



Laois County Council
Comhairle Chontae Laoise

APPENDIX 6:
Landscape Character Assessment 2017-2023

Laois County Development Plan

2017-2023

Adopted 26th June 2017

In effect from 24th July 2017

Table of Contents

1. Introduction	3
2. The Landscape of County Laois-Human Influences	5
3. The Landscape of County Laois-Physical Influences	11
4. Landscape Trends in County Laois	19
5. Landscape Character Types	24

1. INTRODUCTION

How is landscape defined?

Landscape is defined in many different ways but in current guidance there is broad agreement that it is a combination of our physical and perceived surroundings.

Department of the Environment and Local Government (DoEHLG) defines landscape as “all that is visible when looking across areas of land.”

According to the European Landscape Convention 2000 landscape is

“An area as perceived by people, whose visual features and character are the result of the action of natural and / or cultural (that is human) factors...landscapes evolve through time as a result of being acted upon by natural forces and human beings”

“As a key element of individual and social well being and quality of life, landscape plays an important part in human fulfilment and in reinforcement of (European) identity. It has an important public interest role in the cultural, ecological, environmental and social fields and constitutes a resource favourable to economic activities, particularly tourism”

While the Countryside Agency, England regards

“Landscape as about the relationship between people and place. It provides the setting for our day-to-day lives. The term does not mean just special or designated landscapes and it does not only apply to the countryside. Landscape can mean a small patch of urban wasteland or as much as a mountain range...It results from the way that different components of our environment—both natural and cultural—interact together and are perceived by us.”

What is landscape character assessment?

Landscape Character Assessment is a process which describes, maps and classifies landscapes objectively. It can be a tool to aid decision-making and management or simply to promote particular attractions. Defining landscape character enables an understanding to be formed of the inherent value and importance of individual landscape elements and the processes that may alter landscape character in the future. The cultural and ecological aspects of the landscape cannot be divorced from its physical and visual characteristics so all these elements are considered.

Why carry out a landscape character assessment of County Laois?

Under Planning Legislation, it is a legal requirement:

The Local Government (Planning and Development) Act 2000 (Part II, S10 (e) and 1st Schedule, Part IV (7) requires every planning authority to include objectives in their Development Plan for the “preservation of the character of the landscape where, and to the extent that...the proper planning and sustainable development of the area requires it, including the preservation of views and prospects and the amenities of places and features of natural beauty or interest”

- Ireland ratified the European Landscape Convention in 2002 and must adopt national measures to promote landscape planning, protection and management.

Context influencing the Landscape Character Assessment of County Laois

The Landscape Character Assessment and the Development Plan will be informed by existing national, regional and local planning documents and policies including the following

- European Landscape Convention 2000,
- DoEHLG *Landscape and Landscape Assessment: Consultation Draft of*

Guidelines for Planning Authorities, 2000, and other guidelines relating to architectural heritage, including Conservation Areas and Setting of Protected Structures,

- National Spatial Strategy (2002): promotes quality of life, environmental improvement and sustainable economic development,
- Regional Planning Guidelines [RPG's] requires Laois County Council to identify objectives for landscape character assessment,
- Laois County Council's County Development Plan 2006-2012 and current review of the Plan,
- Landscape character assessment of adjoining local authorities; of the five counties bordering Laois each has completed landscape character assessments: North Tipperary, Kilkenny, Offaly, Carlow and Kildare.

KEY OBJECTIVES OF THE LANDSCAPE CHARACTER ASSESSMENT:

1. To improve the understanding of the landscape in County Laois in terms of its inherent and unique character and to identify what key elements should be preserved, conserved or enhanced.
2. To predict the broad pattern of future changes and devise policies and objectives as guidance to planners and other parties which will ensure that change is complimentary to landscape character. Sensitivity and capacity should be given due consideration in all aspects of decision-making.
3. To assist in the achievement of sustainable development, the underlying principle of all current planning practice and legislation, by promoting a unified approach to landscape planning and management which links policies and recommendations for landscape character to existing planning policies.

Laois County Council is currently reviewing it's County Development Plan which will include policies for landscape protection and conservation. This Landscape Character Assessment will form supplementary guidance providing a detailed understanding of the landscapes in County Laois during the period of the Development Plan 2017-2023.

How is Landscape Character Assessment carried out?

This Landscape Character Assessment describes the landscape of Co. Laois including:

- *Physical elements* - landform, land cover, geology, vegetation cover, hydrology and ecology.
- *Visual characteristics* - type and extent of views, enclosure and patterns formed by physical elements.
- *Less tangible aspects* such as historical and cultural associations, archaeology, remoteness, tranquillity and aesthetic quality.

POLICIES AND RECOMMENDATIONS

Policies have been formulated to assist the development of related planning policies, promotion of strategies and development management within the county. They are intended to protect and enhance landscape character, and facilitate and guide sensitively designed development. Policies are general in nature and are concerned with broad principles of good practice. The aim of the suggested policies is to enhance and maintain landscape character within the broader goal of accommodating development in a sustainable manner.

CONSULTATION

There was public consultation alongside statutory consultation [for example with DoEHLG] for the County Development Plan. Where necessary, the Landscape Character Assessment was amended to take account of relevant comments made during this period.

2 THE LANDSCAPE OF COUNTY LAOIS-HUMAN INFLUENCES

2.1 Overview

In this section, an overview is provided of past human activity in County Laois, the influence of past practices on the landscape and the extent to which archaeological and historic elements survive in, or influence, the modern landscape.

2.2 Prehistoric Laois

County Laois has a rich and varied landscape with historic features dating back to prehistory and many well-known tourist attractions that are related to its heritage. The county retains a strong connection with traditional agriculture and the landscape supports a wide range of ecological habitats despite recent rapid growth of its settlements. It is the interaction of these elements that will influence landscape character for future generations.

The relatively accessible landform of County Laois together with its network of navigable river corridors, encouraged successive waves of visitors to settle in the county over time. The earliest people in County Laois were small bands of Mesolithic migratory hunters-fishers-gatherers who appeared about 8500 years ago. Then came Neolithic farmers who left at least a chert javelin head near Glenkitt in Slieve Bloom, and burial mounds in Clonaslee and Cuffsborough.

The early Bronze Age was characterised by a considerable expansion of settlement in the county. The people of this era preferred well drained lightly forested upland pastures. These lightly forested slopes were easier to clear with the available technology and the cleared soil was worked until depleted. Pasture and cattle raising was the key to the Bronze Age economy in the county. The improved technology associated with the Bronze Age also assisted the farmers in improving control over their

environment, by more extensive farming practices and forestry clearances.

The late Bronze Age is characterised by increased deposition of hoards and this may represent a general response to climatic deterioration in the latter half of the second millennium. During this period, climate change and the impacts of farming are believed to have been partially responsible for the development and spread of blanket bog; tree regeneration was hampered by farming practices and soils became wetter, less well drained and more conducive to peat creation.

Surviving from the Bronze Age settlers are examples of the fulacht fiadh or cooking place, weaponry, ornaments and hill forts such as Clopook and Monelly. Their megalithic monuments may include the Ass's Manger (possibly a wedge tomb near Luggacurren, a stone circle in nearby Monamonry ("Druid's Altar")), and the standing stone in the motte and ring fort at Skirke near Borris-in-Ossory.

The pre-Christian Celtic Iron Age is one of bloody conquest by a succession of ruling dynasties. Iron Age activity in the county is largely derived from ring barrows [at Ballydavis] and forts, and a wealth of heroic literature originally in oral form. A marked decline in agricultural activity suggests a contraction in settlement during the Iron Age.

By the first century AD, Laois was part of the Kingdom of Ossory. The county was divided roughly into seven parts, which were ruled by the Seven Septs of Laois: O'More (O'Moore), O'Lalor, O'Doran, O'Dowling, O'Devoy (O'Deevy), O'Kelly and McEvoy.

2.3 Christianity

With the advent of Christianity, religious communities became established in the county. Between 550 and 600, St. Canice founded Aghaboe Abbey and St. Mochua set up a religious community at Timahoe. An early

Christian community lived at Dun Masc or Masc's fort, on the Rock of Dunamase.

Timahoe Round Tower



The introduction of Christianity also facilitated closer contacts with the Roman world, easing the transfer and spread of technologies such as new ploughs and the horizontal mill. These technologies improved agricultural productivity and encouraged population increases. Population expansion led to the on-going construction of ringforts and raths. These may be identified as banks marking the perimeter of enclosed single farmsteads involved in a principally pastoral economy. They are typically sited on sloping sites within lowland areas where there was access to better drained soils and views over the surrounding landscape. Crannogs were broadly contemporary with ringforts and raths, occupying semi-artificial islands of timber, sods and stones. To date, no crannogs have been identified within County Laois possible due to the lack of major surface water features within the county.

