

APPENDIX 13

LANDSCAPE CHARACTER ASSESSMENT



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Comhairle Contae Chill Dara
Kildare County Council



Minogue & Associates
ENVIRONMENTAL CONSULTANCY

COUNTY KILDARE LANDSCAPE CHARACTER ASSESSMENT



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Glossary of Terms: An explanation of how the terms is being used in the context of the *County Kildare Landscape Character Assessment*.

Analysis - the process of breaking the landscape down, usually in descriptive terms, into its component parts in order to understand how it is made up.

Approach - the stepwise process by which a landscape assessment is undertaken.

Assessment - an umbrella term used to encompass all the many different ways of looking at, describing, analysing and evaluating landscape.

Character - a distinct pattern or combination of elements that occurs consistently in a particular landscape.

Character Area - a unique geographic area with a consistent character and identity.

Character Type - a generic term for a landscape with a consistent, homogeneous character. Landscape character types may occur in different parts of the county, but wherever they occur, they will share common combinations of geology, topography, vegetation or human influences.

Characteristic - an element that contributes to local distinctiveness (e.g. narrow winding lanes, vernacular building style).

Classification - a process of sorting the landscape into different types, each with a distinct, consistent and recognisable character.

Description - verbal description of what a landscape looks like. This is usually carried out in a systematic manner, but it may also include personal reactions to the landscape.

Element - a component part of the landscape (e.g. hedges, roads, woods).

Feature - a prominent, eye-catching element (e.g. wooded hilltop, church spire).

Land cover - combinations of land use and vegetation that cover the land surface.

Landform - combinations of slope and elevation that produce the shape and form of the land surface.

Landscape - the term refers primarily to the visual appearance of the land, including its shape, form and colours. However, the landscape is not a purely visual phenomenon; its character relies on a whole range of other dimensions, including geology, topography, soils, ecology, archaeology, landscape history, land use, architecture and cultural associations.

Other Technical Terms

AOD - abbreviation for 'above ordnance datum'

Aeolian - wind-blown sediment (mainly sands)

Alluvium - water transported sediment (river muds and flood deposits)

Barrow – a general term for burial mound dating from Neolithic up to early medieval period.

Bawn - (babhun) Irish word generally taken to mean a fortified enclosure or bulwark of mud or stone walls. These are a particular feature of the Plantation Period. One of the conditions of obtaining a large land grant was that settling landlords construct a manor house or strong house surrounded by a bawn.

Biogeography - the study of plant and animal distributions together with the geographical relationships with their environments over time.

Bronze Age - (2500 BC to 500 BC) during this period, Bronze became the primary material in tools and weapons, enabling settlement to expand into lowland areas. Burials were in pits and cists, sometimes in cemeteries and much simpler than in the Neolithic period. Greater emphasis was placed on worship of the living with the construction of ceremonial megalithic stone circles.

Blanket bog - a bog that drapes all features of the terrain such as filling hollows. It is composed essentially of peat on which rough wet moorland or marshland vegetation prevails. It is formed in high rainfall and low evapotranspiration conditions.

Bluffs - steep headland, promontory, riverbank, or cliff, inland a prominent spur from a large hill

Carboniferous Period - period of the Palaeozoic era, which ranged from 345 million years to about 280 million years BP (Before Present). The Carboniferous can be divided into the Lower Carboniferous and the Upper Carboniferous separated by a boundary dated at about 325 million years BP.

Cashel - a stone fort

Cairn - a mound of stones

Chert - a hard siliceous rock, which occurs as bands or layers in sedimentary rocks. Flint is a variety of chert.

Clachan - nucleated group of farmhouses where landholdings were organised communally, frequently on a townland basis and farmed by communities with strong kinship ties. Houses were surrounded by a permanently cultivated infield, defined by a stone wall outside which lay the outfield and commonage.

Clint - flat topped rock features, which together make up a limestone pavement. Each clint is bounded by a grike.

Crannog - An Island, partly or wholly artificial, built up by dumping timber, earth and stones onto a lake or riverbed often revetted (covered) with timber piles or palisade.

Colluvial - deposition of sediment or rock particles accumulating from overland flow at the base of a slope and originating from higher slopes where sheet erosion is in progress.

Demesne - lands held by the manor for its own use and occupation incorporating farmland, gardens, woods and buildings. With medieval origins the concept survived until the break-up of the estate system in last present century.

Devonian - the fourth geological period of the Palaeozoic era extending from 395 to 345 million years. It comprises marine and continental deposits, the latter being referred to as the Old Red Sandstone.

Drumlin - an Irish term widely accepted to describe a streamlined, elongated egg-shaped hillock of glacial drift formed under a moving glacier during the ice age. The long axis of the hillock is aligned parallel to the direction of the ice flow. Drumlins usually occur in swarms or 'fields'.

Erratic - a large rock fragment which has been transported by moving ice away from its place of origin and deposited in an area of dissimilar rock types.

Esker - long, sinuous ridge of sand and gravel deposited by sub-glacial stream.

Eutrophic - the state of a water body when it has an excess of nutrients usually derived from agricultural fertilisers. The process by which a water body becomes overloaded with nutrients is known as eutrophication and leads to a dense plant population, the decomposition of which kills animal life by depriving it of oxygen.

Fault - a rupture or fracture of rock strata due to strain.

Flush - an area of soil enriched by transported materials, either dissolved mineral salts or rock particles. Wet flushes are found surrounding springs and rivulets and appear as bright green, rushy areas on a hill slope.

Fluvio-glacial - a term referring to the processes and landforms related to the action of glacial meltwater.

Fulachta fiadh - a Bronze Age cooking site. The method of cooking involved the heating of stones in a fire until they were hot enough to drop into a trough of water to bring it to the boil at which point a parcel of food could be dropped in. The shattered stones were thrown into a pile surrounding the trough on three sides, which over time formed the distinctive horseshoe-shaped mound, which may be identified today.

Geomorphology - the scientific study of the origin of landforms based on a cause-and-effect relationship.

Gley soils - Soils characterised by being affected by periodic or permanent saturation by water in the absence of effective artificial drainage. Various gley soils exist.

