing unplanted blanket bog habitat.	Retain open areas.	Regeneration
Wet Heath (HH3)				
Fordal - KY13 Coolsnaghtig - CK24 Cloghvoola - CK17 Derryard - KY13 Sugarhill - LK01 Dromadda Beg - KY03 Lyrecrumpane - KY03 Muingaminnane - KY03	Good quality wet heath	Retain existing unplanted wet heath habitat. Restore open riparian zones.	Retain open areas. Restore riparian zones along Bandon River and its tributaries and Lough Currane	Maintain boundary integrity

Dry Heath (HH1)				
Coolsnaghtig - CK24 Ballinloughane LK01 Glanteenassig KY07 Killiney KY07	Dry Heath	Retain existing unplanted dry heath habitat. Increase dry peat habitat. Restore riparian zones.	Retain open areas. Fell, do not replant areas of Compt. 33484-H	Felling licence - permission not to replant
Oligotrophic Lakes				
Ballintleave - KY10 Lough Nam - brackdarrig - KY09 Dromtine - KY11 Cullenagh - CK22 Glanteenassig - KY07 -Lough Caum	Good quality Oligotrophic waterbodies in acid peat land catchments.	Retain and monitor.	Retain and monitor.	N/A

Protected or Rare Species in West Munster BAU

Main Properties	Habitat Quality	Management Strategy	Management 2016 - 2020	Issues to be Addressed
Lesser horseshoe bat				
Rossacroo - KY14 Glenaserha - KY Dromore - KY12 Uragh - KY14 The Demesne - Glengarriff CK20 Curragh Chase - LK02	Stronghold colonies for Lesser Horseshoe Bat (LHB) in Ireland of national and international importance. Buildings and adjacent woodland Important	Protect roosts and maintain suitable foraging habitat within 20m radius of roost	Thin out conifers to favour native species regeneration.	Costs of building (roost) maintenance Close liaison with NPWS on an ongoing basis.

Kerry Slug				
Glanteenassig – KY08 and various properties in South Kerry and West Cork.	Stronghold Colonies for the Kerry Slug.	Operational guidelines in known range of Kerry slug.	Apply existing Forest Service Kerry Slug Guidelines, whilst retaining edge trees with lichens and mosses covering trunks. Monitoring of sites ongoing in KY12 in conjunction with GMIT research project.	Liaison with NPWS & FS on an ongoing basis.

Freshwater Pearl Mussel				
Kerry Blackwater, KY12 Cappall KY10, Cumberagh KY10, Owenreagh KY14, Caragh KY09 and Caha River Catchments CK24 Owenmore – Glanshanacuirp, Drom West, Cloghane (part of) KY07 Munster Blackwater – Glanowen, Glanawaddra, Knocknaboul, Ballynahulla, Tooteengarriv, Barna - KY05	These catchments are of good water quality and provide a highly rated pearl mussel habitat	Comply with FS FWPM Guidelines.	Consider postponement of clear-felling on deep peat sites within the catchments of the pearl mussel in consultation with NPWS Recommendations on Forest Service FWPM Guidelines and WFD Sub-basin FWPM Forestry Management plans to apply Liaise with pearl mussel technical group of Forest service Liaise with NPWS	Reduction of log supply to the timber industry, loss of revenue, Increased cost of special protective measures.
Hen Harrier				
LK01, KY03, KY04, KY05, KY05, LK09, CK02 – (Stacks to Mullagherik Mountains, West Limerick Hills and Mount Eagle SPA 4161)	These SPA's are of good quality and provide a highly rated Hen Harrier habitats.	Maintain suitable foraging and nesting habitats.	Consultation with NPWS & FS, retain open space and restructuring plan.	Reduction of log supply to the timber industry loss of revenue, additional costs, due to restrictions for carrying out operations.
Natterjack Toad				
Ballintleave – KY09 - Lough Nambrackdarrig KY09	Oligotrophic lake in peatland catchment.	Conserve lake habitat. Avoid afforestation or peat cutting at lake margins. Liaise with NPWS on conservation needs of the animal	Retain populations at known locations through maintenance of existing habitat.	Monitor the habitat condition.

Killarney Fern (Rare Plant and Old Woodland indicator species)				
Glengarriff – CK20 Lickeen – KY09	Broadleaf Acid Oak woodlands (WN1) of good naturalness retaining year round high humidity.	Conserve plant populations and habitats	Retain populations at known locations through removal of conifers and protection of oak and semi natural habitat.	Avoid actions that could endanger the species.