2.4 Medieval Laois

After 1150, the continental Roman Catholic Church began to assert its authority over the independent churches of Ireland. As religious orders with strong ties to Rome replaced older religious communities, the wooden buildings of the early Christian churches in Laois gave way to stone monasteries. The Augustinians and

Dominicans established themselves at Aghaboe Abbey, while the Cistercians took over an older religious community at Abbeyleix. The Cistercians played a significant role in agricultural development and divided monastic lands into farms or granges. They also modified the landscape considerably, clearing woodlands and reclaiming wetlands. Their preference for richer, freely draining soils better suited for cultivation remained throughout the Norman period.

Aghaboe Abbey



Around the same time, the Normans seized control of most of Ireland. In Laois, the fortress on the Rock of Dunamase was part of the dowry of the Irish princess Aoife, who was given in marriage in 1170 to the Norman warrior Strongbow. Advancing Normans surveyed the county from wooden towers built on top of earthen mounds, known as mottes. They also built stone fortresses, such as Lea Castle outside Portarlinton.

Rock of Dunamase C.1250



Several of the county's towns were first established as Norman boroughs, including Castletown, Durrow and Timahoe. From 1175 until about 1325, Normans controlled the best land in the county, while Gaelic society retreated to the bogs, forests and the Slieve Bloom Mountains. The early 14th century saw a Gaelic revival and a simultaneous decline in Norman influence. The Dempseys seized Lea Castle, while Dunamase came into the ownership of the O'Mores. Tower houses belonging to Irish chieftains of this era survive at Ballaghmore and Cullahill, both decorated with Sheila-na-gigs.

2.5 Post-Medieval Laois

The sixteenth and seventeenth centuries witnessed two colonisations by English forces. The first occurred in 1556, when Thomas Radclyffe, 3rd Earl of Sussex dispossessed the O'Moores and attempted to replace them with English settlers. This led to a long drawn-out guerilla war in the county and resulted in a small English community clustered around garrisons. There was a much more widespread and successful plantation in the county in the 17th century which expanded the existing English settlement with more landowners and tenants from England. After the Battle of Kinsale in 1601 the Gaelic order collapsed. By 1610 the seven septs of Laois, their wider families and retainers were transplanted to remote parts of Connacht and Munster. The rest of the century saw further reduction of Roman Catholic landowning in the county reinforced by the Penal Laws.

The new settlers were eager for agricultural improvement and landlord demesnes. As the seventeenth century progressed, the estate system spread throughout most of the populated, good to moderate lands of the county. A feature of this period is how much of the earlier settlement evidence is now supplanted by landlord demesnes, in the eastern half of the county especially.

Among the new colonists to the county were two religious groupings, the Huguenots and Quakers who settled in Portarlinton and Mountmellick respectively in the latter part of the seventeenth century and made major contributions to County Laois in terms of their social, cultural, economic and architectural endeavours.

The plantation marked a new era of landscape change centred on the demesne and influenced by prevalent concepts concerning agricultural improvement operating within a reformed and rationalised field system. The settlers embraced new crops, planting of deciduous trees, improved cattle and sheep breeds and agricultural techniques including liming, drainage and enclosure. Agricultural improvements and demesne creation was facilitated by a rent paying tenantry.

Industrial interests also gave settlers the confidence and resources to establish estates and large unfortified residences. The defensive bawns were replaced by walled gardens. Accompanying this was an enthusiasm for lavish houses, with ornate gardens. Once the natural landscape design associated with Capability Brown became dominant, there was a shift in the location of houses to the more scenic upland, woodland and riverside locations. The greatest period of “Big House” and demesne creation in County Laois was between 1770 and 1840 when many of the county's finest houses including Abbeyleix House, Ballyfin House, Durrow Castle and Emo Court were built. In 1836, a branch of the Grand Canal was extended to Mountmellick, further stimulating industry in that town. Other landscape additions in this period include the glebe house, Protestant churches and police barracks.

2.6 Pre-Famine Laois

The decades prior to the Famine were characterized by relative calm, consolidation, enclosure and landscaping.

In an extract from *The New London Gazetteer* (1826)] Laois was described as follows:

*“Queen's County, a **county** of Ireland, bounded N and W by King's county, E by Kildare and part of Carlow, S by Kilkenny, and SW by Tipperary, 32 English m. long, and as many broad. Along the W boundary runs a range of high and steep mountains, and in the E the Dysart hills form a prominent and picturesque object. The lands have been thus distributed - Arable land, pasture, and meadow: 210,000 acres; Woods and plantations: 1,300 acres; Bog, mountain, and waste: 21,000 acres; Roads: 2,000 acres; Total area: 235,300 acres. Principle rivers, the Barrow and Nore. Chief towns, Maryborough, Portarlinton, and Stradbelly. Almost every description of soil is found in this county, from a very stiff clay, to a light but fertile sandy loam. The principal mineral productions are coal and limestone. It sends 3 members to the British parliament. Pop. 90,000.”*

Abbeyleix House and Demesne



Durrow Castle



Emo Court



Ballyfin House and Demesne



By the 1840's the population of County Laois was three times its present number. Then came the Great Famine of 1845–9 which had a devastating impact on the county. The opening of the workhouse at Donaghmore and the many small ruined houses especially in the foothills of the Slieve Bloom Mountains bear testimony to this calamity.

2.7 Post-Famine Laois

The policy approach to the famine was informed by an initial desire to rid the agricultural system of its perceived backwardness and obstacles to agricultural modernisation. Hence, in particular, small farmers were targeted and through the ratings clauses, large numbers of smallholders were evicted. This clearing of the land, combined with the introduction of ladder fields as a means to rationalise land ownership, removed many of the earlier field systems within the county. Accompanying developments that had a major landscape impact were the overwhelming increase in pasture at the expense of tillage and the consolidation of large scale farmers who tended to rent the limestone rich pastures, whilst the remaining farmers most frequently had to contend with producing on marginal land.

In the aftermath of the famine, strong farmers and landlords increased their holdings at the expense of weaker neighbours, and the pastoral sector increased, helped by the development of the railways and expanding English markets.

A combination of declining numbers of landlords, in large part due to the increasing assertion of agrarian rights and a less sympathetic governmental regime, and the establishment of the Land Commission resulted in many landlords transferring their land to former tenants with a consequent decline in the extent of many estate holdings. The War of Independence, and the Civil War that followed it, also led to many perceived symbols of the

landlords' reign being destroyed during this period.

2.8 Post-Independence

Following independence, land reform is thought to have contributed to an increase in the division of land as former tenants sought to define the boundaries of their newly acquired freeholds. The introduction of rural electrification and group water schemes had both social and landscape impacts in North County Laois with significant improvements on the quality of life for rural householders, as well as the introduction into the landscape of water treatment facilities, reservoirs and electricity poles and pylons.

The economic emergence of Ireland over the last forty years, particularly following the state's entry into the EEC in 1973, has had a profound influence upon the social, economic and physical development of the county.

Today, agriculture remains the predominant land use in County Laois with 109,424 ha under agricultural production. Dairying and cattle rearing remain the key agricultural activity. Associated with the changes in the agricultural sector within the county, is an increase in part time farmers and the accompanying decline in farm employment. This loss of labour is often particularly acute with regard to the traditional maintenance and management of key agricultural landscape features such as hedgerows and ditches. However, programmes such as the Rural Environment Protection Scheme and the recent CAP reforms are again stressing the links between agricultural activity and landscape maintenance.

Whilst the county retains a rural landscape, the pace of change over the past thirty years, in landscape and social terms, has been considerable. Although parts of the county [especially the north and east] are under development pressure in the form of housing requirements, other parts [the west and south]

are suffering population stagnation, decline and associated loss of rural services. Human activities will continue to play the most influential role in landscape retention and change, whether through continued agricultural decline, rural diversification in the form of increased afforestation or development of golf courses, the exploitation of natural resources such as wind farming, aggregates and peat extraction and the roll-out of large infrastructure projects.

3. THE LANDSCAPE OF COUNTY LAOIS-PHYSICAL INFLUENCES

Introduction

This section of the Landscape Character Assessment provides a brief overview of the elements which form the landscape character of County Laois. Laois is an inland county, entirely landlocked and, uniquely amongst Irish counties does not border any other counties with a sea coast

In order to understand the landscapes within County Laois, it is necessary to outline the physical and historical influences that have created the contemporary landscape.

The interplay between solid geology, glacial processes, soil formation, hydrology and ecology has formed the basic materials upon which human activities have impacted. This is a constant and ongoing inter-relationship with topography, access to water and soil conditions influencing the spatial distribution and types of human activities practiced within the county over the past several millennia.

Although human habitation has been the most recent landscape influence, in many ways it has been the most profound. Patterns of land ownership, settlement development, agricultural and ritual activities have all been modified in response to local variations of biotic and abiotic elements and constraints. A description of the physical landscape of County Laois is presented below and is followed by an overview and analysis of human activities within the County Laois landscape from prehistoric to contemporary times.