Infield - large open field surrounding houses within a clachan. This large open field was situated on the best ground and was divided up into a multiplicity of strips separated by sods or stones in which potatoes were grown. Each family used a variety of strips, which were periodically re-distributed (rundale). The infield was permanently cultivated, and nutrients were replenished by the use of lime, seaweed and dung.

Iron Age - (600 BC to Early Christian Period) A period of antiquity in which iron metallurgy was used for tools and weapons. Elsewhere in Europe Iron Age

communities succumbed to Rome. However, in Ireland the 'celts' survived for many centuries. The Iron Age saw the emergence of kingdoms and the consolidation of territories defended by hilltop fortifications and earthworks.

Kame - kames can result from the accumulation of glaciofluvial sediments in a supraglacial position whence they are lowered by ice melting until they form a tumultuous hummocky terrain after the ice has disappeared.

Kame terrain - an undulating landscape composed of groups of kames and/or kame terraces interspersed or pitted with kettle holes. This type of landform is sometimes termed a kame complex and is created when glaciofluvial sediments are lowered onto the sub-ice surface as the glacier or ice-sheet decays, especially when it can be established that the kame sediments were formed in separate basins of accumulation on the ice surface.

Karstic - term referring to the terrain created by limestone solution and characterised by a virtual absence of surface hollows, depressions and fissures and an extensive subterranean drainage network.

Lazy bed - garden like method of farming used in marginal areas to maximise the capacity of thin or nutrient poor soils. Manure was laid out in lines on which sods were lapped overusing a thin bladed spade (loy) to create a series of ridges and furrows of equal width.

Lower Palaeozoic - first of the eras of geological time lasting from about 600 million years to 240 million years BP. In Europe it comprises the Cambrian, Ordovician and Silurian (which together constitute the Lower Palaeozoic) and the Devonian, Carboniferous and Permian that form the Upper Palaeozoic.

Lough - a term for a body of water, either enclosed as a fresh-water lake or a long, narrow penetration of sea water extending inland from the ocean.

Lumper - a high bulk variety of potato, which tolerates poor soils and requires little manure.

Limestone pavement - a glacially planed and smoothed surface of bare limestone, which has subsequently been dissected by vertical joints (grikes) to produce clints.

Megalithic tomb - a construction made of large stones, dating to the Neolithic and Bronze Age. Four types of megalithic tombs have been identified on the basis of architecture, excavation artefacts and distribution patterns: court, portal, passage and wedge. The various tomb types have been interpreted as a chronological sequence, starting with court tombs and ending with wedge tombs. However, the extensive age range provides evidence for a considerable overlap and other explanations for their distribution in the landscape is required.

Mesolithic - (9000 BC - 4000 BC) an archaeological term meaning 'middle stone age' and used to describe the culture of the early Post Glacial period. It is a period of transition when mankind moved from the hunter gathering practices of the Palaeolithic of the last glaciation and the farming and pottery of the post glacial Neolithic. Mesolithic inhabitants frequently lived along coasts, rivers or lake shores and may have used fire to clear forested land for semi-permanent villages.

Mesolithic tool kits reflect a need to adapt to the changing environment and are characterised by the presence of microliths and stone axes.

Metamorphic rocks - rocks that have been altered from their original state by various metamorphic processes, generally as a result of mountain building and the intrusion of magma.

Midlandian glaciation - the name given to the final glacial stage of the Pleistocene.

Moraine - accumulation of rock debris carried by glacier or ice sheet and deposited by ice to become a depositional landform.

Motte-and-bailey castle - the earliest form of Norman castle established along key communication routes after the conquest. An inner courtyard was protected by simple earth and wood defences.

Mudbanks - masses of fine-grained limestone that were formed by the production of huge amounts of calcium carbonate by organisms. These rose above the general level of the sea floor in a manner similar to modern day coral reefs.

Neolithic - (4000 BC - 2500 BC) an archaeological term meaning 'new stone age' which describes the period of antiquity in which people began to use ground stone tools, cultivate plants and keep domestic livestock. The gradual spread of farming though Europe brought with it the custom of communal burial in megalithic tombs.

Outcrop - the area where a particular rock type, stratum or vein appears at the surface.

Outfield - poorer, more marginal or boggy ground where occasional reclamation might be made for the purposes of growing potatoes.

Plantation - a newly established settlement generally associated with a period of subjugation of the native Irish elite and colonisation by a Protestant and British landed class in the late sixteenth and early seventeenth century.

Rath - a type of ring fort found in Ireland mainly dated to the early Christian period, c. 5th-10th centuries AD.

Raised bog peat - under suitable climatic conditions this is built up on top of fen peat. As the depth of the fen peat increases, its living vegetation is less influenced on ground water and becomes more dependent on atmospheric precipitation as a source of moisture. This change in moisture supply results in the growth and development of a raised bog with its characteristic convex surface and acid plant remains.

Riparian habitat - riverbank habitat.

Rundale - periodic re-distribution of strips of land in the infield of a clachan practically universal throughout the poorer lands of the west of Ireland. The re-distribution of strips of land ensured a fair distribution of all soil types to each family of the clachan.

Sandur - An outwash plain formed of glaciofluvial sediments deposited by meltwater outwash at the terminus of a glacier consisting largely of sand and/or gravel.

Semi-natural vegetation - any type of vegetation that has been influenced by human activities, either directly or indirectly.

Silurian period - third period of the Palaeozoic lasting from 440 million years ago to about 395 million years ago. Its rocks comprise thick layers of sandstones, shales, mudstones and limestones.

Souterrain - in most cases a long stone-built chamber sunk into the ground and roofed with stone slabs, usually beneath a house and intended for cold storage.

Turbary - the right of digging turf on another man's land or the ground where turf is dug.

Tundra - the tundra lies between the polar region of perpetual snow and ice and the northern limit of tree growth. The term is used to describe landscapes that are characterised by treeless vegetation consisting of mosses, lichens, sedges and stunted shrubs growing on permafrost. During the quaternary, tundra like conditions were translated south as continental ice sheets expanded.

