

District Strategic Plan

2006-2010

CORK DISTRICT

Statement of Compliance with Principles of Sustainable Forestry Management

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

In practising SFM we will:

- develop our forests in a way that is both environmentally sensitive, socially beneficial and economically sustainable;
- choose to independently verify that SFM is being practiced in our forests through the forest certification process;
- undertaken to work, with our stakeholders, towards full compliance with Irish Forestry standards;
- comply with applicable legal requirements and the FSC's International Principles and Criteria as embodied in the FSC Irish Forestry Standard.
- Strive to achieve full compliance with the FSC standard at the earliest possible date with the resources available.
- Abide by the Forest Service Code of Best Practice and related guidelines on Archaeology, Fisheries, Landscape and Biodiversity among others.
- Strive for continuous improvement of forestry practices.

Pat Roche
District Manager

DISTRICT STRATEGIC PLAN DISTRICT S3

Table of Contents

<u>1.</u>	<u>INTRODUCTION.....</u>	<u>4</u>
1.1	ABOUT THE DISTRICT	4
1.2	KEY EXTERNAL CHALLENGES AND OPPORTUNITIES	6
1.3	AIM OF THE PLAN	8
<u>2.</u>	<u>LONG TERM VISION</u>	<u>9</u>
<u>3.</u>	<u>ISSUES AND PRIORITY OBJECTIVES.....</u>	<u>10</u>
3.1	FOREST RESOURCE	10
3.1.1	SILVICULTURAL SYSTEMS	10
3.1.2	TIMBER SUPPLY	10
3.1.3	HARVESTING AND ROADING.....	11
3.1.3.1	Harvesting	11
3.1.3.2	Forest Roads	12
3.1.4	ESTABLISHMENT	12
3.1.4.1	Species	12
3.1.4.2	Restocking / Regeneration	13
3.1.4.3	Farm Partnerships	14
3.1.5	NON TIMBER BUSINESS.....	14
3.1.5.1	Non Strategic Assets	14
3.1.5.2	Lettings and licences	15
3.1.6	USE OF CHEMICALS.....	16
3.1.7	PROTECTION	16
3.1.7.1	Insect pests and diseases	16
3.1.7.2	Animal Damage	17
3.1.7.3	Fire	17
3.1.7.4	Security	18
3.1.7.5	Water Quality Monitoring	18
3.1.7.6	Litter	19
3.1.8	FOREST PLANNING.....	19
3.2.	THE DISTRICT AS A BUSINESS.....	19
3.3	FOREST DESIGN	21
3.4	NATURE CONSERVATION.....	23
3.4.1	BIODIVERISTY AREAS –STATISTICS/REGULATORY FRAMEWORK	23
3.4.1.1	Statutory Designated Areas.....	24
3.4.1.2	Overall Management Strategy for Statutory Designated Conservation Areas.....	25
3.4.2	SPECIAL HABITATS	25
3.4.2.1	Long Term Retentions	27
3.4.2.2	Natural Reserves	27
3.4.3	PROTECTED OR RARE SPECIES.....	28
3.4.4	NATIVE & MIXED WOODLAND	31
3.4.5	OLD WOODLAND SITE	32

3.4.6	RIPARIAN ZONES	33
3.4.7	DEADWOOD.....	34
3.5	CULTURAL HERITAGE.....	35
3.5.1	ARCHAEOLOGY	35
3.5.2	BUILT AND CULTURAL HERITAGE	35
3.6	WORKING WITH PEOPLE	36
3.6.1	RECREATION	36
3.6.2	PUBLIC PARTICIPATION	37
3.6.2.1	High Impact Operations.....	37
3.6.2.2	Social and Environmental Panels.....	37
3.6.2.3	Complaints and Grievances.....	37
3.6.3	COMMUNITY PROJECTS/PARTNERSHIPS	38
3.6.4.	HEALTH AND SAFETY	39
3.6.5	EMPLOYEE DEVELOPMENT	39
<u>4.</u>	<u>IMPLEMENTING THE PLAN.....</u>	<u>40</u>
4.1	ACTION PLANS - (FIVE – YEAR OBJECTIVES)	40
<u>5.</u>	<u>APPENDICES.....</u>	<u>70</u>
5.1	STRATEGIC IA.....	70
5.2	MONITORING	81
5.2.1.	MONITORING SYSTEMS.....	81
5.2.2.	MONITORING TOOLS.....	81
5.2.3.	MONITORING REPORTS.....	81
5.3	MAPS	85
5.4	GLOSSARY OF TERMS	86

1. INTRODUCTION

1.1 About the District

Cork District embraces the greater part of Cork County excluding West Cork but including the Kilfinane area of South Limerick. The District is now the Forest Management Unit and comprises of 16 new forest zones, The total area of the District is 36,942.ha. The total stocked area is 34,000 ha.

Age category is 44% less than 15 years; 35% between 15 and 35 years; and 21% greater than 35 years.

The main mountain ranges are dominated by old red sandstone and the river valleys by carboniferous limestone. The main soil types vary and include podsols, gleys, brown earths and peats. Topography varies within the District from the rich lowlands in the south to the mountainous regions in the north and west. The Ballyhouras, Nagles, and Boggeraghs are the main mountain ranges. There are four main river catchments - Blackwater, Lee, Bandon and Feale. The Blackwater and it's tributary The Bride are important rich salmonoid rivers with some of their tributaries designated as SACs and associated with fresh water pearl mussel beds.

The District is a moderately scenic area and has the potential to be managed for various recreational activities. The District's policy to develop the Blackwater and Ballyhoura areas will provide a major boost to the local economy of the area through the increase in recreational usage.

The proximity of some of our forests to Cork City and other major urban centres coupled with a large section of coastline and maritime conditions affect the management of our forests and influence decision making.

The District has a high recreational usage and a number of way marked ways traverse our properties – Avondhu Way, Duhallow Way and Ballyhoura Way. There is a highly utilised forest amenity park located at Farran. There are over 20 listed picnic sites with car parking in the District. There is also a large number of loop walks.

Mid and East Cork has a rich cultural heritage. Many sites of local cultural significance are located in or adjacent to numerous forest properties across the District.

Natural and semi-natural habitats are protected and enhanced through appropriate management.

Fig. 1

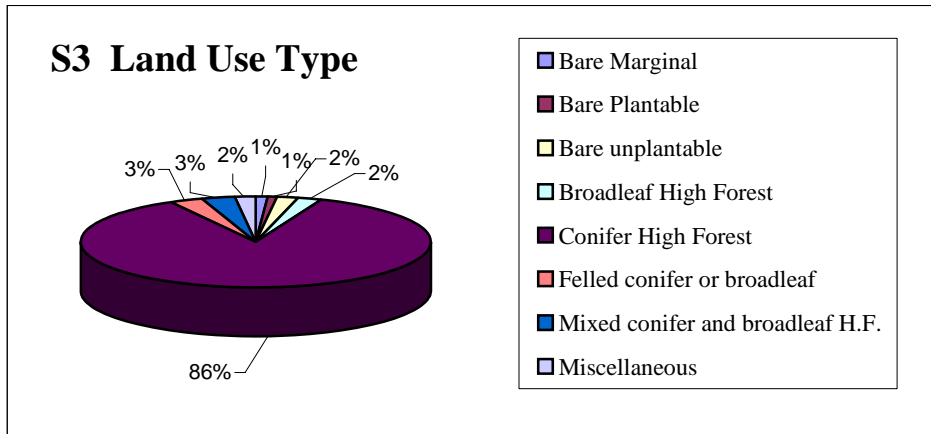


Fig. 2

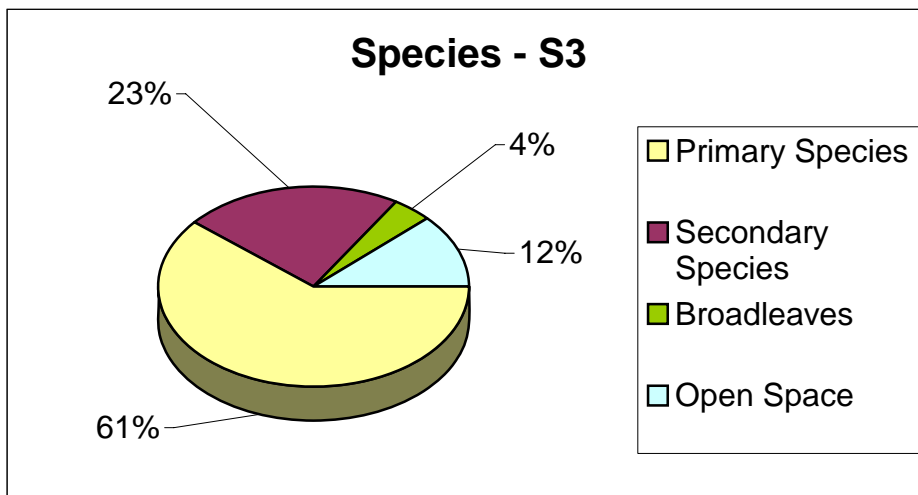
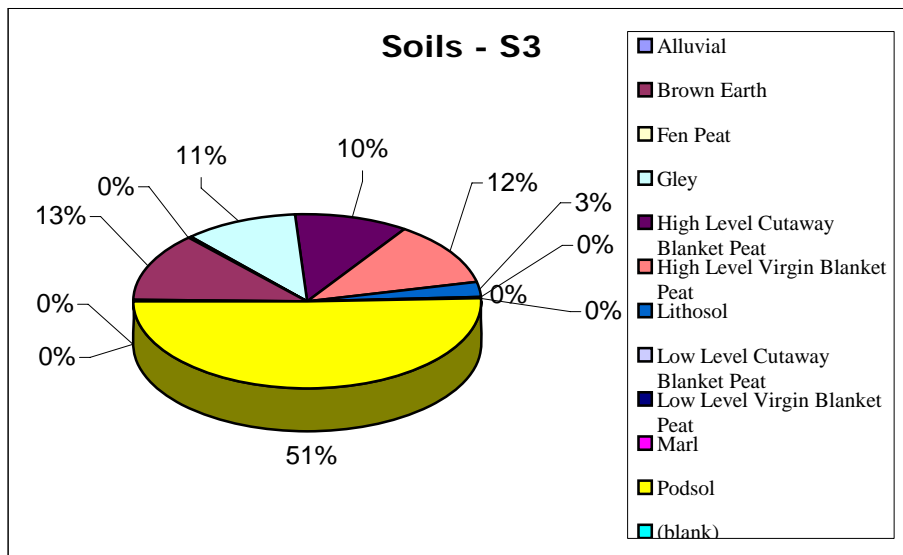


Fig. 3



1.2 Key External Challenges and Opportunities

The District is subject to a number of key external factors, many of a policy or legislative nature, which are driving change and will have a major influence on its future. Understanding and anticipating such factors is vital in order to manage change proactively rather than responding to it reactively.

Challenges	Opportunities
<p>National Forest Strategy</p> <p>The government forestry strategy published in a document titled "Growing for the Future"</p>	<p>District contributing to the national timber supply Greater diversification Increasing broadleaf content</p>
<p>National Biodiversity Strategy</p> <p>The 1992 Convention on Biological Diversity includes measures to develop national strategies and action plans to conserve, protect and enhance biological diversity. The Governments commitment the complete range of habitats and species is set out in the 2002 Biodiversity Action Plan for Ireland. This plan requires that each sector makes a contribution to the conservation of biodiversity within their sphere of operation.</p>	<p>Coillte is in a position to make a meaningful contribution to the National Biodiversity Action Plan through the designation of 15% of its forest estate for nature conservation. Ecological surveys of the District will be completed by end of 2005 and currently 73 plans/sites have been designated for biodiversity. Management plans of these areas are being developed and will ensure their conservation and protection.</p>
<p>Habitats and Birds Directives</p> <p>The EU Directive on the Conservation of natural habitats and of Wild Fauna and Flora 1992 provides for the protection of habitats and their species , and where necessary their restoration to favourable conservation status. This is achieved partly by the establishment of a community-wide network of Special Areas of Conservation (SACs) which form part of Natura 2000. Special Protection Areas (SPAs) established under the Directive on the Conservation of Wild Birds, 1979, are also included within Natura 2000 network.</p>	<p>District has 1,049.5 ha of Natural Heritage Areas (NHAs), 424.2 ha of SACs etc. Managing Old Woodland Sites (OWS) to retain their semi-natural characteristics through biodiversity and Native Woodland Sites (NWS). Protecting and managing habitats for Hen Harrier during nesting season. Areas designated for protection of rare bird species i.e. Peregrine falcon. Maintain habitats for Red squirrel .</p>

Challenges	Opportunities
<p>Water Framework Directive 2000</p> <p>This EU Directive establishes a framework for the protection 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.</p>	<p>Water protection areas (buffer zones) to be established where relevant. Emphasis on protecting waterways during all high impact operations – Standard Operating Procedures (SOPs). Chemical reduction policy in place. Permanent water sampling sites.</p>
<p>Modern Society</p> <p>Trends emerging that are likely to impact on Coillte forests are: Increasing urbanisation of Irish society Access issues to the countryside Significant increases in disposal of waste Greater awareness of environmental issues More investment and business in countryside towns and their hinterlands Changes in EU farming policy – single payment premium Growth in tourism</p>	<p>Coillte operates Open Forest Policy – pedestrian use only. Provision of designated recreation areas with facilities – Farran Forest Park. Working with County Councils to combat dumping Landscaping forests to make them fit better into the landscape Liaison with community councils and non-governmental organisations (NGOs). Facilitating the development of specific recreational activities. Continued participation in the Farm Partnership Schemes.</p>
Challenges	Opportunities
<p>Sustainable Forest Management</p> <p>SFM is the forestry sector’s response to sustainable development. Balancing the economic, environmental and social elements is now the accepted way by which forest management is conducted. Forest certification ensures best forest practice is implemented and provides stakeholders with an opportunity to contribute to the management of forests.</p>	<p>SFM and certification are providing a framework by which the social and environmental issues can be addressed in a constructive manner. It provides an opportunity for the District to work in partnership with others, helps to improve communications and a better understanding of the forestry related issues that concern different sectors of the community. SFM also provides an incentive to address nature conservation issues which are vital to the ecological support systems of the countryside.</p>

1.3 Aim of the Plan

The District Strategic Plan (DSP) through its policies and priority objectives fits in to the existing planning framework by bridging the gap between Coillte's national Corporate Strategic Plan (2004 – 2013) and the local Forest Management Plans (FMP's)

This plan is one of a series of 13 District Strategic Plans which cover the entire Coillte estate.