3.1 Solid Geology

The underlying geology of County Laois is formed from two principal rock formations,

each rock type generally being associated with particular landscapes.

Much of the county is composed of limestone lowlands from the lower Carboniferous Series (approximately 325 million years ago), and generally covered by glacial deposited sediments. The limestone in this area supports generally good quality pastoral farmland but in other areas such as Cul na Mona [between Portlaoise, Mountrath and Abbeyleix] and the southwestern boundary with County Tipperary, the poorly drained geology has led to the creation of peatland areas since the end of the last glacial period in Ireland (approximately 10,000 years ago, the Midlandian period). Elsewhere within the county, blocks of harder, less easily eroded limestone create distinct landscape elements within the wider, flatter limestone surround, by forming small hills and stretches of limestone ridges. In themselves, such hills and ridges are not particularly elevated, (commonly around 200m OD); however they create visual interest in an otherwise low lying area. Examples of these limestone ridges can be found east of Portlaoise

The mountains and hills that rise above these lower areas are composed of a variety of older rocks of differing age and composition. Old Red Sandstone is generally found around the perimeter of these uplands, whilst the interiors are formed by far older Lower Palaeozoic rocks, largely composed of greywacke, mudstone, and slate.

Old Red Sandstone is a tough rock, resistant to erosive influences and this characteristic generally creates upland moorland or blanket bog at the summits of these areas. The Sliabh Bloom Mountains formation is considered to contain the greatest concentration of Old Red Sandstone rocks in the South Midlands.

3.2 Effects of Glaciation

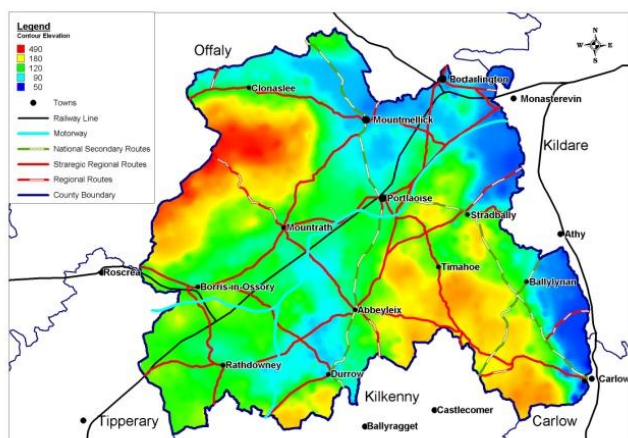
Glacial deposition rather than erosion has been the major landscape influence within the

county. However, there are two areas that clearly display the influence of erosive factors. The uplands were eroded as the Midlandian ice sheets moved in a general southerly direction. Elsewhere glacial deposits led to deposits of boulders, pebble, sand and mud and thereafter their smoothing and rounding over by ice.

3.3 Topography and Drainage

Upland areas and hills within the county provide interest and contrast with the largely central lowland areas. Map 1 illustrates the topography of the county. These uplands are concentrated in the north-western and southern parts of the County and include the Sliabh Bloom Mountains [containing the highest summits in the county], Cullahill Mountain, Cullenagh Mountain, Fossy Mountain and Killeshin Hills.

Map 1: Contour Map of County Laois



Drainage in the county is largely defined by the Rivers Barrow, Nore and Erkin and their various tributaries mainly flowing in a north west - south east trajectory. Apart from minor [man-made] ones at Ballyfin, Grantstown, and Heywood, there are no significant natural lakes in the county reflecting the lack of drumlins to capture waterbodies and the predominantly limestone bedrock.

The water table in the low lying areas is generally very close to the ground surface with the exception of the harder limestone ridges and hills. The water table in the uplands varies considerably depending on seasonality and may be within a few metres of ground level in winter, dropping to more than 20m below ground in the summer months.

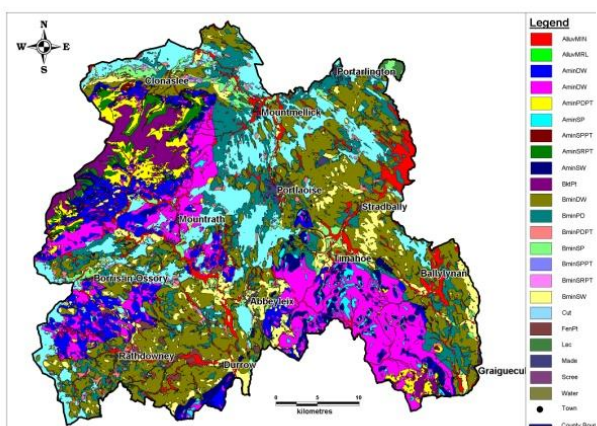
3.4 Soils

In County Laois, the various types of soil have developed from a combination of numerous factors, most notably topography, climate and geological parent material. The principal soil types identified within the county are illustrated in Map 2. Of the nine principal soil types (great soil groups) identified in the National Soil Survey, the most commonly occurring type or group is the grey brown podzol. This type is located mainly in the southwest [Abbeyleix, Ballacolla, Rathdowney, Shanahoe areas] and east [Stradbally, Ballylynan areas] of the county. Geologically, this soil is derived from glacial till composed generally of limestone. It has a heavy texture although the structure is sufficiently good to facilitate drainage. The soil type is suited to most agricultural enterprises although the heavier textured types in this category are more poorly drained and therefore primarily suited to pastoral uses.

The next most frequently occurring soil type is the gley which is generally found in the southeast [Bilboa, Rossmore, Killeshin, Timahoe areas] and low lying ground in parts of the west [Ballybrophy, Borris-in-Ossory areas] of the county. Glacial till comprising mostly shales is the foundation geology for this soil type. In terms of agricultural uses, this soil type is limited largely due to weak structure and poor drainage characteristics. Pastoral uses can be considered although this activity is restricted by the vulnerability of this soil type to poaching by livestock. In addition, these soils are likely to be highly productive from a forestry cropping standpoint.

Peat soil types account for just over 17% of the soil cover in the county. Much of this is associated with the raised bogs on the southwestern eastern edge of the county, in the central areas around Portlaoise, Mountrath, Mountmellick and Abbeyleix and further north in the foothills of the Sliabh Blooms. This soil type is not suited to commercial agriculture. However it does offer considerable potential in terms of afforestation, and increasingly amenity [as in Lough Boora in County Offaly] and green energy. Regarding green energy, there is a current planning application with the Council for a wind farm project on a section of worked-out bogland southwest of Rathdowney.

Map 2 Soil Types Of County Laois



3.5 Landuse

Agriculture is the predominant landuse in the county. According to the 2000 census of agriculture, the average farm size in County Laois is 35.3 hectares, which is higher than the national average of 31.4 hectares. There are 3,395 farms in County Laois of which 50% are less than 30 hectares in size. Furthermore, 52% of the land in the county is designated as disadvantaged.

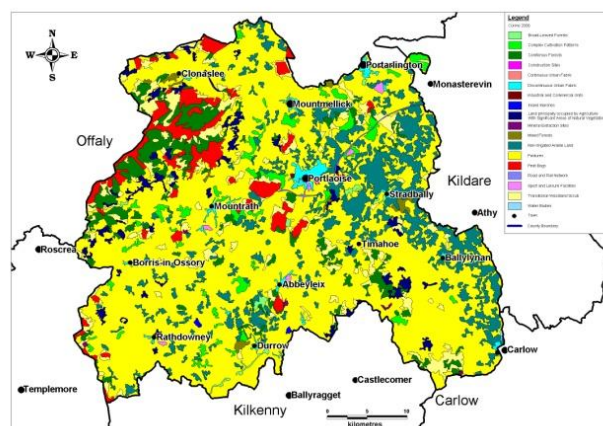
Table 1: No. of Farms Classified by Farm Size (AAU) at County Level

Location	0-10	10-20	20-30	30-50	50-100	100-200	200	Total	Average Farm Size
County Laois	636	601	544	831	651	122	10	3395	35.3

Pastoralism, with an emphasis on beef production, is the predominant agricultural activity in County Laois, with 53% of the county's farmers engaged in this form of enterprise. A further 17% concentrate on dairying. There are a number of specialist areas of agricultural production in the county. For example, tillage farming is most common in the east and north bordering Carlow and Kildare with dairying most evident in the south.

The composition of farm household income is changing too, making off farm employment and the development of alternative enterprises necessary to ensure survival. There are 194 no. farms reporting gainful non-agricultural activity on the farm and for a significant number of farmers in Co. Laois (28%), conventional farming is now regarded only as a part time or a subsidiary occupation.