Vernacular - buildings constructed in the local style, from local materials. Concerned with ordinary rather than monumental buildings.

Veteran tree - a tree that is of interest biologically, culturally or aesthetically because of its age, size or condition

1 LANDSCAPE CHARACTER ASSESSMENT OF COUNTY KILDARE

1.1 INTRODUCTION

Kildare County Council (KCC) commissioned Minogue Environmental Consulting (MEC) Ltd in association with Aegis Archaeology, Loci and Geoscene to revise and update the Landscape Character Assessment of County Kildare. The preparation of the revised LCA contributes to the achievement of Action LRA1 in Chapter 13 of the County Development Plan (CDP) 2023-2029, which seeks to review and update the LCA within two years of the adoption of the CDP, as follows:

LR A1: Review and update the County Landscape Character Assessment, within two years of the adoption of this Plan¹, having regard to the European Landscape Convention Florence 2000, in accordance with all relevant legislation and guidance documents and to ensure consistency with the forthcoming National and Regional Landscape Character Assessment. All landscape character designations will be fully reviewed having regard to updated best practice guidance, LCAs of adjoining Local Authorities and other local relevant considerations, including clusters of biodiversity rich areas and the Council's Green Infrastructure Strategy.

In addition, the adopted CDP includes a series of inter-related Actions regarding landscape character, scenic routes and protected views as follows:

- To investigate the feasibility of preparing a Historic Landscape Characterisation of the county (LR A2).
- To review and update all Scenic Routes and Views in the county within two years of the adoption of the Plan (LR A6); and
- To prepare further detailed guidance in relation to views and prospects available along scenic routes occurring within the boundaries of Local Area Plans (LR A7).

1.2 SCOPE OF WORK

Reflecting the above actions in the CDP, the scope of the project is as follows:

1. To review and update the existing Kildare LCA to identify significant changes, deficiencies, or lack of any required information.
2. To provide a baseline description and analysis of the landscape resources of the County including landscape character types and areas.
3. To undertake a historic landscape character assessment of the county.

¹ A variation of the Kildare CDP will be required to integrate the LCA and its policy context

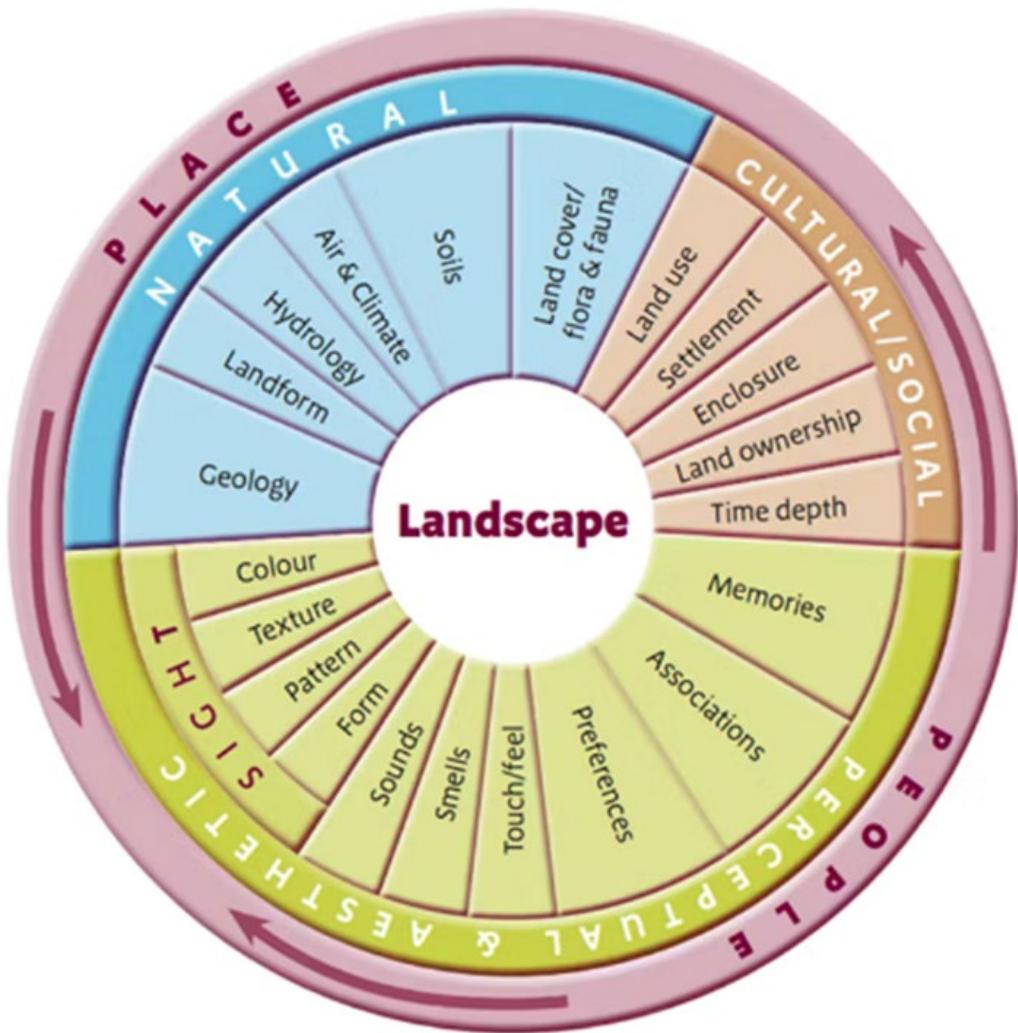
4. To advise on the landscape character sensitivities of the county and to advise on the landscape character capacity of the county in relation to the built development, including, but not confined to rural development, transport infrastructure and renewable energy projects.
5. To review, assess and evaluate all Scenic Routes and Views in the county (Tables 13.5 - 13.7 of Chapter 13 and Appendix 7 of the County Development Plan refers) and the scenic routes and views identified during the preparation of the County Development Plan along with those identified in the extant and forthcoming Local Area Plans.
6. To prepare detailed guidance in relation to all views and prospects occurring within the boundaries of Local Area Plans.