Native and mixed woodlands in West Munster BAU

Main Properties	Habitat Quality	Management Strategy	Management 2016 - 2020	Issues to be Addressed
Oak-Birch-Holly Woodland (WN1)				
Derrycunihy – KY13 Looscaunagh, - KY13 Lickeen – Ky09 Rossacree KY14 Glengarriff The Demense – CK20 Aultagh CK24 Highfield CK22 Mounttrenchard – LK01 Curragh Chase LK02	Small to medium sized woods but in general of good quality, some problems with invasive exotics e.g. Rhododendron ponticum	Maintain areas of native oak canopy, facilitate expansion of oak wood, and remove exotics.	Utilise transformation to native woodland through thinning out conifers to retain woodland condition. Fell at rotation, replant with native broadleaves and Scots pine where appropriate. Address rhododendron control.	Cost of Rhodo removal and control of deer.

Mixed broadleaved Woodland (WD1)				
<p>Kilderry KY10 Killaclohane KY10 Dromillihy Ck22 Castletownsend CK22 Moyross CK22 Rossacroo KY14 Kilmurry KY14 Glenaserha KY Castlefreke CK23 Curragh Chase LK02 Tinnacullia LK02</p>	<p>Mixed woodland, with areas of relict native ground flora. Some problems with invasive exotics e.g. Rhododendron and Cherry laurel</p>	<p>Restore some areas to broadleaf woodland in most suitable parts of these woodlands. Maintain woodland structure and species diversity in other areas. Implement Coillte OWS policy in these woodlands.</p>	<p>Manage under CCF. Utilise transformation to native woodland through thinning out conifers to retain woodland condition. Address Rhododendron and Cherry laurel control.</p>	<p>Cost of Rhodo and Cherry laurel removal. Control of deer</p>
Mixed broadleaved/conifer Woodland (WD2)				
<p>Aultagh CK24 Mallabracka CK24 Cooleen CK18 Dunboy CK20 Dromilihy CK22 Rossacroo KY14 Dromore KY12 High Wood KY13 Pike Wood KY13 Ballinruan Lk08</p>	<p>Mixed broadleaf/conifer woodland, retains areas of relict native ground flora. some problems with invasive exotics e.g. Rhododendron and Cherry laurel</p>	<p>Restore some areas to broadleaf woodland in most suitable parts of these woodlands. Maintain woodland structure and species diversity in other areas. Implement Coillte's OWS policy in these woodlands.</p>	<p>Manage under CCF. Utilise transformation to native woodland through thinning out conifers to retain woodland condition. Fell, replant with broadleaf and light crowned conifer species where appropriate. Address Rhododendron and Cherry laurel control.</p>	<p>Cost of Rhodo and Cherry laurel removal. Deer browsing</p>

Wet woodland (Riparian-Wet Willow-Alder-Ash WN5/WN6)				
Tomies East – KY13 Rossacroo – KY14 Curragh Chase – Southern Portion of Property LK02	Small to medium sized woods but in general of good quality some problems with invasive exotics.	Maintain areas of native canopy, facilitate expansion of native wood, and remove exotics.	Address control and removal of exotic species.	Cost of removal of exotics.
Oak-Ash-Hazel Woodland (WN2)				
Graigue, Rower, Knockanes – LK08 Curragh Chase LK02	Small to medium sized woods but in general of good quality, some problems with invasive exotics e.g <i>Rhododendron ponticum</i>	Maintain areas of native oak canopy, facilitate expansion of oak wood, and remove exotics.	Utilise transformation to native woodland through thinning out conifers to retain woodland condition. Fell at rotation, replant with native broadleaves and Scots pine where appropriate. Address rhododendron control.	Cost of Rhodo removal and control of deer.
Yew Woodland (WN3)				
Curragh Chase LK02	One Hectare Core Area extended to 6.9ha under LIFE 2006 to 2010. Excellent example of Rare and threatened habitat type.	Extend Core Yew area over approximately 7 ha through planting regeneration and phased removal of non native tree and shrub species.	Continue to manage and monitor threats from non native invasive tree and shrub species under 'After LIFE' management plan.	Cost of continued management of the area for 2016 to 2020.