The aim of the plan is to set out a vision for the forests in Cork District for the next 20 years and beyond.

In outlining the broad direction of forest management it:

- sets out the policies and practices that will be adopted; and
- specifies the short-term (5years) priority objectives to be addressed during the period of the plan.

Draft District Strategic Plans will be made available for consultation with relevant Government Agencies, Non Government Organisations (NGO's) and local organisations and communities. Consultation will take place at District level and meetings will be held in geographical areas where Forest Management Plans (FMP's) can be clustered, to take account of areas which are most affected by operations within the District. Following these consultations the DSP will be updated and finalised. It is envisaged that the DSP will be reviewed and reissued every five years, minor changes will happen from time to time and these will be noted in the plan. Where significant changes to the planned activities occur additional consultation will take place in the format of an information/open day in the location and community where proposed new developments are planned

1.4 Guiding Principles

The strategic plan is based on sustainability of the Coillte estate within the District and how it can be achieved. It is the key principle on which the plan is based which requires meeting four closely related objectives:

- Wise use of natural and cultural resources
- Effective protection of the environment
- Sustainable production of forest products (wood and non wood); and
- Working with people.

These are embodied in the Forest Stewardship Council's (FSC) International Forestry Standard which has been adapted for Ireland by the Soil Association. Coillte manages its forests to this Standard and forest certification verifies that sustainable forest management is being practiced.

In the plan issues and objectives are organised under six main themes: Forest Resource, Forest Design, Nature Conservation, Cultural Heritage, Working with People and The District as a Business. The means by which the strategy will be implemented is presented in the Action Plan for the District.

2. LONG TERM VISION

This management plan begins with a long term view of the Coillte forests in the Cork District, looking beyond the 5 year time horizon to a time in the future. The vision will not be realised within 5 years for there will remain political, financial and technological barriers to its achievement. Nevertheless, it offers a vision of the future that all can share and work together to strive towards achieving that vision by practising the concept of sustainable forest management to ensure the economic, social and environmental well being of the District. The DSP incorporates a flexibility to allow for minor adjustments to it's long term view for the District that will inevitably occur.

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

Natural and semi-natural habitats are protected and enhanced through appropriate management.

There is continuity of forest habitat for rare and threatened species such as the Hen Harrier, Peregrine falcon, Fresh water Pearl Mussel, Wood Millet, etc.

Forest recreational sites will be a part of the tourism infrastructure and will be an important contributor to the tourism economy.

That there will be a shared vision between the company and local communities on expectations from the forests and how they are managed.

3. ISSUES AND PRIORITY OBJECTIVES

3.1 Forest Resource

3.1.1 Silvicultural Systems

Many of Coillte's plantations are located on sites that today would not be considered suitable for forestry. Soils with impeded drainage and low nutrient status, coupled with sites that are subject to high winds predispose many plantations to the risk of windthrow. These stands are generally prematurely clearfelled. On more stable sites felling dates are determined by the optimum tree size for harvesting, and the economic rotation.

Low Impact Silvicultural Systems: This management system minimises the impact on the forest crop or its environment. There are opportunities to employ other systems on more sheltered and windfirm sites such as the various forms of Shelterwood systems have been successfully used in the management of broadleaf stands in Ireland but experience with conifers in a windy climate is very limited. The advantages of these systems are that they provide continuous forest cover with little impact on the environment. Regeneration is achieved either by natural seed fall or planting.

Under the FSC Forestry Standard for Ireland Coillte is committed to increasingly favour the use of Low Impact Silvicultural Systems (LISS) in wind firm conifer stands.

5 Year Priority Objectives *(See Action Plans Page 39)*

- Maintain our clearfelling policy with special consideration to felling coupe size.(1)
- Identify opportunities for use of LISS in the District (2)

3.1.2 Timber Supply

District Policy

It is the District policy to thin conifer crops to marginal intensity wherever possible. Broadleaves will be thinned in accordance with good silvicultural practice on a site to site basis and in a sustainable manner.

Clearfelling volume is made available in accordance with forest management plans and based on market dynamics and SFM principles.

5 year priority objectives *(SEE ACTION PLANS PAGE 40)*

- Optimise volume from thinning and clearfell (2006 – 2010) (1)
- Accuracy and usage of Thinning Rotation Classification (TRC) Data(2)
- Meet company targets(3)

3.1.3 Harvesting and Roding

Harvesting infrastructure

Policy: To ensure that harvesting and roading infrastructure is adequate and maintained to meet timber production requirements.

3.1.3.1 *Harvesting*

Timber harvesting is a high impact forestry operation and is the activity that impacts on public attitude to forestry more than any other operation in the district. Harvesting is the end result of a process that involves both strategic and tactical planning over the rotation of a crop. The principle forms of harvesting carried out in the district are thinning and clearfelling. Regular thinning improves the quality of the remaining trees and provides an important timber resource for Irish industry. Under the Forestry Act 1946, felling is controlled by the issue of a proposed five-year General Licence and/or Limited Felling Licence in special circumstances. Reforestation is undertaken to replace the harvested trees where appropriate.

The District and local authorities have identified and agreed the main road arteries which will carry the main bulk of timber over the next five years and are termed 'Designated Timber Haulage Routes'. Harvesting is subject to long term planning and should embrace design and restructuring plans, coupe size, Environmental Impact Appraisal (EIA), statutory and other consultations, felling licence etc.

5 year priority objectives *(See Action Plans Page 42)*

- Delivery of timber supply commitment to timber industry.
 - Maintain thinning regime/policy
 - Maintain harvesting infrastructure.
 - Compliance with all guidelines
 - Adherence with consultation process
-

3.1.3.2 Forest Roads

The district provides a planning programme for roads to access forest properties for management, harvesting, transport and recreational purposes. Road construction is based on site topography and site type dictates method of road construction. Currently the District is well served by an adequate road network with the exception of the Newmarket area.

5 Year Priority Objectives (See Action Plans Page 43)

- Maintain road infrastructure to serve district.
- Reduce where possible the amount of upgrading.
- Implement a cost effective road maintenance programme.

3.1.4 Establishment

3.1.4.1 Species

Climate and soils have largely determined the species that have been planted within the District to date. The variety of soils types within the District allows for diversification of species. Commercial broadleaves are confined to good mineral soils; all broadleaf planting accounts for only 4%. Continual removal of uneconomic stands is continuing to increase the value of the estate.

Opportunities, however, exist for the diversification of species in the second rotation and particularly for environmental planting. The lesser native broadleaf species such as willows, alder and birch can grow on the more inhospitable sites but are unlikely to produce any merchantable timber. Their use, however, is for nature conservation in creating habitat for native flora and fauna and for biodiversity and riparian zones. See Coillte's policy on Species Diversification.

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

Table 1: Species

Requirement	%	Current %	% Change required
Primary species	60%	61%	- 1%
Secondary species	20%	23%	-3%
Broadleaves	10%	4%	+ 6%
Open Space	10%	12%	- 2%

Substantial change is required in the percentage of broadleaves required to meet the Standard. This can only be achieved as a gradual process over time as current crops mature and the sites become available for restocking

5 Year Priority objectives (See Action Plans Page 44)

- Maintain Sitka spruce planting levels. (1)
- Increase the planting of broadleaves with emphasis on alder ash, oak, and natural birch. (2)
- Decrease the present percentage of diverse conifers. (3)
- Ensure that native shrub species are protected and allowed to develop naturally and are recorded. (4)
- Reduce open space percentage. (5)
- Restructuring and forest design through species choice. (6)

3.1.4.2 Restocking / Regeneration

Areas felled under general felling licence should be replanted within the specified period of the licence as stipulated in 1946 Forestry Act. Adherence to prescribed species is mandatory under a Limited Felling Licence.

Cultivation is site specific. Methods include mounding, ripping, scarifying and windrowing. Main type of cultivation in the District is mounding.

Planting stock; bare root, containerised, cold store will be planted in accordance with regeneration plans/management unit (MU) selection of species. In sensitive/ scenic areas species will be in accordance with forest design plan. Stocking levels at free growing stage to be in accordance with company policy.

Riparian/buffer zones species will be in line with MU species selection; open space will be minimised. Setbacks from archaeological monuments, cultural features, county and forest roads are in keeping with various guidelines.

Fertilisation where appropriate to be manual at year one and aerial three years post planting.

5 Year Priority Objectives (See Action Plans Page 46)

- Establishment of a free growing plantation at Year 4 or greater. (1)
- Site specific ground preparation/cultivation. (2)
- Matching of species to site to ensure maximum financial return. (3)
- Proper use of diverse species and hardwoods to ensure environmental and social requirements are met. (4)
- Restocking in accordance with Forest Management Plans(5)

3.1.4.3 *Farm Partnerships*

Since its introduction in 1992, Coillte's Farm Forestry Partnership Scheme has established itself as one of the most successful forestry partnership schemes and to date over 10,650 hectares have been planted in partnership with farmers throughout the country; of these 39 (700 hectares approximately) are located within the District with a high concentration in the North Cork area. The increase in off-farm employment coupled with the current EU Exchequer funded Afforestation Grants and Premium Schemes has had a positive impact on the success of Coillte's Farm Forestry Partnership Scheme.

Under the terms of the partnership the farmer retains the ownership of the land, receives an advance payment and an income for the life of the crop. The farmer benefits from Coillte's management and marketing skills throughout the life of the crop. Profits are divided between both parties. In general farm partnerships are on fertile good quality land that is capable of producing a high quality commercial crop of timber in a sustainable manner.

5 Year Priority Objectives (See Action Plans Page 47)

- District policy to maximise Farm Partnership Forestry Scheme(1).

3.1.5 Non timber Business

3.1.5.1 *Non Strategic Assets*

Each year, Coillte sells, leases or develops a limited area of non-strategic land, for purposes other than forestry. Most sales are made in response to local demand and typically comprise house sites, isolated dwelling houses, sections of recently acquired farms, small outlying forest properties, small areas of forest to neighbouring landowners, gravel pits, land to local authorities for infrastructure projects and land for development.

Properties sold are those considered not to be of strategic importance in the company's forest business, and where sales would not adversely impact on plans for future management of forests and where value exceeds forest value. A Signing Off Committee within Coillte considers all land sales, with larger sales requiring approval from Coillte's Board of Directors.

In the course of the five-year period covered in this District Strategic Plan, properties may be identified in the Forest Management Planning system which are considered suitable for sale or lease in line with the above policy. In the event that such a property is identified, Coillte will endeavour to consult with people likely to be affected by the sale or lease of the land in line with its Consultation Policy.

To put the District's property sales in context, it is worth noting that in the Cork District which has a total area of 36,845 hectares the total area sold during the last five years was 250 hectares, while the District's estate expanded by 500 hectares in the same period.

Wind Farms and Mast Sites

The EU are to the forefront in the research and development of alternative sources of energy and actively encourages their use i.e. wind energy. Due to their location (elevation) a number of Coillte's properties are regarded as suitable for development of wind farms. On suitable sites once planning process have been carried out and been successful, Coillte will then decide on the option of selling off the property to a developer or to enter a joint venture with the developer. In District S3 it is proposed to develop a number of wind farms in the Newmarket area and also wind farms in the Ballyhoura and Boggeragh Mountains.

Communication masts – a number of Coillte hill top sites in the District have been leased for the erection of communication masts.

It is important to note that no development or lease of lands will be entered into until the consultation / planning process is complete and full planning permission has been granted for the development.

5 Year Priority Objectives– (See Action Plans Page 48)

- Develop land and new business opportunities through utilisation of non strategic land assets under control of the District. (1)
- Consultation and planning carried out in consultation with developers. (2)

3.1.5.2 Lettings and licences

Coillte may permit the use of its lands under licence by individuals, clubs and/or syndicates and commercial operators.