1.2.1 WHAT IS LANDSCAPE CHARACTER ASSESSMENT?

Landscape Character Assessment (LCA) is the process of identifying and describing variation in the character of the landscape. Landscape Character Areas (LCAs) identify and explain the combination of elements and features that make landscapes distinct from one another by mapping and describing Landscape Character Types (LCT) and Areas (LCAs). This approach recognises the importance of place and how people perceive their landscapes. Landscape Character Assessment has the potential to deepen our understanding of how the landscape is shaped and identify opportunities for further action (e.g., forward planning, tourism and recreation, renewable energy, agri-environmental schemes, enhancement of the landscape character).

LCA can inform planning policy, development management and guide/inform decision-makers in assessing development proposals that will change the landscape. LCA should facilitate decisions that are in keeping with national and regional landscape objectives. The character of a valued landscape, once identified, can be maintained and enhanced with proper guidance. The LCA process is not designed to prevent change in the landscape. It is an aid to decision making, to describe what the landscape is like today, how it evolved, and to identify possible trends for future change. Figure 1.1 below presents the landscape wheel that demonstrates all the strands and elements that contribute to landscape character.

FIGURE 1-1 LANDSCAPE WHEEL²

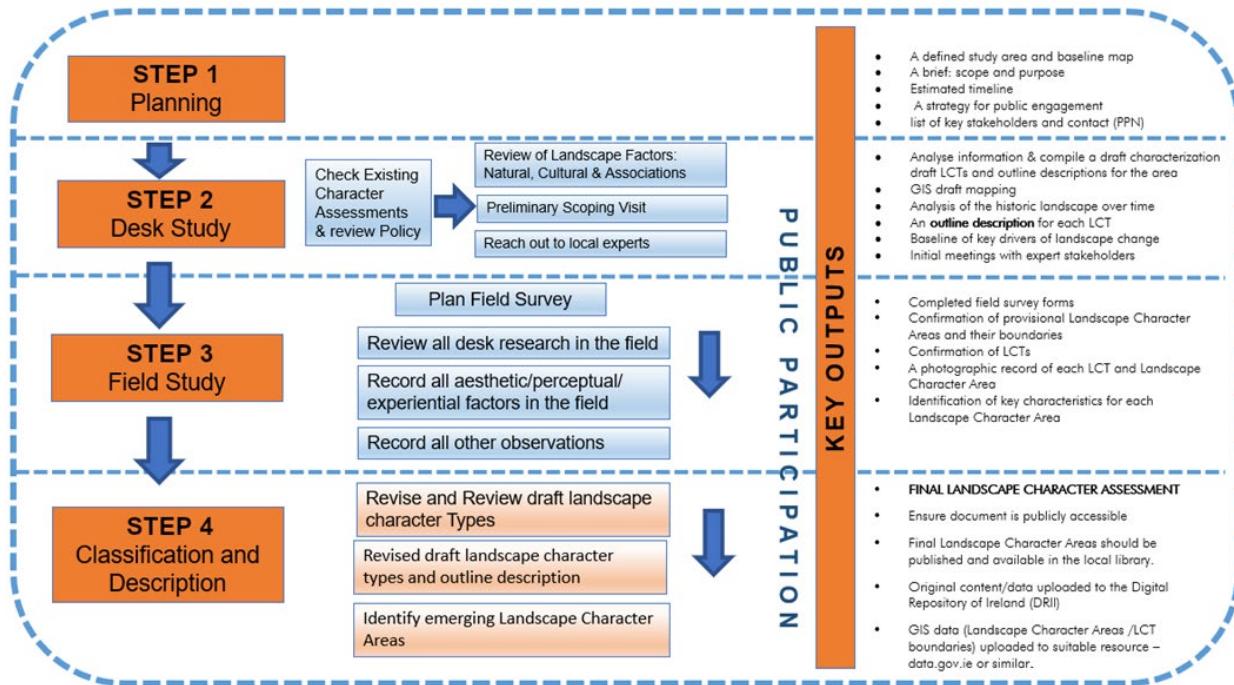


1.3 METHODOLOGY

The methodology applied in undertaking this baseline LCA was informed by the LCA Reframe Toolkit (EPA 2024). As the project brief related to revision and updates to the current LCA, the existing LCA was reviewed as a first step and thereafter the EPA Reframe toolkit was applied, as illustrated below in Figure 1.2. Please see Annex A for further detail on methodology.

² Swanwick, C., Land Use Consultants (2002)

FIGURE 1-2 LCA METHODOLOGY



1.4 STRUCTURE OF THIS REPORT

The remainder of this report is structured as follows:

- Section Two: Evolution of County Kildare's Landscapes
- Section Three: Landscape Character Types
- Section Four: Landscape Character Areas
- Section Five: Consultation
- Section Six: Drivers of Landscape Change
- Section Seven: Landscape Character Guidance- revision to Chapter 13 of the Kildare CDP Landscape Section
- Section Eight: Review of scenic views in Appendix 7 of CDP. Review and guidance on views within the current Local Area Plan boundaries.

Annex A: Methodology

Annex B: GIS Datasets

Technical Paper: Detailed assessment tables evaluating Landscape Character Sensitivity and Capacity-provided under separate cover.

2 EVOLUTION OF THE KILDARE LANDSCAPE

2.1 INTRODUCTION

To understand the Kildare landscape, it is necessary to outline the physical and historical influences that have created the contemporary landscape we experience today.

The interplay between geology, glaciation, soil formation, hydrology and ecology has formed the basic materials upon which human activities have impacted. This is, however, a constant interrelationship – humans need to access freshwater, and the preference for farming on good well-drained land has influenced the pattern and distribution of human activities in the county over the past several millennia. While human habitation and activity have been the most recent factors to shape the Kildare landscape, these have exerted the greatest influence on landscape character. Patterns of land ownership, settlement, agricultural and ritual activities have all been modified in response to local environmental conditions.

A description of the physical landscape of the county is presented below in Section 2.2 and is then followed by an overview and analysis of human activities within the landscape from prehistoric to contemporary times in Section 2.3.