Map 3: Corine Landuse Map of County Laois



3.6 Afforestation

One alternative rural enterprise in County Laois which is proving increasingly attractive for farmers and investment companies alike is afforestation. Almost 15% of Co. Laois is forested comprising 4,430 hectares of private plantings and 15,950 hectares mainly undertaken by Coillte. There was a major afforestation programme implemented between 1984 and 2004 when 6,578 hectares of land was planted. The majority of the schemes to date have been in the upland more marginal areas of the county [areas that incidentally often coincide with amenity and natural heritage designations] with heavy concentrations in the Sliabh Boom Mountains, Cullenagh Mountain, between Ballybrittas and Vicarstown and in the southeast around Swan, Wolfhill, Rossmore and Crettyard.

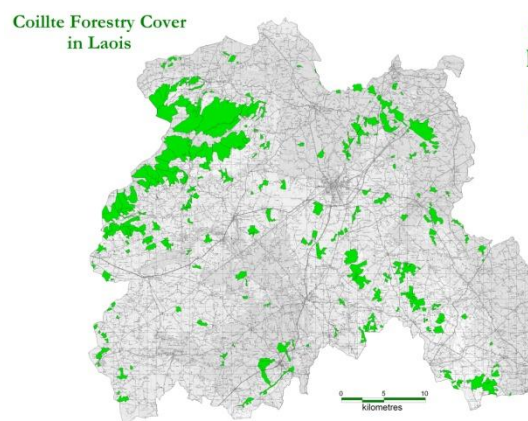
There are also 4,990 hectares of native woodland in County Laois. Broadleaf woodland and copses are more prevalent in lowland areas and mature trees encircle many historic features such as raths and historic graveyards, forming prominent and attractive landscape elements. Remnants of old estate woods and ornamental plantations are still evident in a number of locations throughout the county. In general the county is reasonably well furnished with deciduous tree species. Beech, elm, ash, poplar, sycamore and alder are all still in abundance with oak present to a lesser degree. Forty-five constituent sites were surveyed as part of the National Survey of Native Woodland [BEC Consultants 2003-2008]. The optimum sites in terms of native woodland conservation value include Ballyfin Demesne, Dunmore Demesne, Emo Court and Grantstown Wood.

From a landscape perspective, afforestation can have major negative implications for the environment especially where the predominant species type is of a coniferous variety as is the case with the majority of the locations in County Laois.

It is vital that an holistic approach is adopted in terms of additional and replacement afforestation throughout the county so that

visual amenity, biodiversity, habitat protection, water quality and tourism promotion are afforded due consideration as well.

Map 4: Coillte Plantations in County Laois



Landscape management in rural areas varies. It is generally most intensive around commercial tillage farms in the east which have a manicured appearance, but becomes less intensive in the more marginal farmland areas of the northwest and southeast and very poor around the fringes of expanding urban areas where farming is under threat and becoming a less viable industry. The rural landscape contains numerous trees growing often as mature stands or shelterbelts and within hedgerows.

Hedgerows vary in terms of style, form and species content but are generally well managed along road corridors becoming less well maintained in between fields. In many areas hedgerows have been lost and replaced with post and wire fences, giving the countryside a much more open character and contributing to decline in landscape condition.

Deep drainage ditches are a distinguishing feature along many rural roads particularly in peatland areas. Stonewalls, cylindrical stone

gateposts and iron gates are also common boundary treatments.

3.7 Extractive Industry

Mineral extraction is a significant industry and demand for aggregates is certain to continue notwithstanding the current economic recession. There are already a large number of quarries and pits in County Laois and large areas identified as having high aggregate potential, particularly in the south of the county. There are also the remnants of slag heaps associated with the now defunct coal mining industry centred on Wolfhill and Rossmore. Any future development must be carefully planned to avoid unnecessary adverse landscape impacts.

3.8 Ecology and Habitats

County Laois has a rich natural heritage that includes scenic river valleys, rolling farmland, uplands, watercourses and a network of mature hedgerows all of which are influenced by land use and management. National Heritage Areas (NHA's) were derived from the former Areas of Scientific Interest (ASI's) and include the best remaining areas of Ireland's natural and semi-natural habitats.

Sites have been selected by virtue of having special scientific significance for one or more species, communities, habitats, landforms, or geological or geomorphological features, or for a diversity of natural attributes. There are currently 31 NHA's in County Laois.

Special Areas of Conservation (SAC's) are designated under the European Community Habitats Directive to maintain biodiversity and restore the conservation status of certain species of flora and fauna. Areas in County Laois that support rare, endangered or vulnerable species that require special protection and positive habitat management have been identified as SAC's. There are currently 9 SAC's in County Laois.

Special Protection Areas (SPA's) are areas designated under the European Community Birds Directive for the protection of birds and their habitats. There is one SPA in County Laois: the Sliabh Bloom Mountains in the northwest of the county bordering Counties Offaly and Tipperary

The following are the locations of the existing and proposed NHA's, SAC's and SPA's in County Laois:-

Special Areas of Conservation (SACs) in County Laois (as identified on Map No. 5) Site Name	Site Code	½" Map Number
River Barrow And River Nore	002162	
Clonaslee Eskers and Derry Bog	000859	38
Lisbigney Bog	000869	44
Mountmellick	002141	
Slieve Bloom Mountains	000412	38/44
Coolrain Bog	002332	
Knockacollier Bog	002333	

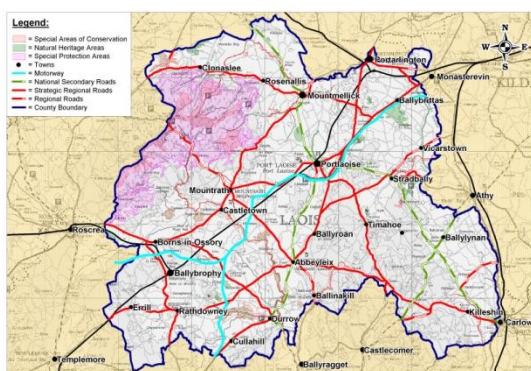
Natural Heritage Areas (NHAs) in Co Laois (as identified on Map No. 5]

Site Name	Site Code	Main habitat or species
Annaghmore Lough Fen	000413	Calcareous fen with willow and birch scrub
Ballylynan	000857	Grassland, wet meadows
Barrow Valley At Tankardstown Bridge	000858	River, canal, grassland, marsh
Clonaslee Eskers And Derry Bog	000859	Esker, raised bog
Clonreher Bog	2357	Raised bog
Cloppook Wood	000860	Ash/hazel woodland, limestone hill
Coolacurragh Wood	000862	Birch/alder woodland, fen peat
Coolrain Bog	000415	Midland raised bog (with Knockacollier Bog, these two bogs are the most southerly intact examples of true Midland Raised Bogs in the country)
Cuffsborough	000418	Grassland used by Greenland White-fronted geese
The Curragh And Goul River Marsh	000420	Wet meadow, river, winter feeding site for Greenland White-fronted Geese
Delour River Nr Lacca Manor	000864	Oak/birch woodland, river, wet grassland
Derries Wood	000416	Disturbed raised bog, disused gravel pit, conifer plantation, lake, reedbed, important insect populations
Dunamaise Woods	001494	Limestone hills, oak/ash woodland
Emo Court	000865	Semi-natural mixed (oak/ash with beech) woodland, lake, parkland, amenity grassland
Forest House Wood	000874	
Grand Canal	002104	Canal, wetland, grassland
Grantstown Wood and Lough	000417	State-owned nature reserve. Lake in transition through fen to alder/willow. Important invertebrate fauna
Kilteale Hill	000867	Limestone hill, hazel/ash woodland
Knockacollier Bog	000419	Midland raised bog, Birch and alder woodland. One of the few intact bogs south of the Slieve Blooms
Lisbigney Bog	000869	Raised bog
Mannin Wetland	00868	Species-rich fen
Monaincha Bog/ Ballaghmore Bog	00652	Raised bog
Ridge Of Portlaoise	000876	Esker ridge, ash/hazel woodland, species-rich grassland, disused gravel pits
River Barrow And River Nore	002162	River, wetland, woodland
River Nore/Abbeyleix Woods Complex	002076	River, site for Freshwater Pearl Mussel (international importance), Twaite Shad (Vulnerable), wet grassland, mixed deciduous woodland of great antiquity and species diversity, with specimen oak
Rock of Dunamaise	000878	
Shanahoe Marsh	001923	
Slieve Bloom Mountains	000412	Old Red Sandstone mountains, mountain blanket bog, Peregrine Falcon, Hen harrier, red grouse
Stradbally Hill	001800	
Timahoe Esker	000421	Esker ridge, Hazel/Ash woodland

Special Protection Areas (SPAs) in Co Laois (as identified on Map No. 5)

Site Name	Site Code	Main habitat or species
Slieve Bloom Mountains	004160	Whooper Swan, Corncrake, Hen Harrier, Merlin, Peregrine

Map 5: Natural Heritage Designations



3.9 Settlement and Built Heritage

County Laois has an impressive built heritage. The three main towns, of Portlaoise, Portarlington and Mountmellick have relatively intact cores while Abbeyleix is designated as a Heritage Town. There are many other urban settlements across the county that are significant in terms of built heritage and cultural associations including the villages of Ballinakill and Timahoe which was the site of an abbey founded by St Mochua in the 6th Century.