In the area of lettings and licences within the forest estate the District currently provides agreements in activities such as grazing, fishing, pony trekking, scouting activities, deer stalking and rough shooting, orienteering, car rallying, walking routes, and other activities undertaken by field sports enthusiasts. The licensing of such activities is restricted to forest areas where it is not considered to compromise public safety, or impede forest operations.

The District is conscious of the growing awareness of the vital role forests play in economic and social developments through the provision of lettings and licences.

All activities are carried out are in compliance with Coillte's relevant Standards, Guidelines and Codes of Practice and Coillte's Forest Certification Standard.

5 Year Priority Objectives– (See Action Plans Page 49)

- Promote the use of Coillte lands through Licences and Lettings (1)
- To endeavour to eliminate all unlicensed / illegal / unauthorised use of the forest.(2)
- Facilitate all reputable licensees / activities in our forests (3)
- Ensure that Coillte are indemnified from potential litigation arising from activities in the forest estate (4)

3.1.6 Use of chemicals

The District is committed to chemical reduction strategy across all forestry operations in line with Coillte's company policy on chemical use and reduction. It is the District's policy to use as little as possible chemicals for weed control, insect control and fertilisation of crops. Application is on a site by site assessment and will only be applied to sites where absolutely necessary. Only the chemicals approved by Pesticide Control Service and endorsed by FSC are used in the District. Main area of usage is in the establishment area particularly in Pine Weevil control. Usage of fertiliser is dependent on site fertility and current health status of older crops.

There has been a dramatic decrease in chemical usage on a continual basis since 1999. Glyphosate is most common chemical used – 39% of total usage in the District.

Average District Reduction

1999 K a.i. / treated per ha = 0.74

2003 K a.i. / treated per ha = 0.16

2004 K a.i. / treated per ha = 0.0596

5 year priority objectives– (See Action Plans Page 50)

- To minimise the use of chemicals (1)
- Promote non chemical methods of vegetation and insect control. (2)

3.1.7 Protection

3.1.7.1 Insect pests and diseases

There are a number of threats to the forest health by insects, pests and diseases. The major threat to the District's reforestation programme is the presence of the Large Pine Weevil. The large scale clearfelling of pines in the

District particularly in the Nagle and Ballyhoura Mountains has highlighted this problem. The monitoring and control of this insect imposes a large financial cost.

5 Year Priority Objectives (See Action Plans Page 51)

- Promote forest health monitoring programme in order to minimise the incidences of insect and pest diseases (1)
- Ensure controls are in place for the control of Large Pine Weevil. (2)

3.1.7.2 *Animal Damage*

The majority of new plantations need to be protected from damage caused by browsing animals i.e. cattle, deer, goats, sheep, rabbits and hares. There are numerous properties in the East Cork encountering deer damage at present. There is also a high incidence of rabbit/hare damage particularly on areas surrounded by agricultural lands. In the north west of the District there are incidences of Bank Vole damage. There is evidence of feral goat damage in Kilworth area.

5 Year Priority objectives (See Action Plans Page 52)

- Ensure animal damage within the district is maintained at minimum level (1)
- Monitor and maintain deer population at appropriate levels (2)

3.1.7.3 *Fire*

Plantations are most vulnerable to fire damage up to and including thicket stage. Each forest and district have their own Fire Plan outlining the procedures to be following in the event of a fire in order to minimise the cost with effective fire procedures and fire control measures. Each year there are incidences of illegal burning causing forest fires throughout the District; unauthorised activities have caused forest fires particularly in the Ballyhouras. It is a growing concern the number of malicious forest fires recently reported.

Consultation is necessary with NPWS when establishing new fire lines and renewing old fire lines within designated areas.

5 Year Priority Objectives (*See Action Plans Page 53*)

- Prevention of forest fires (1)
- Annually updated Fire Plans(2)

3.1.7.4 Security*Security of Coillte's Estate*

The District is committed to protect its estate from loss or damage resulting from unauthorised activity and theft. Security plans have been created which deals with all aspects of security within the District. These Security plans are updated annually for each property depending on the amount of activity therein. The greatest security issues relate to theft of timber, forest boundary encroachment, illegal use of the forest such as rallying, dumping etc.

Security is continuously monitored by Coillte staff, contractors and caretakers.

5 Year Priority Objectives (*See Action Plans Page 54*)

- Adherence to Coillte's Security Policy (1)
- Minimise illegal / unauthorised activities in District (2)
- Protect integrity of estate (3)
- Ensure Timber Security Across District (4)

3.1.7.5 Water Quality Monitoring

The majority of the district is within the South Western River Basin Catchment. The main rivers are The Blackwater (Munster), The Lee, The Bandon and The Feale which is in the Shannon River Basin. The protection of these rivers and their tributaries is of paramount importance and every effort is made to ensure water quality is maintained and enhanced. There are four permanent Coillte water sampling sites within the District; water sampling is also conducted on high impact operational sites. Water monitoring is also conducted by U.C.C. and Cork County Council.

5 Year Priority Objectives (*See Action Plans Page 55*)

- Minimise the impact of forestry and forestry related operations on water quality (1)
- Implement protective measures in order to maintain and enhance water quality(2)
- Assist with the implementation of the "E.U. Water Frame Directive 2000" (3)

3.1.7.6 *Litter*

The District's policy is to keep Coillte lands free of litter. Indiscriminate dumping of all types of mineral, vegetable and animal on Coillte lands is an ongoing problem. Liaison with local authorities and Gardaí is ongoing to address this problem.

5 year priority objectives (*See Action Plans Page 56*)

- Endeavour to keep Coillte lands free of litter. (1)
- Liaise with Local Authorities (2)

3.1.8 Forest Planning

Forest management is a long term activity requiring managers to have clear strategies to meet the long term management objectives for the forest.

These strategies and objectives are set out in a Forest Management Plan (FMP). A forest is made up of Management Units (MUs) and these describe the management prescription for individual parcels of land. An FMP integrates the economic, environmental and social issues within a forest into a locally unique long term plan. A Plan has been drawn up for each of the sixteen forests in the District.

An FMP details all forestry related operations scheduled to be carried out within the five year period of the Plan i.e. harvest scheduling, restocking, implementation of environmental plans to amenity and other land uses. An FMP will provide the foundation by which consultation with all of the statutory authorities and for local stakeholders will take place. Also five year felling licences will be issued by the Forest Service for each FMP.

5 year priority objectives (*See Action Plans Page 57*)

- Main priority is implementation and consultation of 16 FMPs (1)
- Review of 1/5 of Plans per annum (2)

3.2. **The District as a Business**

The District is the primary business unit within Coillte Forest. All activity undertaken within Coillte Forest is undertaken within one of the 13 Districts. By definition therefore all revenue earned (and associated cost) by Coillte Forest is generated from the resource within the District through the activities undertaken on that resource.

The primary revenue source is from the sale of timber with a secondary (less significant) flow generated through lettings, licences, leisure other resource related activities and alternative land use developments. The most significant costs relate to accessing and bringing this timber to market and subsequently replanting any land which has been clearfelled.

The business environment in which the District operates is becoming increasingly more competitive and a number of efficiency programmes are in place to reduce the cost base and optimise the use of new technologies to maintain and in time improve the financial return in the District.

Table 2: District S3: Main Operating Targets 2006 – 2010

ANNUAL TOTALS					
	2006	2007	2008	2009	2010
ESTABLISHMENT					
Sources of Land (HA)					
Land Purchase					
Farm Partnership	25	25	25	25	25
Private Planting Initiatives					
TOTAL	25	25	25	25	25
Planting (HA)					
Afforestation (A/F)	25	25	25	25	25
Regeneration Planting (R/F)	880	840	760	720	550
TOTAL Planting	905	865	785	745	575
HARVESTING PROGRAMME					
Harvest Categories (000m3)*					
Thinnings	57	71	66	88	100
Regeneration Felling (P,C,W)	300	272	256	185	263
TOTAL	357	343	322	273	363
Regeneration Area (HA)	840	760	720	550	700
Coillte Harvesting (000m3)	147	113	112	82	84
Non Coillte Harvesting (000m3)	210	230	210	191	279
ROADING PROGRAMME					
Roading (km)					
New	9	14	10	10	11
Upgrading	18	28	20	20	22

**Harvest categories will be based on the new 2005 Timber Forecast*

5 year priority objectives (*See Action Plans Page 58*)

- Increase District profitability (1)
- Develop and expand new business opportunities (2)
- Continue to develop good relations with customers(3)

3.3 Forest Design

Forest design and Restructuring

The topography varies greatly within the District from the rich lowlands in the south to the mountainous regions in the north and west. This varied topography governs forest design and the restructuring of forest blocks. Parts of the District are highly scenic and have the potential to evolve into high amenity areas. The proximity of some of our forests to Cork City and other major urban centres affect the management of our forests and influences decision making. Accordingly it is imperative that landscape planning and design should take particular account of the primary viewpoint from which the forest can be seen.

In the past the majority of forest blocks consisted mainly of conifers which were created in the first half of the last century and reflected an age that accorded ecological and landscape values of less importance than they currently enjoy. Forest blocks varied in size and shape with inherent lack of character and diversity.

Planning and design deals with the forest in the context of achieving a sympatric response to the distinctive landscape character of a given location and will ensure it's capacity to supply economic, social and environmental value on a sustainable basis.

Each forest landscape in the District is already assessed and given a sensitivity rating and forest designs are developed for areas of high sensitivity. These plans cover visual impact, cultural and heritage, recreational and biodiversity values of the forests. Large even-aged forest blocks are being restructured gradually to diversify ages and species which will lead to enhanced landscape and increased biodiversity values. Coillte's new forest management plans reflect these forest design and restructuring strategies through felling coupe plans and next rotation species selection. Areas of low sensitivity are designed through restructuring and regeneration plans. Forests are now being designed not only to enhance their aesthetics but also other environmental values such as biodiversity, recreation, access, riparian zones, etc.

5 Year Priority Objectives *(See Action Plans Page 59)*

- Continue to plan and redesign our forests in a manner that enhances the character of the landscape (1)
- Complete the restructure programme for large even aged forests (2)

3.4 Nature Conservation

Under FSC Certification Coillte is committed to managing 15% of its forest estate that has nature conservation as a primary objective. This percentage comprises two parts:

- a) Statutory Designations - Special Areas of Conservation (SACs), Special Protection Areas (SPAs) and Natural Heritage Areas (NHAs); and
- b) Biodiversity areas identified by Coillte through ecological surveys.

The latter vary in quality and over time, some may be substituted as better areas are identified, or priorities change. For example,

- the necessity to further develop riparian zones to protect the Fresh Water Pearl Mussel;
- the designation of new statutory areas eg. to protect the hen harrier, merlin and other species;
- issues that may arise as a result of the implementation of the Water Framework Directive; and

the final sign off by the company of its nature conservation areas (15%).

3.4.1 Biodiversity areas –Statistics/Regulatory framework

The District's objective is to identify, map and protect areas of particular nature conservation value. Ecological surveys were commissioned, to evaluate and propose suitable areas.

To date the majority of the District has been surveyed for biodiversity but final figures are as yet unavailable as the mid-eastern area of the District is at present undergoing an ecological survey. Currently 13.5% of the District area is identified through the FMPs for biodiversity management.

Ecological surveys are completed for the Ballyhoura/Nagles, Newmarket, and Kilworth areas. An ecological survey of Mid/East Cork area is in progress.

The District is currently developing management plans for biodiversity areas which will be aimed primarily at the conservation and enhancement of semi natural habitats and wild species. In the current FMPs biodiversity areas additional to those selected by the ecologists have been identified. These will be evaluated and biodiversity management plans developed.

There is a policy of ongoing education of staff in relation to awareness of biodiversity issues and training in management techniques for District S3, e.g. external education UCC Biodiversity Components of Forestry Diploma Course and specialized in house training.

5 Year Priority Objectives (See Action Plans Page 60)

- Complete ecological surveys to identify and map all biodiversity

- areas. (1)
- Discuss recommendations and draw up management plans for selected sites. (2)
 - Ground truth and agree additional biodiversity areas identified on FMPs. (3)
 - Ongoing training of staff in relation to biodiversity issues. (4)
 - Monitoring of biodiversity areas and management plans. (5)

3.4.1.1 Statutory Designated Areas

Statutory designations are proposed by National Parks and Wildlife Service (NPSW) under national and international nature conservation legislation.

Table 3: Area of Statutory and Designated Areas in District

Area of Coillte owned land in District	37,000 hectares
Area of pNHA in District	1050 hectares
Area of cSAC in Site	424 hectares
Area of SPA	Parts of the Ballyhoura and Nagles Mountains may be designated as SPAs. Large parts of these mountain ranges have been identified as important habitat for hen harrier.

3.4.1.2 *Overall Management Strategy for Statutory Designated Conservation Areas*

The overall management strategy for Designated Areas within District S3 is to maintain or improve the habitat conditions within the designated areas, which are selected for biodiversity management.

Ongoing consultation with regard to the management of these areas takes place with NPWS and Forest Service, in particular in relation to all high impact operations e.g. wind farm development.