2.2 PHYSICAL INFLUENCES -A NATURAL HISTORY OF COUNTY KILDARE

2.2.1 SOLID GEOLOGY

Landscape topography in Kildare owes its shape and form to the rock foundation lying beneath the surface layering of soil, vegetation, water, and human-constructed cover. The diverse character of Kildare's geological makeup is the culmination of millions of years of geological events and processes.

The earliest chapter of Kildare's geological story took place 465 to 445 million years ago, during two periods of Earth's history known as the Ordovician and the Silurian. Rocks formed at this time are found in the hilly terrain trending north-eastwards from Red Hill and Dunmurray Hill, to the Hill of Allen. The hills comprise hard rocks (basalt, andesite lava, shale) that formed in an ancient ocean (Iapetus Ocean). Geologists refer to this northeast-southwest oriented hilly terrain as the 'Kildare Inlier'. Further east, near the Wicklow border, where the terrain lies consistently above 100 m elevation, similar aged Silurian rocks are found, consisting of greywacke (hard marine sandstone), siltstone, and shale. Ordovician and Silurian rocks occupy 20% of the total area of County Kildare. Apart from some exceptions, such as the Curragh, and the Cappagh Hill area in the north of the county, it

can be assumed that wherever topography has consistent elevation above 100 m, the underlying bedrock geology consists of hard, resistant Ordovician or Silurian bedrock.

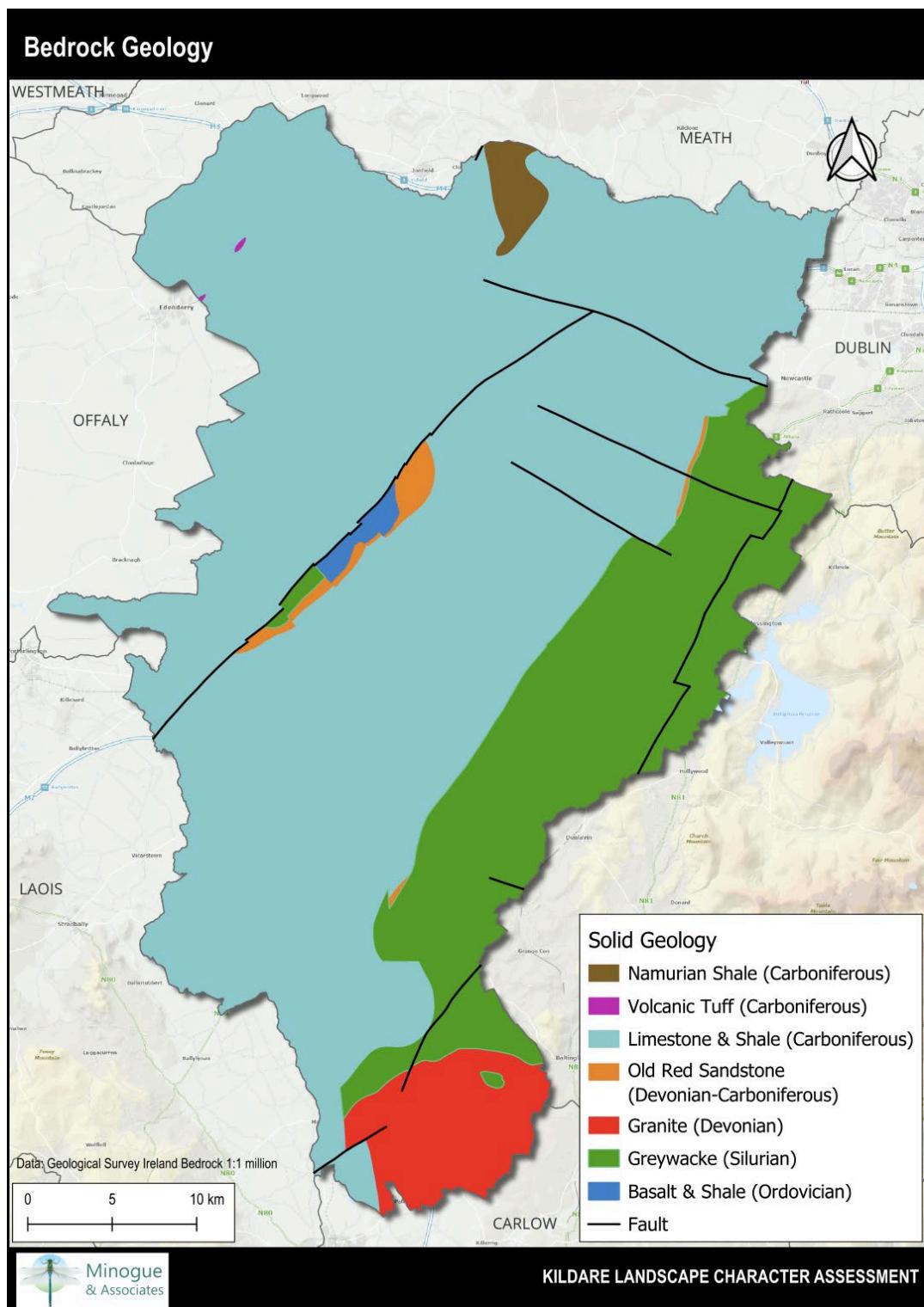
The landscape at the southernmost lobe of the county, near Castledermot, is almost entirely formed of granite bedrock. This granite originated as a plume of magma that was squeezed into the crust around 405 million years ago, during the Devonian Period. Known as the Tullow Pluton, this body of granite is just one of several granite units that make up the extensive granite region in Leinster, known as the Leinster Batholith. Tullow Pluton granites in south Kildare are hard, crystalline rocks, and are found on terrain above 70 m. The granites occupy around 4.5% of the total area.

Sandstone of Devonian-Carboniferous age is found along the southeast side of the Kildare Inlier hills. These rocks were deposited when Ireland was situated on the margin of the Old Red Sandstone continent. These hard, quartz-rich rocks occur mostly along terrain above 100 m.