Appendix III – Recreation Facilities in the BAU

Site Name	General Description
Ballygamboon Castlemaine, Co. Kerry	This site comprises of a picnic area, linear walk and up-to-date signage. Its geographical location at a high point in the Slieve Mish mountains affords the walker with some expansive views.
Caragh Lake Killorglin, Co. Kerry	A car park with magnificent views out over Caragh Lake. Walkers use some of the recently developed trails to access the hills behind the site.
Carrigfadda, Reenascreena, Co. Cork	This recently developed trail originates at Carrigfadda Church. Walkers can follow waymarkers which will guide them up the trail, through forestry, to admire the views from the Marian Cross at the peak.
Castlefreke, Rathbarry, Co. Cork	This site consists of a number of properties that are in close proximity to Long Strand. Waymarked trails and signage. Facilities include a car park and picnic facilities.
Cooragreenane Inchigeelagh, Co. Cork	A hill walk up to the Marian Cross close to the village. This has recently being upgraded by West Cork Rural Social Scheme in conjunction with Inchigeelagh Community Group.
Curragh Chase Forest Park Adare / Askeaton, Co. Limerick	Curragh Chase forest park has been upgraded in recent years. Facilities include; a number of waymarked trails, multi-use ie. walking and cycling trails, nature trail, lake walk, specimen trees, two playgrounds, an arboretum, ruins of the old estate house, two car parks, picnic areas, toilets, whello-o (all ability orienteering), and up-to-date signage. A caravan park is also located within the grounds, and has recently being upgraded and is open for business. A stand of yew within the property is part of the Restoring Priority Woodland Habitat LIFE project. A local scouts group also have a campsite at the edge of the forest. We are also considering installing a zipit facility within the property.
Dooneen Castleisland, Co. Kerry	This is a lay-by parking area with a small picnic spot. Up-to-date signage is in place.
Dromihilly, Skibbereen, Co. Cork	This woodland consists of a car park, threshold signage and picnic area. There is a trail network that has just being upgraded.
Dunboy, Castletownbere, Co. Cork	Amenity Area on the shore of Bantry Bay. The Beara Breifne Way passes through this property.
Foynes Foynes, Co. Limerick	A recently upgraded amenity area on the banks of the River Shannon. Facilities include; off road parking, picnic area, up-to-date signage, a network of walking trails, view points and access to the foreshore.
Glanageenty Castleisland, Co. Kerry	There is a National Looped Walk and associated trailhead running through this forest which is steeped in history and folklore.
Glanawaddra Ballydesmond, Co. Cork	Two National Looped Walks go through this forest in conjunction with IRD Duhallow, and takes in the source of the Munster Blackwater.
Glanteenassig Castlegregory, Co. Kerry	Glanteenassig, on the Dingle Peninsula, is located beside the Slieve Mish mountains. It's setting includes two lakes that are popular with fishermen, one of which has a timber boardwalk circuiting the perimeter, a river walk, picnic area, multi-access trail, picnic areas and two car parks.

Site Name	General Description
Guagan Barra Forest Park, Ballingearry, Co. Cork	Ireland's oldest Forest Park, located behind the oratory of Guagan Barra. This park has 6 waymarked trails ranging from multi-access to strenuous. There are also 2 car parks, toilet facilities and many picnic areas and information panels.
Kilderry, Milltown, Co. Kerry	A popular woodland with picnic facilities, car parking and walking on the forest road network.
Killaclohane Milltown, Co. Kerry	This is an old woodland site with a looped forest road network that is popular with walkers. There is an old mass rock on site. A mass is celebrated here annually. Signage recently upgraded and there is also a way marked trail.
Lickeen, Glencar, Co. Kerry	Facilities include lay-by parking with a picnic area opposite the Glencar GAA grounds. The Kerry Way, a NWMW passes through the forest and is very popular with locals and tourists alike.
Lyracrumpane Castleisland, Co. Kerry	This site consists of a waymarked walk that includes both Coillte and private land. There are a number of picnic tables and up-to-date signage in place also.
Pike Wood, Killarney, Co. Kerry	A picnic area on the outskirts of Killarney town.
Pooleen, Glengarriff, Co. Cork	This site is located at the edge of Glengarriff Nature Reserve. Facilities include a car park and picnic area. The main attraction is the pool and associated rock formations created by the Glengarriff River.
Rossacroo, Kilgarvan, Co. Kerry	This is principally a Millennium Forest site with car parking, up-to-date signage and way marked trails. There are also Club mountain biking events held across the road within the forest bounds.
Dromore, Kenmare, Co. Kerry	Dromore is located adjacent to Templenoe village, c. 11km to WSW of Kenmare. The forest area is a long, narrow strip of forestry situated on lands of the former Dromore Estate, adjacent to S of the N70 Sneem to Kenmare road. The area of existing plantation (KY12) is located on a steady SE-facing slope ranging from 0m OD along the shores of Kenmare Sound and rising to c. 70m OD where it is defined to N by the N70. The recorded monuments and protected structures are located within 4km of each other with the tower house (KE092-030----) located at the ENE-end, just outside Templenoe and the children's burial ground (KE101-001----) located at the WSW-end, near Blackwater Bridge. The sites can be accessed via existing forest roads and trackways. The Kerry Way runs through the property. There is a holy well on site also. The Lobster was filmed in the property in Feb / March 2014 which stars Colin Farrell and Rachel Weisz.
National Waymarked Ways	The following long distance walking routes traverse the BAU's forests. They are; Kerry Way Beara Way Sheeps Head Way Sli Gaeltacht Mhúscraí