3.4.2 Special Habitats

Within District S3 the most important non forest habitats are located in the upland areas and consist predominantly of heath and bog, see Table 1 below.

5 Year priority objectives (See Action Plans Page 61)

- Retain and protect areas of open habitat. (1)
- Implement Biodiversity Action Plans on selected sites. (2)
- Ground truth and agree additional areas of non-forest habitats. Identified during mapping of MUs and development of District FMPs. (3)

Table 4: Special Habitats (non-forest)

Main Properties	Habitat Quality	Management Strategy	Management 2006-2010	Issues to be Addressed
<i>Blanket Bog (PB2)</i>				
Blackrock-Carrigagulla Barrahourin Cummery Connell	Good quality blanket bog habitat in relatively natural condition.	Retain existing unplanted blanket bog habitat. Increase area of open blanket bog habitat. Restore open riparian buffer zones.	Retain open areas.	Felling licence
<i>Wet Heath (HH3)</i>				
Ballyroe Ballyhaght Jamestown Glenanair West Glenanair East Long Mountain Coombs Toor Glandonohue Cummery Connell Glenamucklagh	Good quality wet heath habitat in relatively natural condition	Retain existing unplanted wet heath habitat. Restore open riparian zones.	Retain open areas.	Felling licence
<i>Dry Heath (HH1)</i>				
Ballyhaght Jamestown Glenanair West Glenanair East Long Mountain Coolfree	Good quality dry heath habitat in relatively natural condition.	Retain existing unplanted dry heath habitat. Increase area of open. Restore open riparian zones.	Retain open areas. Fell, planting by agreement with NPWS.	Felling licence NPWS consultation.

3.4.2.1 Long Term Retentions

Long term retentions (LTRs) are stands that are retained well beyond their economic rotation for environmental and/or social reasons – amenity, landscape. The presence of old stands adds structure and habitat diversity to the forest.

The District strategy is to select LTRs in areas that will benefit biodiversity or amenity objectives. LTR is a component of low impact silvicultural systems (LISS). See Section 3.1.1 of this Plan).

Areas of long-term retention are generally confined to old broadleaf and mixed woodland stands and in areas where amenity/recreation use is a primary forest objective. Visually sensitive areas are also retained.

The main strategy for the long-term retention of these woodlands is to retain and manage these sites on longer rotations. Most of these areas of long term retention have also been identified as areas of prime biodiversity importance, e.g. Castleblagh, Cappagh, Gurteen, Greenwood, Island Wood, Monaduhanna, Ballyannon, Currabinny and Farran Forest Park.

5 Year priority objectives (See Action Plans Page 61)

- Develop management plans for Long Term retention in the District. (1)
- Through Forest Management Plans further identify areas suitable for Long Term Retention. (2)

3.4.2.2 Natural Reserves

One of the management strategies for areas of nature conservation value is to manage under non-intervention i.e. 'to leave' for natural development of habitat or vegetation. Such areas are termed natural reserves. Generally areas that are already in good ecological condition are selected as natural reserves.

Much of the special non-forest habitats within the District are to be managed as non-intervention areas, monitoring of these areas will occur to ensure maintenance of habitat quality. These include areas where heath, wet heath and blanket bog are dominant habitats e.g. Barrahourin (The Mossy Beds), Blackrock-Carrigagulla, Glandonohue, and Long Mountain. Areas of native woodland where woodland structure and composition is good will also be managed as natural reserves, e.g. Lismire, Ballard, Dromdeer.

5 Year priority objectives (See Action Plans Page 61)

- Retain and protect areas of natural reserves through minimal intervention. Monitor. (1)

3.4.3 Protected or Rare Species

Table 5: Protected and Rare Species

Main Properties	Habitat Quality	Management Strategy	Management 2006-2010	Issues to be Addressed
<i>Hen harrier</i>				
Ballyroe Ballyhaght Jamestown Glenanair West Glenanair East Long Mountain Coombs Toor Glandonohue Cummery Connell Glenamucklagh	Good quality wet heath habitat, good hen harrier foraging habitat.	Retain open, unplanted habitat (foraging habitat) Ensure availability of pre-thicket stage reforestation (nesting habitat). Restore open habitat and broadleaved scrub in riparian zones	Fell selected riparian zones and do not replant Fell and delay replanting for retention of foraging areas as recommended by NPWS e.g. Bottle hill and Newmarket area	Ongoing consultation with NPWS, Forest Service, Fisheries and stakeholders
<i>Little Egrets</i>				
Ballyannon Shippool	Good quality high woodland roosts adjacent to main feeding estuarine habitats.	Retain High Forest where Egrets have likely nesting sites	Retain nesting sites	

Main Properties	Habitat Quality	Management Strategy	Management 2006-2010	Issues to be Addressed
<i>Freshwater Pearl Mussel</i>				
Properties adjacent to main channel of Munster Blackwater and its Tributaries	Munster Blackwater and Catchment. Are is a highly rated pearl mussel habitat	Conserve pearl mussel population and habitats within the Blackwater Catchment	<p>Considered postponement of clear-felling on deep peat sites within the catchment of the pearl mussel of the Munster Blackwater in consultation with NPWS.</p> <p>Liaise with Pearl Mussel Technical Group of NPWS/ Coillte/Forest Service.</p> <p>Ensure minimal impact on water quality upstream of FPM populations through Coillte EIA procedure.</p>	Cost of EIA production

Main Properties	Habitat Quality	Management Strategy	Management 2006-2010	Issues to be Addressed
<i>Wood Spurge (Rare Plant)</i>				
Bandon Valley	Damp Broadleaf woodlands of moderate naturalness retaining remnant relict native under storey vegetation	Conserve plant populations and habitats as recorded in ecological surveys.	Retain populations at known locations through maintenance of existing habitat. Consider conducting survey to determine extent of populations of this plant in Coillte forests in Bandon Valley	Cost of conducting survey. Supply to timber industry. Changes to felling plans.
<i>Wood Millet (Rare Plant and Old Woodland indicator species)</i>				
East Cork Woodlands	Broadleaf and Mixed woodlands of moderate naturalness retaining remnant relict native under storey vegetation	Conserve plant populations and habitats as recorded in ecological surveys.	Retain populations at known locations through maintenance of existing habitat. Consider conducting survey to determine extent of populations of this plant in Coillte forests in East Cork	Cost of conducting survey.

5 Year priority objectives (See Action Plans Page 62)

- Ensure continued protection of species highlighted as protected or rare species for the District
- Liaise with statutory bodies re. protection of these species

3.4.4 Native & Mixed Woodland

Native and mixed woodland habitats are concentrated in the lowland areas of the District and are found primarily on old woodland sites.

Table 6: Native and Mixed Woodland in District

Main Properties	Habitat Quality	Management Strategy	Management 2006-2010	Issues to be Addressed
<i>Oak-birch-holly Woodland (WN1)</i>				
Greenwood Inchleigh Lismire Currabinny Dukes Wood Ballard	Small sized woods but in general of good quality some problems with invasive exotics e.g Rhododendron	Maintain areas of native oak canopy, facilitate expansion of oak wood, and remove exotics.	Fell, replant with native species Address rhododendron control.	Cost of rhodo removal
<i>Mixed Broadleaved Woodland (WD1)</i>				
Castlemartyr Glenbower Looney's Wood Castleblagh Gurteen Cappagh	Mixed woodland retains areas of relict native ground flora. some problems with invasive exotics e.g Rhododendron and Cherry Laurel	Restore native woodland in most suitable parts of these woodlands. Maintain woodland structure and species diversity in other areas. Implement LISS in these woodlands.	Fell, replant with native species Address rhododendron and cherry laurel control.	Cost of rhodo and Cherry Laurel removal
<i>Mixed broadleaved/conifer Woodland (WD2)</i>				
Glensheskin Castleblagh Gurteen Cappagh	Mixed Broadleaf/Conifer woodland retains areas of relict native ground flora. some problems with invasive exotics e.g Rhododendron and Cherry Laurel	Restore some areas to native woodland in most suitable parts of these woodlands. Maintain woodland structure and species diversity in other areas. Implement LISS in these woodlands.	Fell, replant with native species Address rhododendron and cherry laurel control.	Cost of rhododendron and Cherry Laurel Removal

<i>Mixed conifer Woodland (WD3)</i>				
Glenabo Graigue Castleblagh	Mixed conifer woodland retains areas of relict native ground flora. some problems with invasive exotics e.g Rhododendron and Cherry Laurel	Restore native woodland in most suitable parts of these woodlands. Retain some areas of Light crowned conifer species where ground flora is of good quality. Replant areas with Light crowned conifer species Implement LISS in these woodlands.	Fell, replant with native species and or light crowned conifer species. Address rhododendron and cherry laurel control.	Cost of rhodo and Cherry Laurel Removal

5 Year Priority Objectives (See Action Plans Page 62)

- Maintain and restore native and mixed woodland habitats.
- Avail of relevant funding
- Training programme for management staff

3.4.5 Old Woodland Site

District S3 supports an area of 1931 hectares of old woodland this comprises 5.2% of the area of Coillte land in the district.

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

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

Management tools to implement the management of OWS within the District include the Forest Service Native Woodland Scheme.

5 Year priority objectives (*See Action Plans Page 62*)

- Retain and Restore selected old woodland sites to native woodland types (1)
- Adopt small coupe felling into the future. LISS (2)
- Manage the old woodland sites in a manner that balances their economic social and environmental values. (3)
- Identify opportunities for diversification of forest crop species on old woodland sites. (4)

3.4.6 Riparian Zones

There are four main river catchments in the District the Blackwater and its tributary the Bride, the Lee, the Bandon and the Feale. The Blackwater and Bride are cSAC because they support salmon and Freshwater Pearl Mussel. This is achieved by ensuring that water quality in these rivers remains of good quality.

Management tools to implement the management of riparian zones within the District include;

- Adherence to Forest Service Guidelines in relation to forest operations underpins the overall protection and management of Riparian zones.
- Management of biodiversity areas (through conservation of large biodiversity management areas e.g. large areas of upland including integral riparian zones and specific management of riparian zones)
- Forest Management Plans for riparian zones which will be managed for native woodland and open space.

There is a policy of continual education of staff in relation to riparian zone protection through attendance at extra-company courses and in-house training.

5 Year Priority Objectives (*See Action Plans Page 63*)

- Create riparian buffer zones on selected sites and implement management plans
- Ongoing consultation with Fisheries and NPWS with regard to conservation.

3.4.7 Deadwood

Deadwood is an important component of forest habitats. It has tremendous habitat values for fungi, mosses, lichens and for invertebrates (insects). There are two aspects to how the District deals with dead wood:

1. Strategic – build-up of dead wood in undisturbed area i.e. broadleaf high forest, mixed high forest and biodiversity areas.
2. Operational – protecting significant dead wood where it occurs on forest operations sites (thinnings, clearfells).

The strategic approach is as follows:

- Target density is 3 standing + 3 fallen dead stems per ha across the District
- Aim to achieve build-up of dead wood in the following areas:
 - Old woodland sites – especially native woodland and mixed broadleaf/conifer woodland on OWS or OWS being restored to native woodland e.g. Gurteen, Lismire
 - Mixed broadleaf woodlands
 - Mixed conifer woodlands
 - Amenity Areas/Recreation/Long Term Retention areas e.g. Farran Forest Park
 - Ensure protection of old veteran trees.
 - Unharvestable Timber due to decayed nature e.g. in Land Locked sites e.g. Lavally, Glashaboy.

The policy to collect and maintain deadwood within the District is as follows

- Normal Inventory Process where all sites are inspected for dead wood
- targeting areas of known high density of deadwood

The operational approach is as follows: through operational means i.e. post harvesting

- Forest Service Biodiversity Guidelines state that: After each thinning, there should be 2m³/ha dead wood retained on site; and after each clearfell, there should be 5m³/ha retained.
- On all forestry operational sites, large trees (veteran trees) or piles of dead wood that are not required for timber will be retained on site, marked out on the ground so that contractors will not spray it or plant into it.

The overall percentage of deadwood throughout the District can vary from year to year resulting from harvesting operations for example it may be necessary to remove previously recorded deadwood for health and safety reasons.

3.5 Cultural Heritage.

It is company policy to protect and preserve all known archaeological and cultural features on our estate and to further identify and quantify any new sites which may be discovered during Coillte's forest operations.

3.5.1 Archaeology

Archaeological sites and monuments are part of our national heritage and over 180 sites have been identified in the District. There are significant clusters of archaeological sites in the District e.g. Knocknagown Mountain area, north of Macroom. The important hill fort site at Corrin, near Fermoy, is located on Coillte land. These sites provide valuable information about our history and represent an important educational and recreational resource. Monument locations are recorded on Coillte's Geographical Information System. Local knowledge has resulted in the identification of new unrecorded areas of archaeological importance.

It is imperative that Coillte adheres to Forest Service Forestry and Archaeological Guidelines as part of Coillte's commitment to sustainable forest management.

In relation to harvesting operations a Code of Practice exists between Coillte and Forest Service archaeologists; this code is an essential element in the granting of felling licences.