Rock-type is not the sole factor in the relationship between topography and geology: geological structure (folds and faults) is also a controlling factor in bedrock landform development. However, a simple rule of thumb can be adopted, in that hard bedrock in Kildare has proved stubbornly more resistant to millions of years of erosive processes when compared to softer limestone-dominated bedrock of Carboniferous age. The exception being the Cappagh Hill area west of Kilcock, wherein lies the youngest bedrock in Kildare: hard Namurian black shale of Carboniferous age.

Almost 75% of the county is underlain by bedrock that formed from lime-mud sediment laid down on a shallow seafloor around 330 million years ago, during Carboniferous times. Most of the terrain occupied by these Carboniferous rocks is low ground covered by a thick blanket of glacial sediments (Quaternary-age) or peat deposits. Kildare's Carboniferous bedrock comprises mostly limestone and shale, as well as oolites, dolomite, sandstone and some volcanic tuff (ash) in the northwest. These rocks are found across the Irish midlands, and when ground up by ice sheets, such as occurred during recent Quaternary glaciations, and mixed into glacial sediments, tend to contribute to the development of fertile soils. Figure 2.1 presents the main bedrock geology as discussed above.

FIGURE 2-1 BEDROCK GEOLOGY (ADAPTED FROM GEOLOGICAL SURVEY IRELAND BEDROCK GEOLOGY 1:500,000)



2.2.2 SOILS

Of the eleven great soil groups recognised in Ireland (EPA-Teagasc Soil Information System), the major soils groups in Kildare comprise Luvisol (45%); Peat (20%); Surface Water Gley (12%); Alluvial (7%); Groundwater Gley (7%); and Brown Earth (5%).

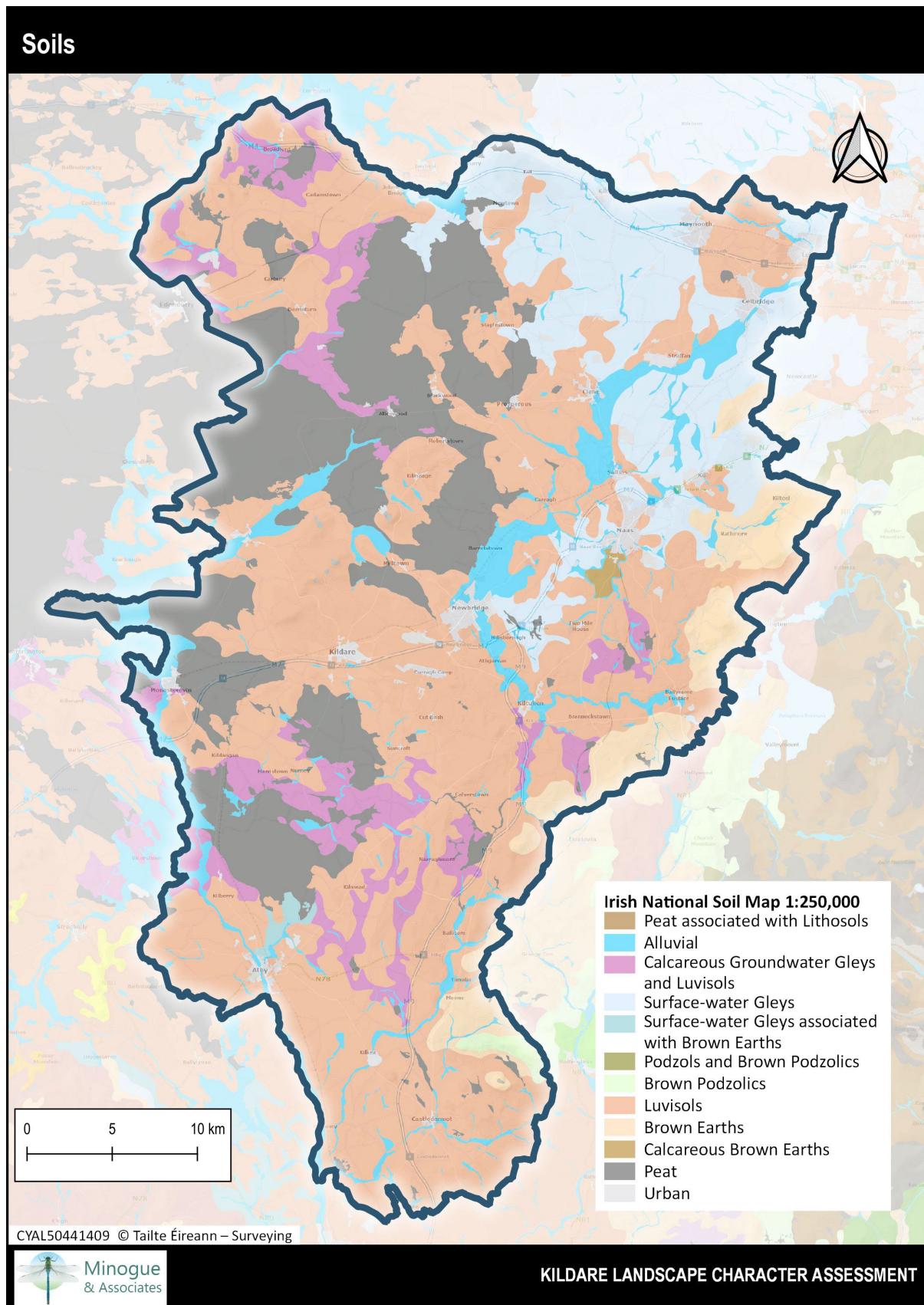
Broadly considered, the parent material of soils across the county comprises glacial till derived from limestones. Deep luvisols and surface-water gleys have developed on limestone-dominated glacial tills across the flat to undulating lowland landscapes of limestone-dominated bedrock. Luvisols are the most common soils across the limestone lowlands of Ireland and are found throughout Kildare. Surface-water gleys mainly occur in the northeast of the county. Gley soils tend to be wet and are susceptible to seasonal or continuous waterlogging. Owing to a high clay content, gleys are considered heavy from a farming perspective and have more limited agricultural uses. Some benefit from artificial drainage is possible, such as in the northeast. Although discontinuous in coverage, peat is a dominant soil type across the western, low-lying half of the county. Occurring in raised bogs, significant areas of this cover is cutover bog.