Nonetheless, the historic structure of urban settlements in the county is under threat from unprecedented population growth. Urban areas are [until recently] rapidly expanding, particularly in northern and eastern areas due to their proximity to the Dublin metropolitan area. Many settlements such as Portlaoise and Portarlington have grown in size at such a rate that the historic centres are in danger of becoming detached from the majority of their populations and the relationship between

urban area and landscape setting is being threatened.

Further development of towns and villages must be carefully planned to avoid creating linear extensions of large scale housing on approaches to towns and villages. Collectively this type of development has the potential to threaten the rural character of the whole county.

One-off house rural housing is a major issue throughout County Laois with particularly strong concentrations in the north and east of the county and in the vicinity of all the main urban settlements. An appropriate planning response is necessary to avoid houses being built that are out of character within the rural context. The draft RPG's has identified a hierarchy of settlements in order to accommodate development in the best way possible. The Council's interpretation of the RPG through planning policy will seek to promote the retention and enhancement of the identity of individual settlements including landscape setting and avoiding further loss of character. In addition, the rural housing policy of Laois County Council is presently being examined as part of the review of the County Development Plan. One of the base criteria is the quality of the design of one-off houses and their potential impact on landscape character.

3.10 Infrastructure

Development pressure from the Dublin Metropolitan Area and recent road and rail improvements have led to increased commuting between County Laois and Dublin. This has placed greater pressure on county roads that link primary road corridors. Current planning policy is to create an integrated public transport system and reduce the need and demand for travel, particularly by private car. Improvements to public transport networks will be carried out alongside road improvements to facilitate more sustainable and efficient commuting whilst also improving local

employment opportunities to reduce the need to commute in the long term.

The M7/M8 is the most significant planned road infrastructure, ultimately superseding the existing N7 and N8 as the primary road linking County Laois and the main cities of the country. Detailed design of these new roads respects the existing landscape character of the receiving countryside thereby minimizing the resultant visual impact.

Upgrading of the rail infrastructure will alleviate some pressure on rural roads in the county. The opportunity for further rail networks elsewhere in the county would increase sustainable transport provision but it is crucial that any new and reopened rail lines are designed to reflect landscape character and minimise the loss of existing landscape character elements such as vegetation and archaeology.

Rapid urban expansion has also put existing water and wastewater services under pressure. In many of the county's towns the capacity of treatment plants has been reached and exceeded. This is posing implications for further economic development. Improvements to this element of infrastructure will be an integral objective of the new Development Plan.

The continued growth of County Laois is putting current energy generation under significant strain and there are a number of planned improvements to electrical infrastructure over the life of the new County Development Plan. These include new transmission lines and opening of a major substation between Portlaoise and Timahoe.

Currently there is no renewable energy provision in Laois but such provision is a priority at local, regional and national level for local, regional and national policy reasons. A recent draft wind energy policy paper has identified a number of areas in the county with potential for wind energy generation. This Landscape Character Assessment will include an

assessment of the potential capacity of the landscape to accommodate renewable energy developments

There are over thirty telecommunications masts at present in County Laois. They are likely to become a more significant element in the future with the need to improve economic competitiveness and social inclusion. It is Council policy that masts should avoid areas of high visual value or archaeological importance and be co-located where feasible.

3.11 Tourism

While lacking the dramatic scenery of some western seaboard counties, County Laois has significant tourist potential in its own right. Rich in contrast, there is provision for a wide range of outdoor active pursuits including golfing, walking, vintage car-rallies, music events, heritage tours and equestrian sports. Emo Court and Gardens, Heywood Gardens, Rock of Dunamaise, Donaghmore Famine Museum, Sliabh Bloom Mountains and Abbeyleix Heritage House are the main tourist destinations in the county.

Improved transport infrastructure, particularly links to the Greater Dublin Area means that Laois is a very accessible and attractive destination for short breaks for visitors in Ireland or as part of a longer stay by visitors from abroad.

4. LANDSCAPE TRENDS IN COUNTY LAOIS

Landscape trends have been identified to predict the broad pattern of future changes and devise policies and objectives which will assist in ensuring that change is complimentary to landscape character. The main forces for change which are causing changes to the overall appearance, function and condition of the landscape are categorised under the following headings: settlements and built structures, infrastructure and industry, tourism, rivers and canals, agriculture and tree cover.

The most likely forms of future development are derived from these landscape trends.

Introduction

The landscapes in County Laois are constantly evolving in response to natural forces and human activity. Glacial movement shaped the topography into its present form and mans activities have been largely responsible for land cover since farming began around the 4th Century. There have been several phases of history which have left their marks on the landscape and which are evident today such as a patchwork of elements including passage tombs and pre Christian earthworks, early Christian ecclesiastical buildings, Norman castles and walled settlements, 17th – 18th Century demesnes and field patterns and 18th – 19th Century buildings and structures.

Today the pressures of change continue apace. Whilst many changes are a result of economic necessity, crucial to the development of the county, the impacts on landscape character are potentially very damaging.

This Landscape Character Assessment seeks to recognise what is valuable and what elements should be preserved, conserved or enhanced. It also aims to predict the broad pattern of future changes and devise policies and objectives

which will assist in ensuring that change is complimentary to landscape character.

The main forces for change which are causing changes to the overall appearance, function and condition of the landscape can be categorised as follows:

- *Settlements, Built Structures and Population Growth*
- *Infrastructure and Industry*
- *Tourism*
- *Rivers and Canals*
- *Agriculture*
- *Tree Cover*

4.1 Settlements, Built Structures and Population Growth

The growth of urban areas and built development is the strongest trend that has, is and will continue to influence landscape character in County Laois. The strength of this trend will also have a knock-on effect on all other factors that influence landscape character such as infrastructure and industry, tourism, water bodies, agriculture and vegetation.

Most settlements in the county, and particularly those in the north and east, have undergone rapid expansion of modern residential development. This trend is set to continue and has the potential to permanently alter landscape character in and adjacent to urban fringe areas.

The historic character which is highly evident in most settlements, large and small, is being diluted by new development which adheres less to the local vernacular and is more homogenous in appearance and layout.

Sporadic one-off houses in rural areas are becoming more common and are also causing dilution of rural character where it has been located insensitively. However, the desire of people to live in remoter areas could potentially give rise to opportunities to reverse the

dereliction of traditional buildings by finding new uses for them.

4.2 Infrastructure and Industry

Large scale infrastructure development such as motorway projects, waste water treatment works etc resulting directly from population growth in the county, will have major effects on landscape and visual character which will be difficult to mitigate against because of the scale of such development. Sensitive choice of location is likely to be the most important factor that will limit negative impacts on the wider landscape. Design of boundaries may also aid integration at a very local level.

Ongoing planned extension to infrastructure networks (electricity, water and sewage, communications, Transport etc) is associated with population growth and the demand for greater service capacities. These are causing often small-scale loss of features and character which, when seen together have a potentially significant cumulative effect on landscape character.

To date there is little renewable energy provision in County Laois but it is a priority policy at all levels of government and is being promoted to meet part of the county's increased energy requirements. Wind and to a lesser degree hydro energy are likely to be particularly viable because of the county's water and wind resources but other forms of renewable energy, such as bio-energy and biomass are also potential contributors in this regard.

Bio-energy has the potential to assist diversification and enhancement of the rural economy but may result in reduced biodiversity through the planting of large-scale single species plantations. These would have a similar landscape effect to commercial forestry.

Biomass is likely to be a scale that will be visually prominent so care should be taken in design of its location, layout and setting.

Wind energy is also a visually prominent form of development and should be located away from highly sensitive landscapes and those of exceptional value. One landscape character type in the county being considered for this form of development is harvested peatland. While substantially lower than hill and mountain locations, the potential landscape impact will still need careful appraisal.

Hydro energy will be related to water bodies so care should be taken to avoid adverse impacts on national and European designated ecological sites and other existing uses that are complimentary to the maintenance of attractive and valuable river corridors.

The demand for aggregates will continue with increased development of the county. It is likely that quarries may be extended or new areas for mineral extraction created to meet demand.

4.3 Tourism

Expansion and promotion of the tourism sector in the county is a key Council strategy. There are potential opportunities to raise awareness of the wealth of visitor attractions that exist in the county in addition to the key established sites such as the Sliabh Blooms, Emo Court and Rock of Dunamaise.

Improved visitor facilities will be required to enhance visitor experiences. These may include additional parking areas, picnic sites, signage etc that should be sensitively designed to avoid visual clutter in scenic landscapes.