5 year priority Objectives (See Action Plans Page 63)

- Ensure protection of known archaeological sites (1)
- Identify and record all new sites (2)

3.5.2 Built and Cultural Heritage

Many sites of local cultural significance are located within or adjacent to numerous forest properties across the District. While many are well known, documentation as to their history is sparse. Other sites may be identified from consultation with community groups, historical societies, etc. These sites are treated and cared for in the same manner as archaeological sites. It is our brief to record through the company's geographical information system all local cultural features as they become known and protect all of these sites, particularly during high impact forest operations such as establishment, road making and harvesting.

The following are examples within the District:

- Church ruins and burial ground at Castlemartyr Wood.
- Ice house in Castlemartyr Wood.
- Ice house in Rostellan Wood.
- Ruins of old chapel in Lisnabrin Wood.

- Corbally – site of ‘Old IRA’ arms dump.
- Open cast silica mines at Saleen.
- Summer house at Currabinny Wood.
- Kilbrittain Castle near Bawnea Property.
- Edmund Burke lived here and went to hedge school (1720-1730) at Ballyduff.
- St. John’s Well, famous for having a cure for warts, is located at Mushera.
- Kerryman’s Table – famous stop on the old Kerry to Cork ‘butter road’.
- Site of battle of Knockbrack.
- Site of 1798 battle between North Cork Yeomen militia and local insurgents at Darrah Bridge.

5 year priority Objectives (See Action Plans Page 63)

- Protect and preserve all known cultural sites. (1)
- Identify and record all new sites (2)

3.6 Working with People

3.6.1 Recreation

Coillte’s forests have been a traditional outlet for recreational use for the Irish nation. Ireland is largely an urban society and the present day recreational forest users are more active and environmentally aware creating an increasing demand for the use of our forests for recreation. Coillte continues to be the largest provider of outdoor recreation with an estimated eight million visits per annum.

Up to 2004 Coillte’s Open Forest Policy allows free access to forest lands on foot for recreation, however, the facilities and policies had not changed significantly to meet the changing demands in recreation. There has been an increase in local community initiatives in relation to the tourism and recreation potential of our forests. Managing these initiatives is essential to ensure company objectives are met in any such arrangements. Coillte launched its new recreational policy in September 2005 after extensive consultation with stakeholder groups and individuals. The new recreational policy actively encourages and facilitates the development of recreational facilities in Coillte’s forests in partnership with local community groups/organisations.

5 year priority objectives (See Action Plans Page 64)

- Promote forest recreation in line with Coillte’s new “Recreation Policy” (1)
- Encourage involvement and partnerships of local communities in forest recreation projects. (2)

3.6.2 Public Participation

It is Coillte's policy to consult with its stakeholders in formulating its forest management policies and objectives to ensure that there is community support for the Company's activities.

3.6.2.1 High Impact Operations

It is the aim of the District to manage its forests in a way which balances economic, environmental and social aspects. Some high impact operations have the potential to impact adversely on the landscape and the environment. In order to minimise this adverse impact, Coillte carries out an assessment of the environmental and social impacts of forest operations including protection and enhancement measures prior to commencement during the planning stage. The results of these appraisals will be included in the operational plans. The District welcomes and encourages inputs from its stakeholders on forest management policies and practices

5 Year Priority Objectives (See Action Plans Page 65)

- Consult with stakeholders on FMPs formulation.
- Carry out Environmental Impact Appraisal for all high impact operations

3.6.2.2 Social and Environmental Panels

The District's Social and Environmental Panel provides a forum in which the District and environmental, social and community interests can discuss issues of common concern. Panel members are selected by an independent selection panel and nominees with different interests in forestry are selected to be part of this group. The Panel is appointed for a period of two years with an option for a second two year term. It provides an ideal opportunity to discuss Coillte's policies, plans and practices while exchanging and receiving advice, views and suggestions from stakeholders.

5 year priority objectives (See Action Plans Page 65)

- Maintain an active Social and Environmental Panel within the District. (1)

3.6.2.3 Complaints and Grievances

The objective of Coillte's Complaints And Grievance Procedure is to ensure that, where a complaint is made by a stakeholder, that every attempt is made to resolve it to the satisfaction of the stakeholder and Coillte. Where an

impasse occurs it ensures that any decision or action taken by Coillte is fully explained. (Please see Coillte's Complaints And Grievance Procedure).

A Complaints Register is held in Coillte offices at Cork and Mallow. Complaints at forest level are recorded by forest managers and are reviewed and signed off regularly.

5 year priority objectives (See Action Plans Page 64)

- Record and deal with all complaints received in line with the company complaints and grievances procedures. (1)

3.6.3 Community Projects/Partnerships

It is Coillte's policy to enter into partnership with local communities/interests to provide a recreational infrastructure and services when projects are environmentally, socially and economically sustainable and in line with Forest Management Unit Plans and objectives. Funding for partnership schemes may come from Coillte, the community or a third party

The District is currently involved in approximately 15 community projects/partnerships where inputs for finance or time are invested by both parties.

The following is a sample of projects in District:

- Ballyhoura Failte Amenity Projects
- Innishannon Community Groups
- Kilbrittain Community Groups
- Warrenscourt Bat Project
- Moanbaun Amenity
- Ballyannon Amenity/County Nature Trust
- Castlemartyr Community Development
- Marlog Wood Amenity
- Killbarry/Kilmagner Community Dev. Assoc.
- Island Wood/Newmarket Development Association
- Lyradane Wood
- Kilcorney Rivers Development
- Ballynoe Community Council – Holy Well
- Knockraha Heritage and Historical Society

5 year priority objectives (See Action Plans Page 66)

- Promote involvement and partnerships with local communities(1)

3.6.4. Health and Safety

The District is committed to Safety, Health and Welfare in the workplace and its obligations under the Safety, Health and Welfare at Work Act, 1989. This act requires that every employer prepares and if appropriate, revises a written statement of safety and health and bring to the notice of all employees and others that may be affected by it. Today's timber grower, timber purchaser, subcontractor or forest worker, have legal duties to fulfil in order to ensure people's safety and health is not put at risk as a result of forestry operations.

The law requires a number of safety and health duties to be carried out to protect staff and public safety and health.

Standards are monitored through audits by managers and safety personnel. Safety is now an every day concern on all sites, new developments and procedures are constantly being examined by our Central and Regional Safety Committee .

5 year priority objectives *(See Action Plans Page 67)*

- Promote continuous improvement in standards of Health and Safety in the District. (1)

3.6.5 Employee Development

Employee development is an integral part of the District's Performance Management System. Personal development requirements when identified and agreed are incorporated into a personal training and development plan.

A strategic goal is to develop a team of competent managers, industrial workers and contractors to conduct the business of the District. Personal development requirements, once identified and agreed, are incorporated into a personal training and development plan.

5 year priority objectives *(See Action Plans Page 67)*

- Further develop employee competencies to meet requirements of the District. (1)
-

4. IMPLEMENTING THE PLAN

4.1 ACTION PLANS - (FIVE – YEAR OBJECTIVES)

Priority Objective Reference	Silvicultural Systems - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.1	<p>1. Maintain our clearfelling policy with special consideration to felling coupe size.</p> <ul style="list-style-type: none"> • Ensure coupe size is in line with Forest Service requirement. • Minimise clearfelling impact on sensitive sites • Adhere to Forest Service Guidelines. 	
	<p>2. Identify opportunities for use of LISS in the District</p> <ul style="list-style-type: none"> • Continue to identify opportunities for the use of LISS in windfirm conifer plantations –e.g. Shippool and Oldcourt • Implement management plans for LISS sites already selected e.g. Corrin, . • Monitor the progress of LISS treatments 	

Priority Objective Reference	Timber Supply - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.2	<p>1. Optimise volume from thinning and clearfell</p> <ul style="list-style-type: none"> • Optimisation of volume and end products from thinnings and clearfells across the district. • Ensure that thinnings and clearfells are in line with company policies and expectations. • The optimum thinning practice is to thin all species to marginal intensity, except where alternative silvicultural systems have been identified in the Forest Management Plans. • Thinning types reflect reality on the ground. • Maximise production of Hurley Ash. • Timing of thinning for high yielding Farm Partnership sites is of paramount importance. • IForUT sites: decision on clearfelling is the prerogative of IForUT. Clearfelling planned by District – flexible within the five-year period of plan. 	
	<p>2. Accuracy And Usage Of Thinning Rotation Classification (TRC) Data</p> <ul style="list-style-type: none"> • Guiding principle of district planning and forecasting is the maintaining of up to date inventory and accompanying accurate TRC prescriptions. • Forest Management Plans (FMP) to reflect fell years by Management Unit (MU). • District will take on board new timber measurement systems as they become available. • Thinning control data a requirement to maintain sustainability and provide the basis of data for future thinning supply. • Thinning and clearfells prescriptions for under performing crops taken into account. 	

Priority Objective Reference	Timber Supply - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.2 (Contd.)	<p>3. Meet company targets.</p> <ul style="list-style-type: none"> • Gaining suitable access to land locked and difficult sites. • Road infrastructure – county and internal roads especially in western side of district. • Harvesting infrastructure – availability of suitable machinery to access some sites. • Forward planning essential to minimise the effect of adverse weather conditions and/or low bearing soil type on production. • Non strategic property sales - purchase of immature private plantations to offset loss of resource. 	

Priority Objective Reference	Harvesting - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.3.1	<p>1. Delivery of timber supply commitment to timber industry</p> <ul style="list-style-type: none"> • Planning of Harvest operations to ensure maximum site protection. Winter/Summer sites – Newmarket area; . Awareness of stakeholder requirements i.e. Way Marked Ways in Ballyhouras, Avondhu and Duhallow areas; rights-of-way, etc. • Ensure consultation with stakeholders and statutory bodies and adherence to Forest Service Guidelines. • Introduction of technology to optimise production and timber measurement. • Availability of timber supply for small or local customers. • Strive to provide sustainable work locally for contractors. 	
	<p>2. Maintain thinning regime/policy</p> <ul style="list-style-type: none"> • Harvesting in sensitive or important biodiversity areas: - River catchments i.e. Munster Blackwater - Freshwater Pearl Mussel; Ballyhouras/Nagles - Hen harrier indicative areas; SACs.; and future management in Bottlehill area in accordance with EIS. • Adherence to company's Security Policy on harvesting sites and develop culture of trust with contractors and customers. • Health and safety, site conditions post harvesting, completion of all harvesting on site. • Implementation of deadwood guidelines and dangerous trees policy. 	
	<p>3. Maintain harvesting infrastructure..</p> <ul style="list-style-type: none"> • Ensure suitability of harvesting machinery to harvest type for specific conditions or site types. Light machines or other systems for environmentally sensitive areas and steep/difficult sites. • Skills levels in harvesting infrastructure maintained to at least NPTC standard. 	

Priority Objective Reference	Forest Roads - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.3.2	<p>1. Maintain road infrastructure to serve district.</p> <ul style="list-style-type: none"> • District to adhere to Boundary Management Plan with regard to engineering works – interaction between district, engineering and harvesting teams. • Road clearance well in advance of new road formation. It is proposed to have new road developments are at least one year ahead of timber harvesting • Set out proposals on future road requirements for forests coming into production • Safety aspect - New entrances by agreement with local authority. • Forward road planning in high yield farm partnership sites essential. • Specification for new and up grade road will be as per COFORD Forest Road Manual • Consultation to take place where necessary. 	
	<p>2. Reduce where possible the amount of upgrading</p> <ul style="list-style-type: none"> • On road upgrading sites it is proposed to fell two lines of roadside trees in conjunction with harvesting. • Ensure all legal weight limits are adhered to. • Minimise forwarding of timber on forest roads. 	
	<p>3. Implement a cost effective road maintenance programme</p> <ul style="list-style-type: none"> • Road Maintenance to be in accordance with local usage and requirement. • Maximise CLAR funding within the District. • Strive to provide sustainable work locally for contractors. 	

Priority Objective Reference	Species - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.4.1.	1. Maintain current Sitka spruce planting levels <ul style="list-style-type: none"> • Maintain Sitka spruce planting levels in line with District species diversity policy. • Use only Washington and Oregon provenances. 	
	2. Increase the planting of broadleaves within the District with emphasis on alder ash, oak, and natural birch <ul style="list-style-type: none"> • Identify old woodland sites suitable for broadleaf planting. Place emphasis on riparian zones and brown earths at low elevation. • Plan to achieve the 10% broadleaf target in District over the next rotation • Target agreed biodiversity areas i.e. old woodland sites, buffer zones, naturally regenerated sites, which are naturally converting to broadleaf 	
	3. Decrease the present percentage of diverse conifers <ul style="list-style-type: none"> • Concentrate planting of these species on the more sheltered sites in the eastern part of the FMU. 	
	4. Ensure that native shrub species are protected and allowed to develop naturally and are recorded. <ul style="list-style-type: none"> • Inventory staff to attend training day on protocol for recording native species • Estimate the area of native broadleaves in the District not captured in existing inventory by sample survey. 	

Priority Objective Reference	Species - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.4.1 (Contd.)	5. Reduce Open Space percentage <ul style="list-style-type: none"> • Monitor future creation of open space. 	
	6. Restructuring and forest design through species choice <ul style="list-style-type: none"> • Adhere to FMP restocking plans. 	