The elevated terrain of the Kildare Inlier and Curragh roughly separates the Kildare peatland into southern and northern units. Groundwater Gley soils tend to occur adjacent to peat cover, and in isolated eastern areas below 150 m.

Soils on the upland fringe along the Kildare-Wicklow border are mainly acidic in nature, comprising Brown Earths and Brown Podzolics. The acidic nature of the soils is directly related to the acidic Silurian sedimentary bedrock along the uplands, and the close proximity to the acidic granite mountain terrain further east. Alluvial soils are present along the valley floors of the River Barrow, River Liffey, Slate River, River Greese, and River Blackwater (Longwood).

Pollardstown Fen, Ireland's largest remaining calcareous spring-fed fen, is situated on the northern margin of the Curragh, west of Newbridge. The fen occupies a northwest - southeast oriented shallow depression, into which around 40 springs supply a continuous supply of water. The springs seep from lime-rich mineral soils around the fen margins and provide a constant supply of calcium-rich water. Figure 2.2 presents the great soil groups of the county.

FIGURE 2-2 GREAT SOIL GROUP (NATIONAL SOIL MAP OF IRELAND) - COUNTY KILDARE (EPA-TEAGASC IRISH SOIL INFORMATION SYSTEM 1:250,000)



2.2.3 TOPOGRAPHY AND DRAINAGE

In a county as predominantly low-lying as County Kildare is, any variation in topography from the lowland plains and boglands is particularly noticeable on the landscape. Hills and elevated ground in the central and northern regions, though not rising above 250 m in height, stand in marked contrast to the low-lying terrain. Only along the eastern border with County Wicklow, does the terrain maintain a consistent elevation over 100 m, to the eastern elevated plateau that ascends to uplands and mountain summits along the western fringe of the Wicklow mountains.

Almost three-quarters (74%) of the county lies below 100 m elevation, with the other one-quarter almost entirely between 100 m and 300 m. A very small portion of the eastern uplands to the north of Blessington are higher than 300 m, with maximum summit heights ranging from 332 m (Sleveroe) to 379 m (Cupidstown Hill). The lowest elevations in the county are around 30 m above sea level.

The topography of the County Kildare can be considered in distinct geographical regions based on topography: the southern and central plains; the northwestern plains and boglands; the northeastern lowlands; the central hills and the Curragh, and the eastern uplands. The central hills, known geologically as the 'Kildare Inlier', are from south to north: Red Hill (197 m); Dunmurry Hill (233 m); Grange Hill (223 m); Boston Hill (159 m); the Hill of Allen (219 m); and Kilmeage Hill (133 m). The elevated terrain of the Curragh ranges from 100 m to 140 m, forming a topographical 'bridge' running NW-SE between the Kildare Inlier and the eastern uplands. Isolated hills in the north of the county include Cappagh Hill (137 m). Carbury Hill (142 m) and its sister hills lie to the north of Derrinturn in a region of otherwise low-lying plains.

County Kildare is drained via three main catchment areas: the Barrow (51%; 87364km²), Liffey and Dublin Bay (35%; 59642 km²) and Boyne (13%; 22404 km²). The Slaney and Wexford Catchment drain a negligibly minor area (31 km²). Much of the Liffey and Dublin Bay water originates in the uplands to the east of the county. The Barrow catchment drains much of the western peatlands. The Boyne drains the very low ground and peatlands in the northwest of the county. The major rivers include the rivers Liffey and Barrow, as well as the smaller but important Greese, Glash, and Blackwater Rivers to name a few. Much of the drainage pattern in the west of the county derives from the peat wetlands.

Figure 2.3 presents the river network classified under the Water Framework Directive with elevation; Figure 2.3 presents the catchments and rivers of County Kildare.

FIGURE 2-3 RIVER NETWORK SHOWING WATER FRAMEWORK DIRECTIVE ORDER - COUNTY KILDARE
(EPA RIVER NETWORK ROUTES)