There are some instances of historic buildings, such as 18th and 19th Century estate houses in the countryside, for example Roundwood House, Mountrath, being converted to new uses and this trend is likely to continue. It provides a good opportunity to restore

landscape character to previously degraded sites and introduce new sustainable uses which will maintain this character in the long term. It is important that all such work be done sensitively and with respect paid to vernacular features, materials, scale and landscape setting.

4.4 Rivers and Canals

Historically rivers were the focus of human settlement and all of the county's large towns-Portlaoise, Portarlington, Mountmellick, Mountrath, Graiguecullen, Rathdowney, Stradbally-have grown up around river corridors. Today most have some form of ecological designation as well as significant associated cultural features and, as such are particularly sensitive to change.

Increased run-off from urban areas, and increased demand for abstraction and waste water facilities will continue to be direct consequences of rapid population growth in the county. All are likely to adversely affect water quality and the ecological and amenity value of water bodies.

River corridors and the section of Grand Canal in the northeast of the county could come under increased pressure from recreational activities, as tourism in County Laois is further promoted. Rivers and lakes are an integral part of the visitor experience and should be developed sensitively to avoid adverse impacts resulting from heavy use.

Other visitor attractions and facilities could also be adversely affected if proper management structures are not developed. The development of river corridors for activities such as fishing, boating, picnicking and walking could all potentially contribute to such impacts as erosion of riverbanks, water pollution, disturbance to wildlife and designated habitats, and loss of visual amenity.

4.5 Agriculture

A general decline in the sustainability of agriculture, particularly small-scale farms and farming on land at the edge of expanding settlements and the associated decline in management of farmland.

This has caused hedgerows to become overgrown, traditional dry stonewalls and banks to fall into disrepair and rushes to infest extensive grazing land. The decline in management of boundaries has also caused the loss of hedgerows and trees as they become over mature.

Where small farms are becoming less viable they are often being amalgamated into larger ones. The associated enlargement of fields and the removal of traditional boundary features, such as hedgerows, trees, walls and earth banks, is having an adverse impact on the appearance of the landscape and on its biodiversity. Strong hedgerows create a network of green corridors that provide habitats and allow wildlife to travel through the landscape easily.

4.6 Tree Cover

Laois is a relatively well-forested county. It has the third highest tree cover in the country. Many of the trees date back to the Plantation periods when demesne landscapes were planted with broadleaved species along entrance avenues with estate parkland and areas of mixed woodland often used for hunting for example at Ballyfin and Emo Court.

Most hedgerows are also well treed but less intensive management has caused the loss of some and others have become over mature (see Agriculture section above).

There are several areas of extensive commercial forestry plantations [primarily of a coniferous type] in the county. Prime example are the Sliabh Bloom Mountains, Cullenagh Mountain and the upland areas in the south-east of the

county. Coniferous plantations are significant and long-term landscape features which should be located sensitively. If located in prominent or highly visible locations they will change the traditional farmed appearance of the landscape and attract attention from long distances. They have the potential to adversely affect scenic value, views and prospects, biodiversity, flora and fauna and archaeological features.

In some places deforestation has occurred. This has allowed heathland and pioneer species such as birch to regenerate. This is also changing the appearance of the landscape - from an intensively managed, man-made landscape to a more natural and rougher textured landscape. It has also increased biodiversity.

In the current County Development plan, there are no Tree Preservation Orders in County Laois

4.7 Capacity to Accommodate Change

The forms of development most likely to occur in Co. Laois are identified based on an assessment of the current and planned landscape trends described above. The potential capacity of each LCA to accommodate these types of development is assessed in greater detail further on. The likely characteristics of each form of development is described below including the features that are likely to cause adverse impacts on landscape character.

4.8 Likely forms of Development

Large modern farm buildings	Likely to be constructed using modern materials and colours. Massing and location are particularly likely to detract from visual quality.
Industrial and commercial facilities	May comprise low key or more prominent elements. Likely to include factories, warehouses, retail parks, hotels, and associated parking areas and signage. Potential impacts on landscape character may be caused by the creation of pollution, litter, visual clutter, inappropriate location within the

	landscape, materials, design and layout.
Multi-house residential developments	Are likely to be constructed using modern building materials, styles, scales and layouts. They may be large or small in size and are most likely to be located in and around existing settlements or primary transport routes. The current trend in housing development around urban fringes is adversely affecting the viability of adjacent farmland
One off houses	Built both at the edge of existing settlements and in open countryside, generally by owner-occupiers. These dwellings are likely to vary in scale, design and layout but will generally be of a substantial size ie greater than 250 sq. metres. Their impact on landscape character will be determined by their design, materials, scale, location, treatment of garden space and boundaries and cumulative impact if, as is often the case, many such houses are built in of proximity to each other.
Conversion of existing buildings	Provides opportunities to allow development in rural areas whilst conserving landscape character. Many conversions are likely to be residential but other uses should also be considered, particularly where opportunities for better management may enhance existing landscape condition and value. The nature of the proposed use, and its suitability for the location should be considered as well as the method of restoration, which should respect historic materials and styles.
Overhead cables, substations and communications masts	Are generally large and prominent features. Their impact on landscape character is a factor of their visual prominence, size and scale as well as their location in sensitive landscapes such as archaeological sites or areas within scenic vistas. The convergence of a number of overhead cables or the massing of a large substation or number of masts will adversely affect landscape character depending on the state of the landscape in question.

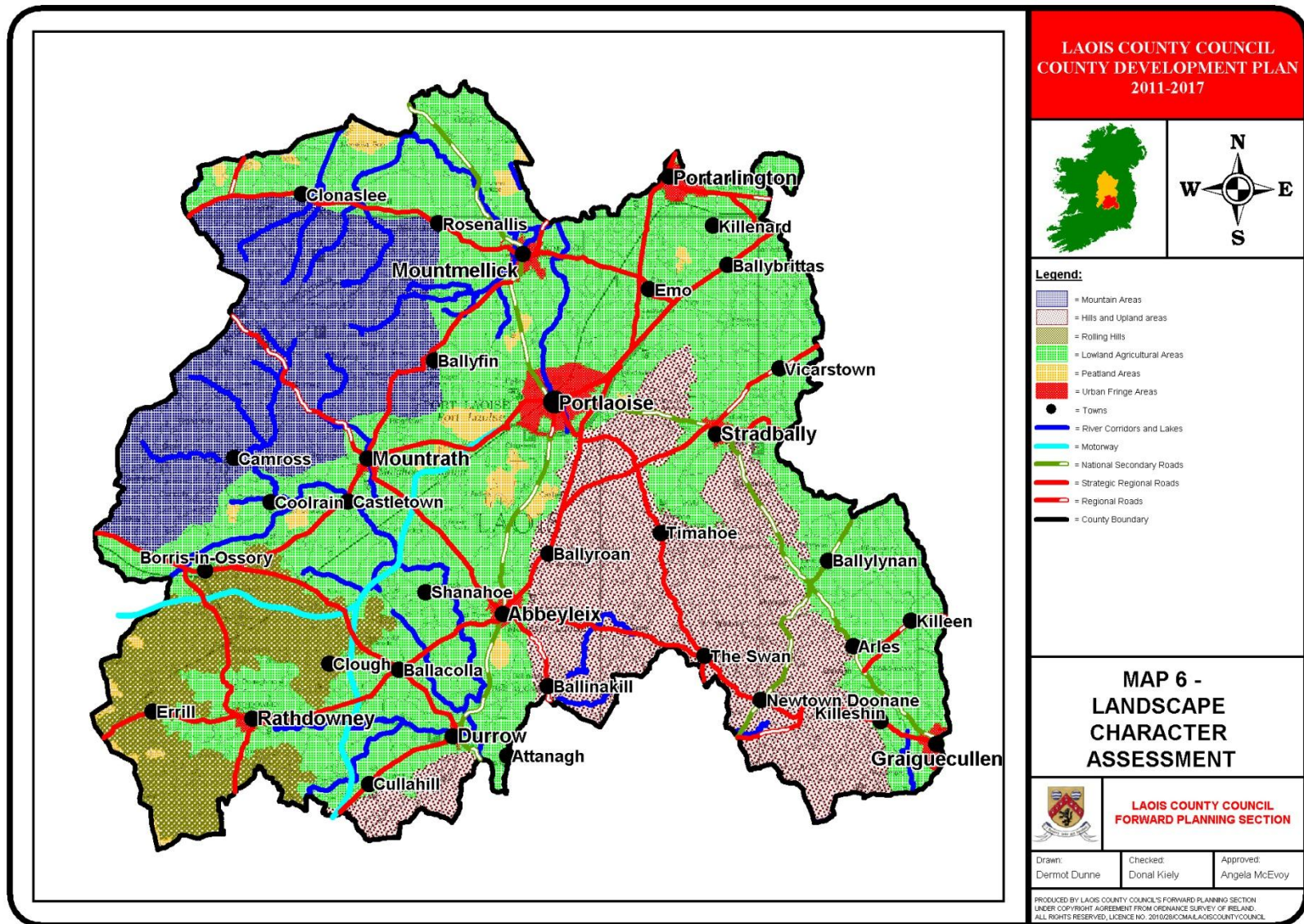
<i>Transport corridors,</i>	Primarily roads and railways which may be improved or created eg the M7 and M8 road projects. The most likely impacts of this type of development are noise and visual intrusion which are often exacerbated by the loss of existing boundary hedgerows, walls and mature trees. Other potential impacts on archaeology and drainage are also likely.
<i>Installation of new underground services</i>	For example gas and water pipes resulting in potential loss of existing hedgerows, walls and trees and disturbance of archaeological features, habitats and drainage systems.
<i>Wind turbines, installed as single turbines or wind farms.</i>	<p>There are currently no wind farms operating in Laois but construction of an eight turbine farm is underway in the southeast of the county. In addition, there is a current application for a four turbine farm in the southwest of the county and a number of enquiries regarding other potential locations for this type of development. Increasing renewable energy provision is a key element of central and regional government policy and is also emphasised in the Laois County Development Plan, 2006-2012.</p> <p>Key impacts on landscape character will include visual impact on long and short-range views, sensitive historic landscapes and cumulative impacts of other wind farms, including those in neighbouring counties such as Tipperary where a large facility at Lisheen near Rathdowney has been opened. Physical impacts on sensitive landscape features such as habitats, historic artefacts and vegetation will also need to be considered and mitigated against.</p>
<i>Biomass and forestry</i>	Likely to comprise areas of single-species plantations which will be a long-term feature of the landscape. Evergreen conifer plantations exist in many parts of County Laois already but there are currently no biomass plantations, which are more likely to be fast growing deciduous species such as willow. Potential impacts of new plantations include loss of biodiversity and visual intrusion. Location away from visually prominent areas will be very important. Such areas may provide opportunities for recreation and agricultural diversification, particularly where conventional farming is in decline.
<i>Quarries</i>	Includes working areas, stockpiles, storage and parking areas, haul routes, plant, machinery and signage. Key impacts on landscape character will include visual intrusion, noise and dust pollution, run-off, erosion of habitats, reduced biodiversity, loss of flora and fauna, land rehabilitation and conversion to other uses including agriculture, amenity and afforestation.