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

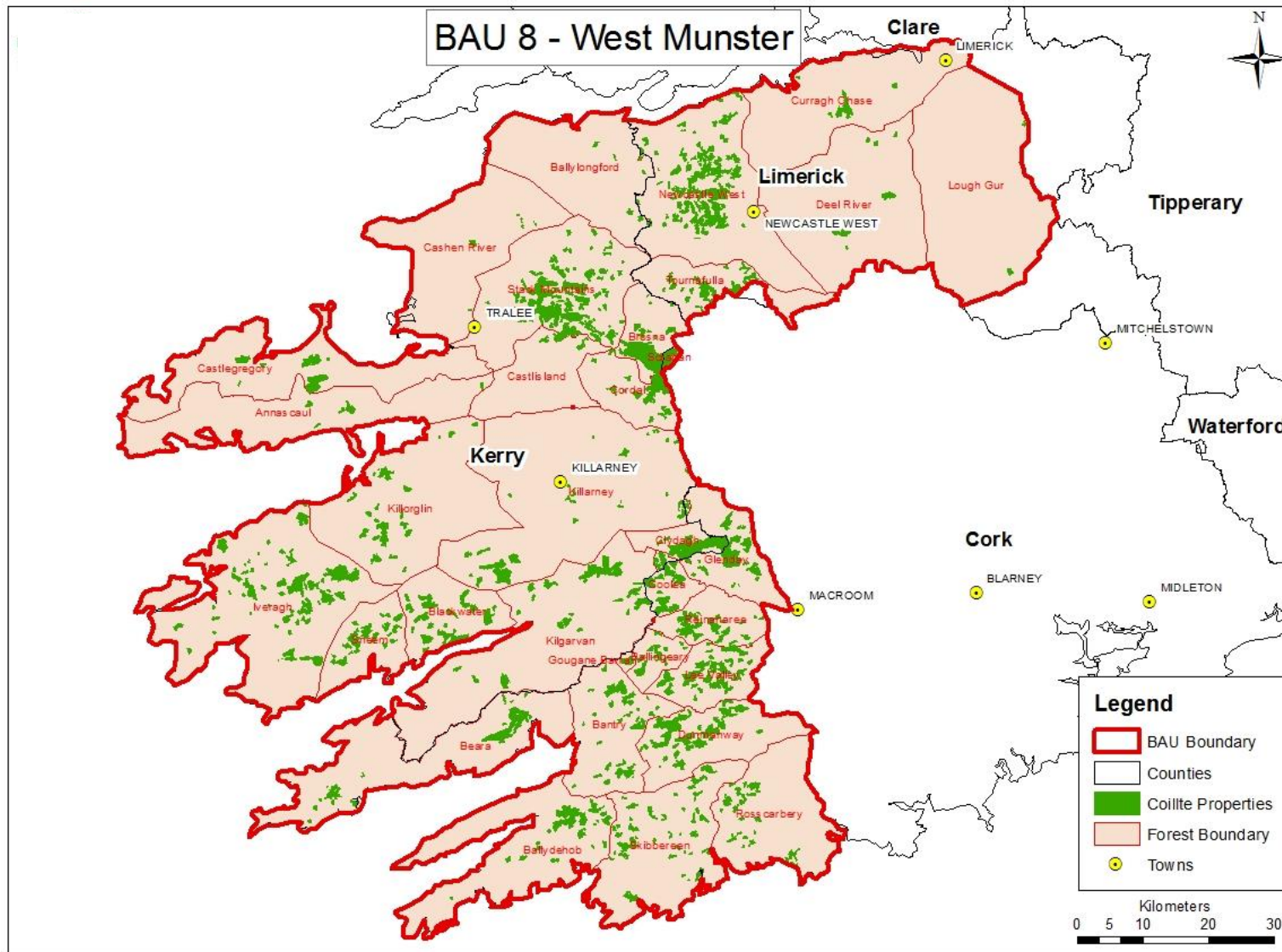
Appendix V – Forest Details

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
CK02 - Scrahan	438	8,293	-	-	-	-	-	-	-	-	-	23	-	-	-	-
CK11 - Glendav	1,388	23,823	10,434	21,079	39,577	7,914	3,031	1,850	2,309	538	2,048	60	30	50	104	25
CK17 - Lee Valley	1,879	19,905	24,819	21,436	14,909	12,089	4,655	2,249	1,985	1,318	3,781	53	56	48	39	23
CK18 - Reinanaree	1,110	4,341	8,539	5,039	5,317	2,478	3,187	1,732	647	1,235	1,738	15	25	14	12	10
CK19 - Bantry	1,242	7,007	20,952	6,751	13,126	7,685	34	2,057	-	1,055	661	26	53	21	23	12
CK20 - Beara	1,382	26,412	15,100	19,672	4,306	17,390	866	-	-	-	-	80	26	36	8	29
CK21 - Ballydehob	1,343	31,517	1,025	16,342	14,685	16,014	1,031	1,528	991	1,184	1,983	85	1	32	38	28
CK22 - Skibbereen	1,358	18,996	5,364	13,813	3,266	13,194	1,655	526	2,932	2,565	1,367	66	10	25	7	27
CK23 - Rosscarbery	685	19,692	3,190	3,106	14,221	5,756	-	108	57	1,321	292	54	7	7	38	25
CK24 - Dunmanway	2,289	3,481	27,003	40,953	12,839	21,952	4,314	3,833	2,510	1,990	5,261	10	61	110	28	51
CK27 - Gougane Barra	137	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CK28 - Ballingeary	508	7,330	7,073	6,420	9,693	1,885	-	1,093	206	239	-	19	19	13	26	3
CK29 - Coolea	1,317	8,738	9,380	15,212	14,122	709	2,474	447	-	-	493	30	19	49	41	1

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
KY01 - Ballylongford	190	-	-	-	-	-	-	378	56	37	-	-	-	-	-	-
KY02 - Cashen River	99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
KY03 - Stack Mountains	4,477	10,963	10,771	22,878	28,414	26,336	4,370	5,724	7,901	8,283	7,173	37	24	44	62	51