Priority Objective Reference	Restocking / Regeneration - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.4.2	<p>1. Establishment of a free growing plantation at Year 4 or greater.</p> <ul style="list-style-type: none"> • Site development plans in place for restocked sites. • Stocking levels to be in accordance with District policy. • Consideration given to larch/pine in mixture with primary species on Old Red Sandstone marginal soils • Contracts of scale management responsibility with contractor from Year 0 to Year 4. 	
	<p>2. Site specific ground preparation/cultivation.</p> <ul style="list-style-type: none"> • Methods include mounding, ripping, scarifying and windrowing. • Use of steel tracks under machines in difficult peat conditions • Use 'Bracke' planter on suitable dry mineral sites. 	
	<p>3. Matching of species to site to ensure maximum financial return.</p> <ul style="list-style-type: none"> • Planting stock bare root, containerised, cold store will be planted in accordance with regeneration plans/MU selection of species. 	
	<p>4. Proper use of diverse species and hardwoods to ensure environmental and social requirements are met.</p> <ul style="list-style-type: none"> • In sensitive/ scenic areas species will be in accordance with forest design plans. • Encourage natural regeneration where possible. • Old woodland sites planned, cultivated and managed sensitively. 	
	<p>5. Restocking in accordance with Forest Management Plans</p> <ul style="list-style-type: none"> • Monitor species proportions to ensure compliance with District species composition. 	

Priority Objective Reference	Farm Partnerships - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.4.3	1. District policy to maximise Farm Partnership Forestry scheme <ul style="list-style-type: none">• Dedicated pro-active sales team;• Ensure adequate access be agreed at contract signing stage.• Early management planning essential due to high yield class.• Hold annual meeting with Farm Partners.	

Priority Objective Reference	Non Strategic Assets - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.5.1	<p>1. Develop land and new business opportunities through utilisation of non strategic land assets under control of the District.</p> <ul style="list-style-type: none"> • Progress wind farm development in the Ballyhoura, Boggeragh and Newmarket areas. • Strategic sites rezoned for housing developments in line with Local Area Plans. • Identify stone, sand and gravel deposits. • Locate mast site development on suitable sites. • Consultation on all new business opportunities. 	
	<p>2. Consultation and planning carried out in conjunction with developers</p> <ul style="list-style-type: none"> • Relevant consultation in liaison with developer on local issues and Environmental Impact Assessments. 	

Priority Objective Reference	Lettings and Licences - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.5.2.	<ol style="list-style-type: none"> 1. Promote the use of Coillte lands through Licences and Lettings <ul style="list-style-type: none"> • Identify all potential areas for lettings and licences. • Deer and Game Lettings to be publicly advertised under Coillte's tendering system. • Adherence to Standard Operating Procedures covering lettings and licences over Coillte lands. 2. Endeavour to eliminate all unlicensed / illegal / unauthorised use of the forest. <ul style="list-style-type: none"> • All licensees to comply with conditions of licence/agreement. • Ensure up to date database of all lettings and licences is maintained on Coillte management information system (FIS). • Ensure Coillte is indemnified from potential litigation arising for activities in the forest estate within the District. • Adherence to Coillte's Security Policy in all cases. 3. Facilitate all reputable licensees / activities in our forests <ul style="list-style-type: none"> • Promote and facilitate all reputable users / usage of Coillte's estate 4. Ensure that Coillte are indemnified from potential litigation arising from activities in the forest estate <ul style="list-style-type: none"> • Ensure public liability insurance is in place to indemnify Coillte with the granting of lettings and licences. 	

Priority Objective Reference	Use of Chemicals – Five Year Priority Objectives Action Plans	FSC P&C Reference
3.1.6	<p>1. To minimise the use of chemicals</p> <ul style="list-style-type: none"> • Centralised dipping of plants against Pine Weevil attack is envisaged for the District in the future • Chemicals applied only where absolute necessary for good forest management practices • Subsequent manurial applications are determined by foliar analysis • Alternative methods of ensuring crop health and sustained yield to be undertaken • Usage of fertilisation in sensitive areas as per Forest Service Guidelines <p>2. Promote non chemical methods of vegetation and insect control</p> <ul style="list-style-type: none"> • Use manual vegetation control. • Promote nurse species on infertile sites i.e. Ballyhouras. • Promote the use of fast growing species on fertile sites. 	

Priority Objective Reference	Insect, Pests and Diseases - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.7.1	<p>Promote forest health monitoring programme in order to minimise the incidences of insect and pest diseases</p> <ul style="list-style-type: none"> • Constant monitoring of sites for insects, pests and diseases. • Forest Health surveys conducted annually on 18 sites • Audits carried by CFS team post planting – generally Pine Weevil control. • General forest inspection for Green Spruce Aphids • Designated research areas to be monitored by R & D. • Monitor presence of <i>Foames annosus</i> post thinning stage <p>Ensure controls are in place for the control of Large Pine Weevil (2)</p> <ul style="list-style-type: none"> • Monitor on regular basis restocking stocks during high risk periods • Spray sites where Weevil attack has occurred. 	

Priority Objective Reference	Animal Damage - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.7.2	<p>1. Ensure animal damage within the district is maintained at minimum level</p> <ul style="list-style-type: none"> • Continual filling-in with strong plants; • Review Selection of species – use least vulnerable species. • Erect rabbit fencing where cost effective.. • Introduce control measures. <p>2. Monitor and maintain deer population at appropriate levels</p> <ul style="list-style-type: none"> • Monitor and maintain deer pop. • Review Deer Management Plan • Increase cull numbers of females • Deer fencing where appropriate and cost effective. 	

Priority Objective Reference	Fire - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.7.3	<ol style="list-style-type: none"> <li data-bbox="443 300 920 328">1. Prevention of forest fires <ul style="list-style-type: none"> <li data-bbox="450 336 779 365">• Maintain fire lines. <li data-bbox="450 373 1256 402">• Consult with statutory bodies on designated areas. <li data-bbox="450 410 1155 438">• Implementation of company security policy. <li data-bbox="450 446 936 475">• Vigilant staff and caretakers. <li data-bbox="450 483 1144 512">• Promote public awareness through media.. <li data-bbox="443 520 947 549">2. Update Fire Plans annually <ul style="list-style-type: none"> <li data-bbox="450 557 898 585">• Maintain updated fire plan <li data-bbox="450 593 1272 622">• Distribute fire plans to relevant emergency services 	

Priority Objective Reference	Security - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.7.4	1. Adherence to Coillte's Security Policy <ul style="list-style-type: none"> • Adhere to terms of Security Plan on High Impact Operation Sites • Operate within terms of access agreement. • Participation by all Coillte staff, contractors in District Security Plan. • Security Plans for high impact operations • 	
	2. Minimise illegal / unauthorised activities in District <ul style="list-style-type: none"> • Implement Security Plan • Monitor and record all incidents • Involve all staff and caretakers in security. • Promote local community involvement. • Identify areas and issue permit where appropriate. • Create recreational facility in response to public demand i.e. Ballyhoura Mountain Bike Trail 	
	3. Protect integrity of estate <ul style="list-style-type: none"> • Protection of legal boundaries and rights. • Vigilance by all • Demarcation of property sale boundaries by fencing. • Minimise the impact of external developments on Coillte Estate 	
	4. Ensure Timber Security Across District <ul style="list-style-type: none"> • Ensure timber security in the forest across the District. • Prosecution through the courts. • Vigilance by all staff, community. 	

Priority Objective Reference	Water Quality Monitoring - 5-Year Priority Objectives Action Plans	FSC P&C Reference	Monitoring	
			Source of Data	Measure
3.1.7.5	1. Minimise the impact of forestry and forestry related operations on water quality <ul style="list-style-type: none"> • Forward planning meetings to identify sampling sites. • Protection and management of riparian zones through FMPs designations i.e. Glennagear, Killavullen. • Defer harvesting on peat sites until findings of Working Group on Pearl Mussel sites, Munster Blackwater catchment, have been finalised.. • Adherence to Forest Service Guidelines. 			
	2. Implement protective measures in order to maintain and enhance water quality <ul style="list-style-type: none"> • Monitor by water sampling on high impact operations. • Permanent water monitoring sampling points in selected sensitive sites i.e. Killavullen, Kilfinane, Macroom, and Newmarket. • Liaison with local authority, UCC, etc. Database build up i.e. Kilworth. 			
	3. Assist with the implementation of the "E.U. Water Frame Directive 2000". <ul style="list-style-type: none"> • Align forest management unit to coincide with river basin catchments. • Report on catchment areas as per new forest management plans 			

Priority Objective Reference	Litter - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.7.6	1. Endeavour to keep Coillte lands free of litter. <ul style="list-style-type: none"> • Implement Litter Management Plan • Dispose of litter in a safe manner. • Surveillance by CCTV. • Media Press campaign. • Community Involvement 	
	2. Liaise with relevant authorities <ul style="list-style-type: none"> • Liaise with Litter Wardens • Use authorised County Council signage in hot spots. 	

Priority Objective Reference	Forest Planning - 5-Year Priority Objectives Action Plans	FSC P&C Reference
3.1.8	<p>1. Main priority is implementation and consultation of 16 FMPs</p> <ul style="list-style-type: none"> • Management Plan for District by 2006 – 2010 • Consultation document for all stakeholders • Derive Coillte's long term (five-year) felling licences from plans • Derive long term timber forecasts from Plan • Integrated Planning document <p>2. Review 1/5 of plans per annum</p> <ul style="list-style-type: none"> • Review FMPs on a four year cycle. • Reflect/update management changes in FMP. 	

Priority Objective Reference	District as a Business – Five Year Priority Objectives Action Plans	FSC P&C Reference
3.2	<p>1. Increase the District's profitability</p> <ul style="list-style-type: none"> • Maximise timber revenue • Maximise District cash flow • Ensure timber targets are reached. • Reduce operational costs • Develop and expand new business opportunities. • <p>2. Promote use of Coillte lands through lettings and licences.</p> <ul style="list-style-type: none"> • Maximise use of non strategic lands. • Continue to develop good customer relations • Consult widely with customers/ • Endeavour to meet customer demands • Adhere to Company's Customer Charter. 	

Priority Objective Reference	Forest Design - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.3	<p>1. Continue to plan and redesign our forests in a manner that enhances the character of the landscape</p> <ul style="list-style-type: none"> • Complete forest designs plans on areas rated as "high" and "medium" landscape sensitivity i.e Corrin, Fermoy and Farran Forest Park. • Continue to redesign through new Forest Management Plan review process on a 4-year cycle. • Utilise alternative silvicultural systems i.e. LISS. • Adhere to Coillte and the Forest Service guidelines "Forestry and the Landscape Guidelines" <p>2. Complete the restructure programme for large even aged forests</p> <ul style="list-style-type: none"> • Plan felling coupes so as to minimise visual impact.. • Restructure large even aged blocks through regeneration planning and species diversification. 	

Priority Objective Reference	Biodiversity Areas - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.4.1	1. Complete ecological surveys to identify and map all biodiversity areas. <ul style="list-style-type: none"> • Carry out ecological surveys to ensure that all potential areas of biodiversity are captured. 	
	2. Agree sign-off and draw up management plans for selected sites <ul style="list-style-type: none"> • Adhere to management plans for identified sites. • Ensure biodiversity plans are reflected in relevant FMPs. 	
	3. Ground truth and agree additional biodiversity areas identified on FMPs. <ul style="list-style-type: none"> • Draw up management plans for these additional areas. • Ensure all staff to be conscious of biodiversity features when on site visits. • Record any features identified on "Features" database. 	
	4. Ongoing training of staff in relation to biodiversity issues. <ul style="list-style-type: none"> • Ongoing training of staff in relation to biodiversity issues. • All District team members to complete Biodiversity Components of Forestry at U.C.C. • All District team members to complete courses on O.W.S. policy, Biodiversity Action Plans (B.A.P.'s) for rare and protected species and completion of Environmental Impact Appraisals. 	
	5. Monitoring of biodiversity management plans <ul style="list-style-type: none"> • Ongoing monitoring of biodiversity areas. 	

Priority Objective Reference	Special Habitats - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.4.2	1. Retain and protect areas of open habitat. <ul style="list-style-type: none"> • Ensure areas are protected through monitoring. 	
	2. Implement Biodiversity Action Plans on selected sites <ul style="list-style-type: none"> • Adhere to management plans for identified sites. 	
	3. Ground truth and agree additional biodiversity areas identified during mapping of MUs and development of District FMPs <ul style="list-style-type: none"> • Draw up management plans for these additional areas. 	

Priority Objective Reference	Long Term Retentions - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.4.2.1	1. Develop management plans for Long Term Retentions in the District <ul style="list-style-type: none"> • Draw up management plans for Long Term Retention areas. 	
	2. Through FMPs further identify areas suitable for Long Term Retention <ul style="list-style-type: none"> • Draw up management plans for these additional areas. 	

Priority Objective Reference	Natural Reserves – 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.4.2.1	1. Retain and protect areas of natural reserves through minimal intervention <ul style="list-style-type: none"> • Ongoing monitoring. 	