5. LANDSCAPE CHARACTER TYPES IN COUNTY LAOIS

Landscape Character Types are distinct types of landscape that are relatively homogenous in character. They are generic in nature in that they may occur in different localities throughout any defined area. Nonetheless, where they do occur, they commonly share similar combinations of geology, topography, land cover and historical landuse. For example, blanket bog uplands are distinct landscape character types and are recognisable as such whether they occur in County Laois or other counties.

Co. Laois has been divided into 7 LCT's:

- Hills and Upland Areas
- Lowland Agricultural Areas
- River Corridors and Lakes
- Mountain Areas
- Peatland Areas
- Urban Fringe Areas
- Rolling Hill Areas



TYPE 1: HILLS AND UPLAND AREAS



Although lacking in terms of dramatic peaks, hills and uplands are a prominent feature of the county, particularly in the north west and south-east. From the tops of these hills panoramic views of the lowland landscapes of Laois and adjacent counties are gained. The hills also act as orientating features. The Seven Hills, Cullenagh, Cullahill, Fossy Mountains and the upland areas around Swan, Luggacurren and Wolfhill are prominent by virtue of landmarks at their summits as well as their topography: A church on the Wolfhill acts as a prominent local landmark.

The hills and uplands form important historic features with an abundance of archaeological features and contain evidence of human settlement extending back 9,000 years.

There is extensive mono-type afforestation and marginal agriculture in these areas. Field systems and the enclosures associated with them are generally absent in this landscape. New dwellings are comparatively few with much of the older stock abandoned and derelict.

These hills and uplands represent some potential in terms of tourism development. However, at present they are somewhat isolated as separate entities. Linking the most important sites by way-marked trails would be a

valuable addition allowing further appreciation of the landscape in a sensitive manner.

GENERAL RECOMMENDATIONS

1. To preserve and enhance the rich heritage assets of these LCT's which provide visible evidence of all four key phases of the County's history.
2. To have due regard to the positive contribution that views across adjacent lowland areas and landmarks within the landscape make to the overall landscape character.
3. To respect the remote character and existing low-density development in these LCTs.
4. To implement improvements to the visitor attractions of these areas.
5. To further define popular walking routes such as Cullahill Mountain and create new routes to additional areas of interest.
6. To continue and encourage the improved management of field boundaries such as hedgerows and stone walls and hunting copses/wooded copses.
7. To maximise the potential amenity value of water bodies within this LCT.
8. Facilitate the development of sustainable rural industries that encourage interaction between urban and rural landscapes and dwellers, e.g. farmer's markets.

TYPE 2: LOWLAND AGRICULTURAL AREAS



The Lowland LCT covers the largest proportion of County Laois. In terms of landuse, it is comprised primarily of pastoral and tillage agriculture.

It is generally a flat open landscape [around Ballylynan, Barrowhouse and the environs of Graiguecullen especially] with long range views towards the upland areas. Field patterns tend to be of large scale and are generally bounded by deciduous hedgerows containing mature trees. Farm sizes are larger than average. Throughout the county there is an abundance of 18th and 19th century demesnes with extensive areas of mixed woodland and parkland bounded by original stonewalls, creating an attractive landscape setting for the numerous estate houses.

The Lowland LCT has been developed more extensively than other the LCT's, particularly in the north and east where there is development pressure from the large towns as well as the Dublin metropolitan area. This has resulted in significant changes to the landscape character and it is crucial that future development of this LCT is carried out sensitively and with particular reference to the rural nature of the landscape.

The significant growth of towns and villages over the past decade has led to myriad of architectural styles that are not in keeping with the historic built vernacular. It is equally

important that future development relates to the existing structure of towns and villages and reflects characteristic building scales and materials.

Much of the lowlands have an enclosed character with well-treed road corridors, dense hedgerows, parkland and areas of woodland. Views of landmarks within the landscape and of the surrounding upland areas are a characteristic of this area and must be retained because the interaction between the lowlands and hills/uplands is an important feature of this LCT.

GENERAL RECOMMENDATIONS

1. Promote good agricultural practices to create a sustainable rural economy.
2. Provide incentives for smaller rural/family farms to manage their land to avoid loss of hedgerows and field patterns.
3. Maintain and enhance the 18th and 19th century estate landscapes and associated parkland & woodland to develop them as a tourism resource.
4. Diversify the urban fringe by developing mixed-use amenity areas, which will create a landscape buffer creating a transition between urban and rural areas.
5. Define the urban fringe with planting of native species and mixed woodland to tie into existing rural landscape.
6. Reflect the 18th and 19th century field patterns in the scale of new development.
7. Restoration of historic boundaries, walls to original standard with coursing and materials to match existing.
8. Design of all single one-off houses to be fully compliant with Rural House Design Guidelines

TYPE 3: RIVER CORRIDORS AND LAKES



A number of key river corridors traverse County Laois. This LCT contains a wealth of historic features providing longstanding evidence of human influence on the landscape including Norman fortifications, castles, demesnes and industrial artifacts such as mills, canals and bridges.

The River Nore is the largest and most prominent of the river corridors. The river enters the county north of Borris-in Ossory and runs generally in a southeast trajectory through Castletown, west of Abbeyleix, east of Durrow and onto Ballyragget, County Kilkenny. It merges with a number of other rivers along the way including Whitehorse [near Mountrath] and Erkina, Gully and Owenbeg [near Durrow]. The river is enclosed and well wooded along much of its length, containing areas of mixed deciduous woodland of great antiquity and species diversity including specimen oak in Abbeyleix Demesne.

Excellent views of the river are afforded at a number of locations including Castletown, Shanahoe and near Attanagh where the river can be seen cutting through large flat-bottomed valleys.

The River Nore has a number of key designations including extensive SAC and more partial NHA coverage. It is an internationally renowned site for the freshwater pearl mussel.

Grand Canal at Vicarstown



The River Barrow is an extensive river corridor in the north and east of the County where it forms a significant portion of the county boundary with Kildare. It flows eastwards through Portarlinton onto Monasterevan, re-enters the county east of Ballybrittas and merges with the Stradbally River northeast of Stradbally. Within County Laois, the river has a European designation as an SAC; however only a minor portion near Maganey is designated as an NHA. Key vistas of the Barrow River are available in Portarlinton and Graiguecullen.