KY04 - Brosna	1,902	5,836	1,121	9,990	5,121	5,401	5,351	619	4,105	1,363	3,357	16	3	19	8	11
KY05 - Cordal	1,128	8,471	6,052	1,301	7,205	14,467	2,648	4,459	2,086	2,592	2,011	24	12	2	17	26
KY06 - Castleisland	199	-	-	-	-	-	-	1,212	229	2,000	81	-	-	-	-	-
KY07 - Castlegregory	935	15,194	7,856	699	2,758	735	-	-	-	-	-	44	17	1	4	1
KY08 - Annascaul	226	2,992	7,349	1,182	-	-	-	19	403	-	56	16	18	3	-	-
KY09 - Killorglin	1,134	15,290	17,239	8,832	3,700	3,764	200	567	-	139	75	48	41	21	8	8
KY10 - Iveragh	3,592	44,054	49,338	34,047	39,715	24,748	2,428	2,640	843	3,384	1,432	136	147	74	93	40
KY11 - Sneem	1,068	3,695	10,126	12,383	5,647	14,029	741	189	53	-	282	14	20	25	7	26
KY12 - Blackwater	1,627	27,051	7,007	45,346	33,449	15,903	1,386	1,381	3,459	4,071	1,310	89	15	136	74	35
KY13 - Killarney	1,411	21,163	2,201	7,890	5,544	4,209	-	-	377	55	-	72	4	14	13	10
KY14 - Kilgarvan	1,893	6,151	16,611	15,738	18,764	5,357	1,309	4,664	4,004	3,338	1,345	20	46	48	47	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
KY15 - Clydagh	1,704	25,837	2,481	-	5,222	5,093	-	194	1,894	-	-	81	7	-	10	8
LK01 - Newcastle West	4,224	11,535	7,091	17,852	19,684	38,226	11,327	14,971	7,836	7,017	5,463	36	19	35	49	72
LK02 - Curragh Chase	364	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LK04 - Lough Gour	65	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LK08 - Deel River	334	-	-	-	-	-	-	320	972	609	57	-	-	-	-	-
LK09 - Tournafulla	942	363	1,613	1,645	5,899	14,594	3,692	2,149	1,720	563	891	3	4	4	11	22

Appendix VI – BAU Map



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