Priority Objective Reference	Protected or Rare Species - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.4.3	1. Ensure continued protection of species highlighted as protected or rare species for the District <ul style="list-style-type: none"> • Ongoing monitoring.. 	
	2. Liaise with statutory bodies re protection of these species <ul style="list-style-type: none"> • Initiate consultations with statutory bodies. 	
Priority Objective Reference	Native and Mixed Woodland - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.4.4	1. Maintain and restore native and mixed woodland habitats <ul style="list-style-type: none"> • Convert to native species where appropriate • Address invasive species and put control measures in place. 	
Priority Objective Reference	Old Woodland Site - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.4.5	1. Retain and restore selected old woodland sites to native woodland types <ul style="list-style-type: none"> • Draw up management plan for identified sites. 	
	2 Adopt small coupe felling into the future <ul style="list-style-type: none"> • Reflect small coupe felling through FMP review. 	
	3 Manage the old woodland sites in a manner that balances their economic, social and environmental values <ul style="list-style-type: none"> • Ongoing monitoring to ensure balance of values. 	
	4 Identify opportunities for diversification of forest crop species on old woodland sites. <ul style="list-style-type: none"> • Adhere to management plans for identified old woodland sites. 	

Priority Objective Reference	Riparian Zones - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.4.6	1. Create riparian buffer zones on selected site and implement management plans <ul style="list-style-type: none"> • Create and maintain riparian zones on identified sites. • Adherence to management plan and Forest Service guidelines. 	
	2. Ongoing consultation with Fisheries and NPWS with regard to conservation <ul style="list-style-type: none"> • Ongoing consultations with statutory bodies. 	
Priority Objective Reference	Archaeology - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.5.1	1. Maintain, protect and preserve all known archaeological sites <ul style="list-style-type: none"> • Mark all sites on ground. • Protect sites from damage during active forest operations. • Ensure exclusion zones are clearly defined. • Maintain pedestrian access to sites where possible. 	
	2. Identify and record all new sites <ul style="list-style-type: none"> • On identification, ensure all active forest operations cease. • Mark on ground and ensure relevant bodies are notified. • Ensure newly identified sites are passed to the Forest Service. 	
Priority Objective Reference	Built and Cultural Heritage - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.5.2	1. Protect and preserve all known built and cultural sites. <ul style="list-style-type: none"> • Protect sites from damage during active forest operations • Highlight sites during Environmental Impact Appraisal procedure. 	
	2. Identify and record all new sites <ul style="list-style-type: none"> • Ensure newly identified sites are passed to the Forest Service. 	

Priority Objective Reference	Recreation - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.6.1	1. Promote forest recreation in line with Coillte's new Recreation Policy <ul style="list-style-type: none"> • Review all existing recreational sites - downgrade unsuitable sites. • Carry out regular safety audits and take necessary action; upgrade signage and amenity furniture. • Develop outdoor amenity facility at Ballyhoura on time and within budget • Upgrade amenity areas at Corrin and Glenabo. 	
	2. Encourage involvement and partnerships of local communities in forest recreation projects <ul style="list-style-type: none"> • Encourage communities to develop projects in partnership with Coillte. • Where partnerships exist, ensure all conditions of licence are met. 	

Priority Objective Reference	High Impact Operations - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.6.2.1	1. Consult with stakeholders on FMPs formulation <ul style="list-style-type: none"> • Consult with local stakeholders and statutory bodies in line with company policy. • Record and validate stakeholders' suggestions. 	
	2. Carry out Environmental Impact Appraisals on all high impact operations <ul style="list-style-type: none"> • Adhere to procedures on Environmental Impact Appraisals. • Consult and take on board views of stakeholders where practicable. 	

Priority Objective Reference	Social and Environmental Panels - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.6.2.2	1. Maintain an active Social and Environmental Panel within the District. <ul style="list-style-type: none"> • Set up new District Social and Environmental Panel for 2005 – 2007 season. • Promote participation of Panel members through presentations and field-days. 	

Priority Objective Reference	Complaints and Grievances - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.6.2.3	1. Record and deal with all complaints received in line with the company complaints and grievance procedures <ul style="list-style-type: none"> • Maintain and update complaints Register in Cork and Mallow Offices. • Where possible resolve complaints at local level. • Adhere to Company's complaints procedures. 	

Priority Objective Reference	Community Projects/Partnerships - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.6.3	1. Promote involvement and partnerships with local communities <ul style="list-style-type: none"> • Maintain existing partnerships. • Promote new partnerships with local communities. • Source external funding in partnership with local communities. • Encourage community involvement in local forestry. 	

Priority Objective Reference	Health and Safety - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.6.4	1. Promote continuous improvement in standards of Health and Safety in the District. <ul style="list-style-type: none"> • Preparing written hazard identification and risk assessments (HIRA). • Set out safe work procedures including working alone. • Ensuring operators are competent and trained to NPCT standards where necessary. • Safety audits carried out on recreation sites and dangerous trees. • Record and investigate all accidents/incidents. 	

Priority Objective Reference	Employee Development - 5 Year Priority Objectives Action Plans	FSC P&C Reference
3.6.5	1. Further develop employee competencies to meet requirements of the District. <ul style="list-style-type: none"> • Carry out skills analysis to determine training requirements. • Provide in house and external training where necessary. • Implement performance management and manpower plan. 	

5. APPENDICES

5.1 Strategic Environment and Social Assessment

What is a Strategic Environmental Assessment?

A Strategic Environmental Assessment (SEA) is defined as:

"A systematic process for evaluating the environmental consequences of proposed policy, plan or programme initiatives in order to ensure that they are fully included and appropriately addressed at the earliest stage of decision making on a par with economic and social considerations."

It differs from an Environmental Impact Assessment in that the assessment process deals with implementation of a strategic plan rather than an individual, site-specific project. In this particular instance, the SEA process is intended to systematically highlight the likely social and environmental impacts (positive, neutral and negative) of the Draft District Strategic Plan in order to ensure that any potential adverse impacts can be minimised. The assessment will primarily focus on issues, which are considered relevant at a strategic level, rather than attempting to identify detailed quantified impacts.

Why Carry out a SEA?

Among the principal goals of the District Strategic Plan is the promotion of sustainable development. The plan also contains commitments on the protection and enhancement of environmental and cultural heritage within Coillte's estate. Most development policies will have either a direct or indirect impact on the environment and/or heritage and these should, where possible, be either positive or neutral. There will, however, be situations where policies may have a negative impact and it is important that these be identified at an early stage of plan development.

The carrying out of a Strategic Environmental Assessment ensures that all likely impacts associated with implementation of the policies contained within the draft plan are identified at an early stage. In some instances, amendments can be considered in order to minimise potentially negative impacts and/or "trade-offs" can be identified where conflicts between economic, social and environmental objectives arise.

A Strategic Environmental Assessment carried out for the new District Strategic Plan will ensure that the social and environmental consequences of adopting the policies proposed for the plan are identified and assessed during their preparation and before final adoption.

The SEA is an important part of the DSP and is a key element in the consultation process. It allows stakeholders to see where the potential impacts are and how the company is dealing with these impacts.

Priority Objectives	Receptors*										
	Bio	Pop	HH	FF	H ₂ O	Soil	Air	CI	MA	CH	L
Recreation	?	✓	✓	?	?	?	○	○	○	?	○
Consultation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
S&E Panels	✓	✓	○	○	○	○	○	○	○	○	○
Complaints and Grievances	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Community Projects	✓	✓	○	✓	✓	✓	✓	✓	✓	✓	✓
Health and Safety	○	✓	✓	○	○	○	○	○	○	○	○
Employee Development	○	✓	✓	○	○	○	○	○	○	○	○

* Receptors as listed in the SEA Directive(2001/42/EC)

- ✓ Compatible
- No effect
- ? Uncertain effect
- X May conflict

Table 4b: Explanation of S&E Receptors in Table 5a

- BIO: National biodiversity designations – i.e. NHA, SAC, SPA, other; OR Coillte biodiversity area
- POP: Population; local communities – people living in the area.
- HH: Human health.
- FF: Rare or protected species of flora or fauna.
- H₂O: Water.
- Soil: Soil
- Air: Air
- CI: Climate
- MA: Material Assets
- CH: Cultural Heritage
- L: Landscape

Table 5: Information on District strategic objectives that “May Conflict” with environmental and social receptors (see Table 4a).

Priority Objective	Possible Conflict No.	Nature of Possible Conflict	Mitigation
Silvicultural Systems	1	The Clearfelling system is used because of the nature of the soils and climate. Sudden removal of forest cover may impact on the qualifying interest in the designation.	The management of all areas within the Coillte estate that are in statutory designations SACs etc is undertaken in consultation with NPWS.
	2	Felling plantation may impact on visual amenity	LISS will be used where appropriate in amenity areas to maintain forest cover and the integrity of the woodland.
	3	Clear felling may expose vulnerable species/habitats	LISS will be used in Old Woodland Sites (OWS) where vulnerable species are most frequently found.
	4&5	Greater risk of soil erosion and damage to water bodies through the essential use of clearfell systems	Forest Service guidelines are strictly followed in harvesting operations. Silt traps are installed where required. Riparian buffer zones are being developed for all waterways within the District.

Priority Objective	Possible Conflict No.	Nature of Possible Conflict	Mitigation
Silvicultural Systems	6	Clearfell systems can significantly change the appearance of the landscape in a short time	Wet soils and windy climate limit the use of continuous cover systems. Past planting patterns are often difficult to correct and can only be done when the current crops mature. However, an assessment of the landscape sensitivity of all properties has been completed and this is being used to guide forest planners in developing design plans which are sensitive to the landscape. Techniques used are matching plantation edges to the land form, delayed fellings and species choice to create better structural and visual diversity.
Timber Supply	7	Timber Supply V's Biodiversity management.	Adherence to biodiversity management plans. All harvesting in statutory designations is subject to detailed consultation with N.P.W.S.
	8	Clearfelling can visually affect the landscape.	Clearfelling in sensitive areas will be carried out to a forest design plan. E.I.A.'s will be carried out to identify potential impacts and mitigation will be taken. Public consultation will take place.

Priority Objective	Possible Conflict No.	Nature of Possible Conflict	Mitigation
Road and Harvesting	9	Harvesting and roading are high impact operations that can cause significant disturbance to a forest area.	Adhere to biodiversity management plans, consult with N.P.W.S. and agree plans. Comply with Forest Service guidelines and Code of Best Forest Practice.
	10	Noise, traffic etc from harvesting timber, transport and road making can disturb local residents.	Carry out E.I.A. to identify impacts, put mitigation measures in place. Consult with locals. Only use designated haulage routes as agreed with Local Authorities.
	11	These operations can be potentially hazardous if health and safety precautions are not taken.	Comply with H.S.A. Code of Practice for managing safety and health in Forestry Operations. All operators must be trained to N.P.T.C. standard.
	12	Damage to rare and protected species of flora and fauna.	Compliance with biodiversity management plans, Biodiversity Actions Plans (B.A.P.'s). consultation and agreement with N.P.W.S.
	13	Site disturbance can release silt and nutrients into waterways if precautions are not taken.	Comply with Forest Service Guidelines and Code of Best Forest Practice. Create silt traps to capture run off. Take water samples before, during and after operations and have them analysed. Consult with Fisheries and comply with their recommendations.
	14	Damage to soil structure from compaction by heavy machinery.	Use of correct machine for the site. Carry out operations when weather conditions are suitable.

Priority Objective	Possible Conflict No.	Nature of Possible Conflict	Mitigation
	15	Heavy loads can cause wear and tear to roads network.	Only use designated haulage routes as agreed with Local Authorities. Comply with legal loads.
	16	Clearfells of timber and development of new roads can impact visually on the landscape.	Carry out E.I.A. to identify impacts and put mitigation measures in place. Carry out forest design plans for moderately sensitive and highly sensitive landscapes. Consult with locals.
	17	Planting the wrong species can have a negative impact on the biodiversity value of a site.	Comply with Coillte's Old Woodland Site (O.W.S.) policy, biodiversity management plans. Always match species to site.
	18	The species planted can have major impact on sensitive landscapes.	Carry out forest design plans and match the species to the landscape, e.g. use broadleaves and diverse conifers such as Larch and Scots Pine.

Priority Objective	Possible Conflict No.	Nature of Possible Conflict	Mitigation
Restocking	19	Ground preparation is a high impact operation that can cause significant disturbance to a forest area.	Consult with N.P.W.S. if area is within a stat. designation and agree plans. Comply with biodiversity management plans. Comply with Forest Service Guidelines and Code of Best Forest Practice.
	20	Restocking operations such as ground preparation, planting, vegetation and insect control can impact on rare and protected species.	Consult with N.P.W.S. and agree plans if area is within stat. Designation. Comply with biodiversity management plans and B.A.P.'s.
	21	Ground preparation can release silt and nutrients into waterways.	Comply with Forest Service Guidelines and Code of Best Forest Practice. Consult and agree plans with N.P.W.S. if site is in stat. Designation. Create silt traps. Take water samples before, during and after operating and have analysed.
	22	Incorrect method of ground preparation or machine can damage soil structure e.g. soil compaction deep mound drains bringing subsoil to the surface.	Ground preparation method should match the site. Carry out operation when weather conditions are suitable.
	23	A restock site can have a major impact on the landscape if it is not properly planned and designed.	Carry out E.I.A. to identify impacts and put mitigation measures in place e.g. direction of windrows, drains etc. avoid windrowing and mounding on dry visually sensitive sites. Consult with locals.