Though less extensive than the Rivers Nore and Barrow which carry both national and regional significance, the county contains a number of locally important river corridors such as the Erkina and Goul which flow between Cullahill and Durrow where they join with the River Nore, the Owenass on which Mountmellick is built and which joins with the River Barrow near Portarlinton, the Fushoge between Arles and Carlow, the Delour in Coolrain and the Clodiagh in Clonaslee. With the exception of the River Owenass and to a lesser extent the River Clodiagh, the others have remained relatively undisturbed with largely undeveloped corridors, and a diverse range of habitats of high ecological value and significant areas of SAC and NHA designation.

A portion of the Grand Canal-Barrow Way enters into the northeastern part of the county

Laois and follows in a southerly route from Jamestown onto Vicarstown.

Primarily a product of 19th Century industry and commerce, it now acts as a major tourist resource providing a range of recreation opportunities including walking, cycling, water sports and fishing. The canal has NHA designation only though it is located in very close proximity to the SAC designated River Barrow.

In addition to the rivers and canal, there are a number of lakes located throughout County Laois. The most significant of these including Ballyfin, Emo, Heywood, Grantstown, Masslough and Rathdaire are of man-made origin and were developed as ornamental features of formerly extensive 19th Century country house demesnes. The lakes which are now mainly used for recreational and amenity purposes, provide aquatic habitats of high ecological value supporting a diverse range of animal and plant life. A number of the lakes for example Grantstown are designated.

GENERAL RECOMMENDATIONS

1. To recognise the importance of river corridors for scenic value, recreation, ecology, history and culture.
2. To preserve riverside historic features and their landscape settings.
3. To conserve valuable habitats focused on and around river corridors and estuaries including European and national designations.
4. To maintain current agricultural practices that are responsible for the current strong landscape character in these LCA's.
5. To maintain attractive and unspoilt open views particularly along estuaries where the interface between river corridors and the coast creates very attractive landscapes.

6. To continue and encourage the improved management of field boundaries such as hedgerows and stonewalls and hunting copses/wooded copses.

7. To reinforce the appearance of urban fringe areas adjacent to river corridors.

8. To develop trans-county tourism river linkages.

9. To recognise the potential constraints on development created by river flood plains and the value of these flood plains as increasingly rare habitats.

10. To reflect existing vegetation species and patterns in new planting schemes in these LCAs.

11. To avoid unsustainable exploitation of watercourses, e.g. for abstraction and dilution of effluent, to the point that these water courses lose their ecological and amenity value.

12. Design of all single one-off houses to be fully compliant with Rural House Design Guidelines

TYPE 4: MOUNTAIN AREAS



The Sliabh Bloom Mountains are the only mountain range in the county, covering an area of approx. 25,000 hectares with the remaining 12,000 hectares in County Offaly.

In addition to the multiple nature designations including extensive NHA's, SAC's, and SPA, tourist infrastructure in the form of picnic areas, walking trails, archaeological artifacts, the mountains offer a sense of remoteness and a range of spectacular views over the rest of County Laois and many adjoining counties. They also contain the largest unbroken area of upland blanket peat in Ireland.

As a result, the Sliabh Blooms are particularly sensitive to many forms of development including large agricultural structures, sporadic housing, transmission lines, masts and windfarm developments. There is increasing concern about the drastic visual impact of widespread coniferous tree plantations on the mountains as well.

If allowed at all, new housing should be very low impact in design, scale, mass and site selection. Robust, well screened sites should be chosen over unscreened elevated sites in order to restrict the visual impact to as small an area as possible.

GENERAL RECOMMENDATIONS

1. To preserve and enhance the rich heritage assets of this LCT.
2. To have due regard to the positive contribution that views across adjacent lowland areas and landmarks within the landscape make to the overall landscape character.
3. To respect the remote character and existing low-density development in this LCT.
4. To implement improvements to the visitor attractions of these areas.
5. To further develop, in conjunction with Offaly County Council and other relevant stakeholders, the tourism potential of this LCT.
6. Applications for single one-off houses to be rigorously assessed and only permitted to immediate members of land owning families. There will be a presumption against speculative and holiday home type developments.
7. To restrict new development [housing, agricultural] to below the 225 metres contour line.
8. Design of all single one-off houses to be fully compliant with Rural House Design Guidelines. Use the principles inherent in the scale, spacing, orientation and siting of traditional settlement form as a guide for modern development.
9. Introduce strict design guidance in respect of coniferous afforestation. In particular, no new or replacement coniferous afforestation to be allowed on summit of mountain, generally above the 250 metres contour line. This restriction will not apply in the [unlikely] event of broadleaf afforestation being proposed.
10. To continue and encourage the improved management of field boundaries such as hedgerows and stonewalls and hunting copses/ wooded copses.
11. There will be a presumption against windfarm developments in this LCT.

TYPE 5: PEATLAND AREAS



Topography is strikingly flat, geology is generally Carboniferous Limestone (type varies according to specific location) and landcover is raised bog much of which is now exhausted and being considered for alternatives uses including afforestation, amenity and wind energy.

The Lisheen site in County Tipperary [south of Rathdowney] clearly shows the potential of using disused cutaway bogland for developing wind energy. Also, there is a current planning application with Laois County Council for a wind farm development on the extensive Bord Na Mona boglands between Rathdowney and Templetohy, County Tipperary

This landscape type could be more accurately described as a specific habitat rather than a landscape type per se. In its original state, the undisturbed raised bog is peat based and supports a dense growth of birch scrub with gorse and heather as an understorey. Manual turf cutting in some areas will have left a somewhat untidy exposed peat surface, with scarce vegetation. Commercially harvested peatland areas are generally devoid of

vegetation and present as an evenly exposed surface of peat. Such a man made landscape has a sterile and indeed industrial character. Pockets of rough grazing and scrubland also exist in this landscape character area.

In terms of location, some of the larger peatland areas are in close proximity to the larger urban settlements such as Cul na Mona between Portlaoise and Mountrath. Others are in more remote, sparsely populated place, for example in the southwest of the county.

GENERAL RECOMMENDATIONS

1. To recognise the importance of peatlands for ecology, history, culture and for alternative energy production.
2. To conserve valuable habitats including any European and national designations.
3. Introduce design guidance in respect of commercial forestry in order to integrate this landuse into the landscape.
- 4 Design of all single one-off houses to be fully compliant with Rural House Design Guidelines

TYPE 6: URBAN FRINGE AREAS



Elevations range from 20-100 metres and geology is generally Carboniferous Limestone. The majority of the centres of the county population are located in this landscape type including the largest urban settlements of Portlaoise, Portarlinton, Mountmellick and Graiguecullen. This landscape type also overlaps with LCT's 2 [Lowland Agricultural Areas] 3 [River Corridors and Lakes] and 5 [Peatland Areas].

In terms of urban fringe, the defining characteristics include the radiating road routes on which development has taken place in a ribbon-type physical form. Individual sites are often suburban in design and their more formal and sculptured character does not usually integrate sympathetically with the overall landscape context.

Another characteristic of this LCT is the frequently disused or underused nature of former agricultural lands which are now zoned and set aside for future development or may be required for orbital route schemes.

GENERAL RECOMMENDATIONS

1. To promote agricultural practices that are responsible for improving landscape character in this LCT.
2. To conserve valuable habitats including any European and national designations.

3. Diversify the urban fringe by developing mixed-use amenity areas, which will create a landscape buffer creating a transition between urban and rural areas.

4. Define the urban fringe with planting of native species and mixed woodland to tie into existing rural landscape.

5. Applications for single one-off houses to be rigorously assessed and only permitted to immediate members of land owning families. There will be a presumption against speculative developments.

6. Design of all single one-off houses to be fully compliant with Rural House Design Guidelines

TYPE 7: ROLLING HILL AREAS



Undulating with variable topography usually ranging from 70 metres to 90 metres. Geology comprises Silurian greywackes and slates with Old Red Sandstone at lower elevations.

Overall, this is a complex landscape incorporating several elements within a rolling landform. Land cover reflects this complexity with tillage and pasture agriculture, pockets of wetlands and raised bog, small coniferous plantations and occasional deciduous copses. Varied enclosures include hedgerows with significant amounts of trees and some post and wire fencing. Settlement is quite frequent though commonly dispersed. Considerable evidence of new one-off house building in the vicinity of settlements

GENERAL RECOMMENDATIONS

1. To promote agricultural practices to create a sustainable rural economy.
2. Provide incentives for smaller rural/family farms to manage their land to avoid loss of hedgerows and field patterns.
3. To conserve valuable habitats including any European and national designations.

4. Diversify the urban fringe by developing mixed-use amenity areas, which will create a landscape buffer creating a transition between urban and rural areas.

5. Define the urban fringe with planting of native species and mixed woodland to tie into existing rural landscape.

6. Design of all single one-off houses to be fully compliant with Rural House Design Guidelines

7. Maintain and enhance the 18th and 19th century estate landscapes and associated parkland & woodland to develop them as a tourism resource.

8. Reflect the 18th and 19th century field patterns in the scale of new development.

9. Restoration of historic boundaries, walls to original standard with coursing and materials to match existing.