Priority Objective	Possible Conflict No.	Nature of Possible Conflict	Mitigation
Farm Partnerships	24	Damage to biodiversity value of site.	Ensure that > 15% of site is designated biodiversity. Protect hedgerows and biodiversity features.
	25	Rare and protected species can be damaged by establishment operations on the planting of incorrect species.	Consult and agree plans with N.P.W.S. if site is within a statutory designation. Comply with B.A.P.'s , comply with Forest Service Guidelines and Code of Best Forest Practice.
	26	Water quality may be affected by forest operations.	Compliance with all statutory regulations, consult and agree plans with Fisheries, N.P.W.S. as appropriate.
	27	A plantation may impact on the landscape if not properly designated.	Ensure that plantation does not intrude on the landscape by judicious planting of broadleaves, use of open spaces etc.

Priority Objective	Possible Conflict No.	Nature of Possible Conflict	Mitigation
Chemical Usage	28	Use of chemicals can have major impact on biodiversity value of a site if not properly used.	Chemicals will be used only for control of large pine weevil and eradication of <i>Rhododendron ponticum</i> . All other vegetation will be controlled manually.
	29	Chemicals can have major impact on health of people and animals if not properly used.	Coillte's Code of Practice on the usage of chemicals will be adhered to. Operators will wear full personal protective equipment. Operators will be trained to NPTC standard.
	30	Waterways would become contaminated though careless use of chemicals.	Coillte's Code of Practice on the use of chemicals will be adhered to. Operators will be trained to NPTC standards. All mixing of chemicals and cleaning of sprayers, containers etc will be carried out well away from streams. The use of chemicals will be strictly monitored.
Animal Damage	31 & 32	Trespassing animals could have a detrimental affect on areas designated for biodiversity and on rare and protected species.	Coillte's standard operating procedure (SOP) on trespass control will be enforced. Fences will be maintained where necessary. Trespass will be monitored.

Priority Objective	Possible Conflict No.	Nature of Possible Conflict	Mitigation
Forest design	33	A forest can have a negative impact on a landscape if it is not properly designed.	Forest design plans will be carried out for all moderately sensitive and highly sensitive landscapes. Design plans will include judicious planting of broadleaves, light crowned conifers e.g. Larch, Scots Pine and the use of open space to blend the forest into the landscape.
Deadwood	34	Deadwood could present a hazard to staff, customers and contractors and the general public in the forest if not properly managed.	Deadwood will not be retained in areas where it presents a hazard to people or animal. In these areas standing deadwood will be felled and made safe. Fallen trees will also be made safe.

5.2 Monitoring

5.2.1. Monitoring Systems

- **Monitoring Objectives of the Plan** – This will be achieved through the use of the Balanced Score Card which is currently used by the Districts as a rolling 5 year business plan that is updated annually. The balanced scorecard is a *management system* (not only a measurement system) that enables organisations to clarify their vision and strategy and translate them into action. It provides feedback around both the internal business processes and external outcomes in order to continuously improve strategic performance and results. When fully deployed, the balanced scorecard transforms strategic planning from an academic exercise into the nerve center of an enterprise.

The Balanced Score Card is reviewed three times a year to monitor performance. Formal Performance Reviews are held at both Team member and District management level. Progress with the key targets is recorded.

- **Monitoring Trends** – Trends in forests and forest management will be monitored through a core set of economic, environmental and social parameters (Table 6) which are common to all districts.

5.2.2. Monitoring Tools

Coillte has invested heavily in the development of an IT based Integrated Planning System. Integrated forest design plans incorporating multiple management objectives (timber and non-timber) with associated work schedules and reporting facilities are electronically accessible to staff in the Districts and Processes. This system is flexible and allows the generation of an extensive suite of up-to-date reports which are used to monitor progress against plan.

5.2.3. Monitoring Reports

Plan Objectives - The final Performance Review of the year will provide a measure of progress achieved against the plan.

Trends - The parameters or indicators monitored will not only be used to provide information to forest managers but also will be reported to stakeholders in the company's Social and Environmental Annual Report.

Summary - A summary of monitoring results will be produced at the end of the 5-year period of the plan and made publicly available if requested.

Table 9 Monitoring Parameters

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 25ha	no. of Sales Proposals
9	Clearfell area greater than 25ha - total	Total area of SP's >25 ha
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 District 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 District
17	Secondary species	% area of District
18	Broadleaves	% area of District
19	Open Space	% area of District
Chemicals		
20	Chemical usage	Kgs active ingredient/ha
Land Transactions		
21	Area sold by District	hectares
22	Area acquired by District	hectares

Table 9 Monitoring Parameters
(Contd.)

Environmental Parameters		
No.	Parameter	Measure
Biodiversity		
23	Biodiversity area identified	% area of District
24	Biodiversity sites identified	number
25	Biodiversity management plans completed	number
26	Biodiversity features recorded	number
27	Long term retentions,	% area of District
28	Deadwood: Standing.	stems/ha in District
29	Deadwood: Fallen	stems/ha in District
30	Deadwood: Volume	total (m ³) in District
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	District Forest Health Survey results	any damage recorded [y/n]
39	District 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	Windthrown area	hectares
Deer Culls		
43	Current deer cull return figures	number culled

Table 9 Monitoring Parameters
(Contd.)

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 District	Number estimated
Complaints		
55	Complaints received	number registered
56	Complaints addressed	number signed off
Community		
57	Community partnerships	number
Health and Safety		
58	Notifyable accidents	number

5.3 Maps

5.4 Glossary of Terms

Acidification: This can be defined as a decrease in the buffering capacity of a water course. Buffering capacity is the ability of a system to counteract acidity.

Afforestation: Tree planting on land not previously used for forestry.

Biodiversity: The variety of ecosystems and living organisms (species), including genetic variation within species.

Biodiversity Action Plan: A programme of action to conserve and enhance key habitats and species

arbon sequestration: The process by which carbon dioxide is removed from the atmosphere and is stored as carbon.

Catchment: An area of land defined by topography and hydrological flow patterns, which drain into a river. Hydrological flow patterns are a measure of any water that flows above and below ground, and into a river.

Clearfell: A silvicultural system where annual increment is maximized and where the entire crop is felled at the end of a specified rotation.

Code of Best forest Practice: A tool to support the sustainable management of forestry through the use of best operational practice.

Compartment: The basic locational unit of the forest. A compartment has permanent boundaries such as streams or roads. Compartments are given a unique identification code.

Continuous cover: Continuous cover forest management involves the use of selective harvesting and natural regeneration to promote uneven-aged forest stands and a continuous tree cover that is more typical of natural forests. Continuous cover implies a continuous input of management effort, at a low level, and a continuous flow of timber and other benefits from the forest.

Criteria: Category of conditions or processes that describe Sustainable Forest Management at the conceptual level by defining the essential elements of Sustainable Forest Management.

Crown Condition: An approach that is used to assess the health and vitality of trees in an ecosystem. It is measured in terms of defoliation and discolouration of foliage.

COFORD: The National Council for Forest Research and Development.

Defoliation: The amount of needle or leaf loss in a tree when compared to an imaginary reference tree. The reference tree is the best tree that could exist in, or in the vicinity of, the tree being assessed. It may not be fully foliated or have the best possible colour, i.e., it is a local reference tree, which takes local site conditions into account. The reference tree is therefore an imaginary reference tree.

Discolouration: The deviation in colour of the needles or leaves in a tree from what is considered to be its normal healthy colour.

Forest Service: An agency of the Department of Marine and Natural Resources with responsibility of National Forest Policy, promotion of private planting, administration of forest grant schemes, forest protection, control of felling, and promotion of research in forestry and forest products.

Forest Stewardship Council (FSC): An international, non –profit organization that is committed to bridging the gap between responsible producers and consumers of forest products. It links producers who agree to manage forests according to published standards covering social, environmental and economic aspects, to informed consumers, through a certification scheme. Its members represent environmental and social groups, the timber trade and the forestry profession around the world.

GIS: Geographic Information System is a computer system for the efficient input, storage, analysis and retrieval and representation of maps and related data.

Greenhouse gas emissions: Greenhouse gases are carbon dioxide (CO²), methane (CH₄), nitrous oxide(N²O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulphurhexafluoride (SF₆). They are released or emitted into the atmosphere as a by-product of natural and industrial processes. These emissions are regulated by the Kyoto Protocol of the United Nations Framework Convention on Climate (UNFCCC).

Growing Stock: The composition of the forest estate usually described in terms of area, total standing volume (cubic metres), species mix and age class distribution.

Helsinki Process: The Ministerial Conference on the Protection of Forests in Europe is usually known as the Helsinki or Pan-European Process. It is one of a number of international for a that have developed criteria and indicators to assist in assessing success in implementing Sustainable Forest Management, and 20 quantitative indicators that are designed to show changes over time for each criterion and demonstrate how well the objectives set for each criterion are being met. The Helsinki Process is the international forum on Sustainable Forest Management, which is most relevant to Ireland.

Hydrological Budget: A measure of all water flow inputs and outputs (above and below ground) for a defined area.

Indicators: These provide a basis for assessing actual forest conditions by measuring Sustainable Forest Management in relation to one aspect of a criterion. Kyoto Protocol: the Kyoto Protocol of the UNFCCC sets legally binding targets for the atmospheric release of greenhouse gases.

Long-term Retentions: Trees or groups of trees retained beyond economic maturity to enhance landscape values and biodiversity.

Low Impact Silvicultural Systems A form of management that minimises the impact on either the forest crop, the site conditions, the woodland condition and the woodland environment

MIS: A computer system, which combines capabilities of data input, storage, retrieval and reporting of information for management purposes.

National Heritage Areas (NHAs): Proposed areas that were designated as being worthy of conservation on a survey undertaken by the National Parks and Wildlife Service in the early 1990's. These areas are currently in the process of being formalized. The survey is not complete and there are likely to be more potential NHA's in existence in the country.

Old Woodland Sites: Forest areas that have supported woodland cover since at least the 1830s A.D.

OSB Plant: A factory in County Waterford that manufactures a type of panel board known as Oriented Strand Board. The factory is owned by Louisiana Pacific Coillte Ltd.

Pesticide Control Service (PCS): The Pesticide Control Service is part of the Department of Agriculture and Food. It functions as the National Regulatory Authority for pesticides, administering National and European Union legislation.

Pheromone: A substance secreted by an animal that affects the behaviour of other animals of the same species.

Productive Forest Area: This is the area solely occupied by trees, where deductions have been made for gaps in the canopy. The purpose of productive area estimation is to normalize mapped sub-compartment areas for production forecasting.

Reforestation: Replanting an area on which a stand of trees has been clearfelled.

Silviculture: The science of growing and managing forests.

Stakeholder: Any individual or group that maintains an active interest in an organisation's operations. Shareholders are a subset of stakeholders.

Stewardship: The care and management of a resource and recognizes and responds to the wider interests and /or ownership of that resource.

Structural Diversity: On a practical level structural diversity can be used as a surrogate measure for biodiversity . It describes: the variety of age classes and layers of trees and vegetation in a forest; the amount of open spaces; and, the amount and type of dead and decaying wood in a forest.

Sedimentation: The process where soil particles are transported by surface water flow (water flowing above ground) into adjacent water courses (drains, streams and rivers), and exceed that watercourse's sediment transport capacity. The soil particles accumulate within the watercourse, building up on its bed and banks.

Semi-natural Woodlands: Woodland composed of mainly locally native trees and shrubs that derive from natural seed fall or coppice rather than from planting.

Special Area of Conservation (SACs): Areas of significance for the conservation of special habitats that have been designated under the EC Habitats Directive (92/43/EEC).

Special Protection Areas (SPAs): Areas of significance for the conservation of special habitats that are important for birds, and have been designated under the EC Wild Birds Directive (79/409/EEC).

Standard Operating Procedures: A procedure setting out current best practice for a process together with the control procedures/documentation necessary to ensure attainment of that standard.

Sub-compartment: An area within a compartment, which is sufficiently homogenous in species composition, age, or productive capacity (yield class) to be treated as a single unit. A sub-compartment has a minimum size of 0.5 hectares.

Sustainable Forest Management: The stewardship and use of forests and forest land in a way and at a rate that maintains their biodiversity, productivity, regeneration capacity, vitality and their potential to fulfill, now and in the future, relevant ecological, economic and social functions, at local, national, and global levels and does not cause damage to other ecosystems (Helsinki Process).

Sustained Yield: The management and control of timber yield to ensure the rate of removals does not exceed the growth increment of the forest, over a defined time frame. Thinning: Removal of some trees in a stand to redistribute volume, and improve form, over the remaining crop.

Turbary: An area where individuals are legally entitled to cut turf.

Yield Class: The potential productive capacity of a forest, measured in cubic meters per hectare per year. Yield classes are divided into steps of two cubic metres per hectare. Thus a stand of yield class 14 has a maximum mean annual increment of 14m³ per hectare per year.