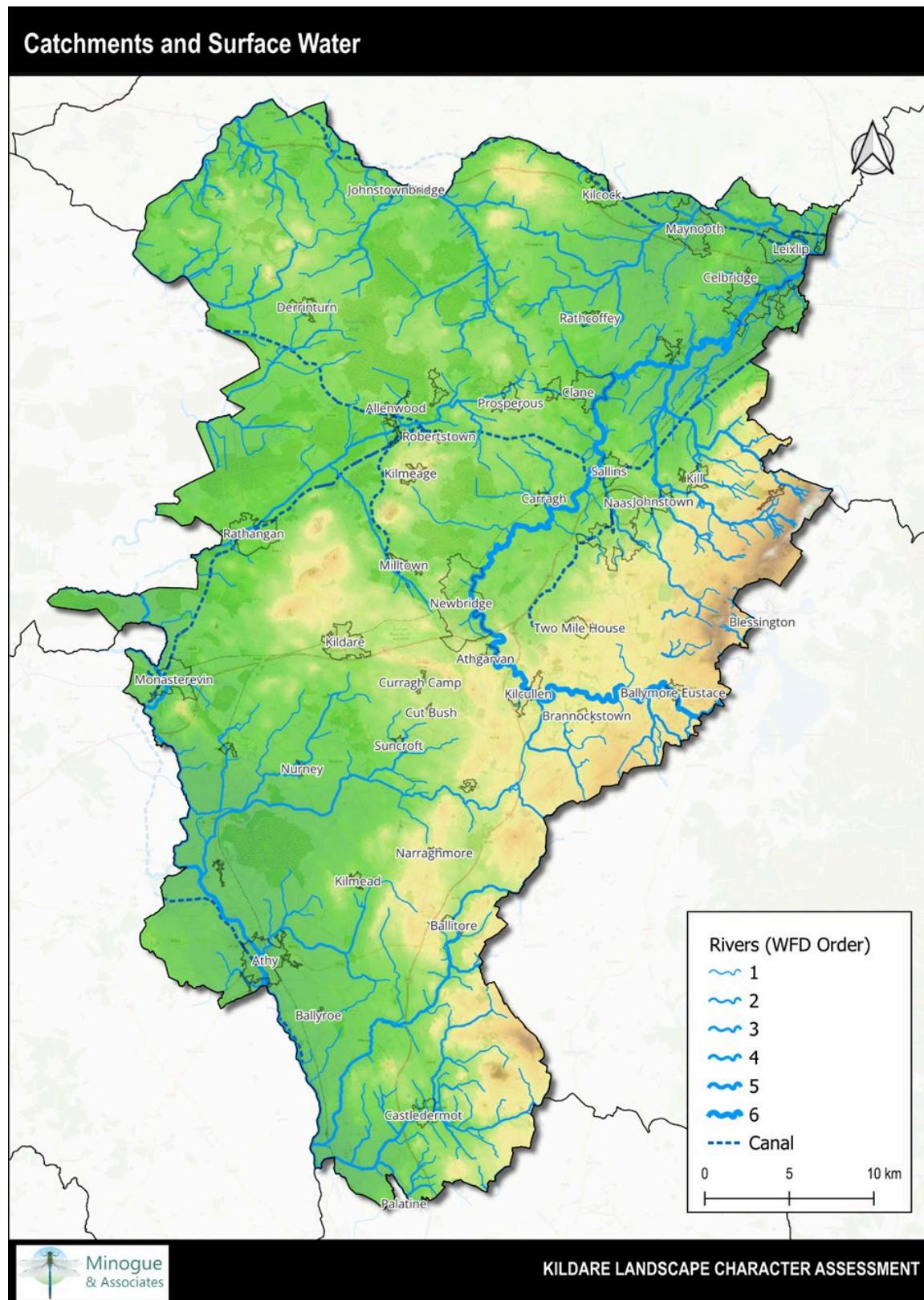
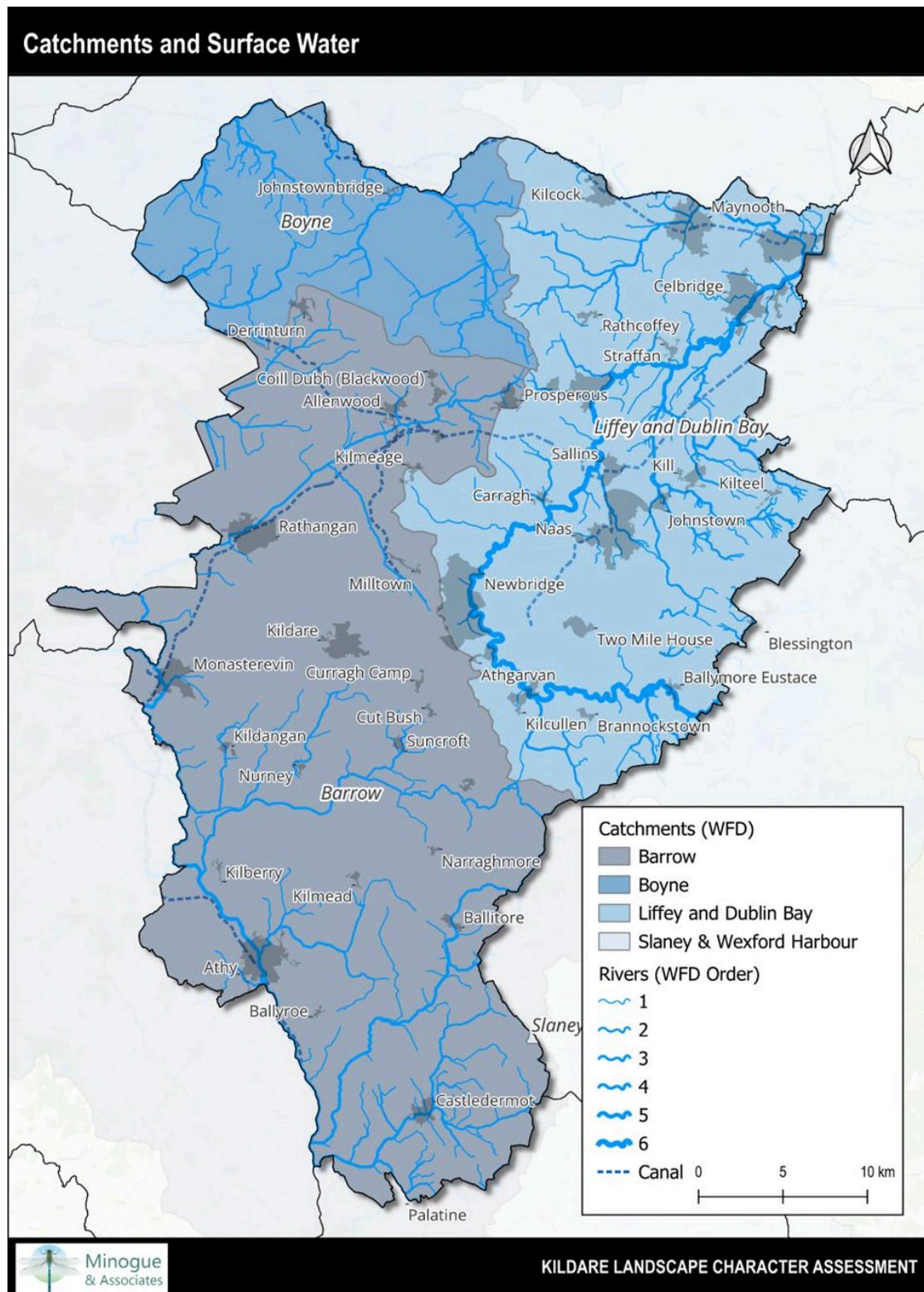


FIGURE 2-4 WATER FRAMEWORK DIRECTIVE WATER CATCHMENTS AND RIVER NETWORK SHOWING WATER FRAMEWORK DIRECTIVE ORDER - COUNTY KILDARE (EPA DATA)

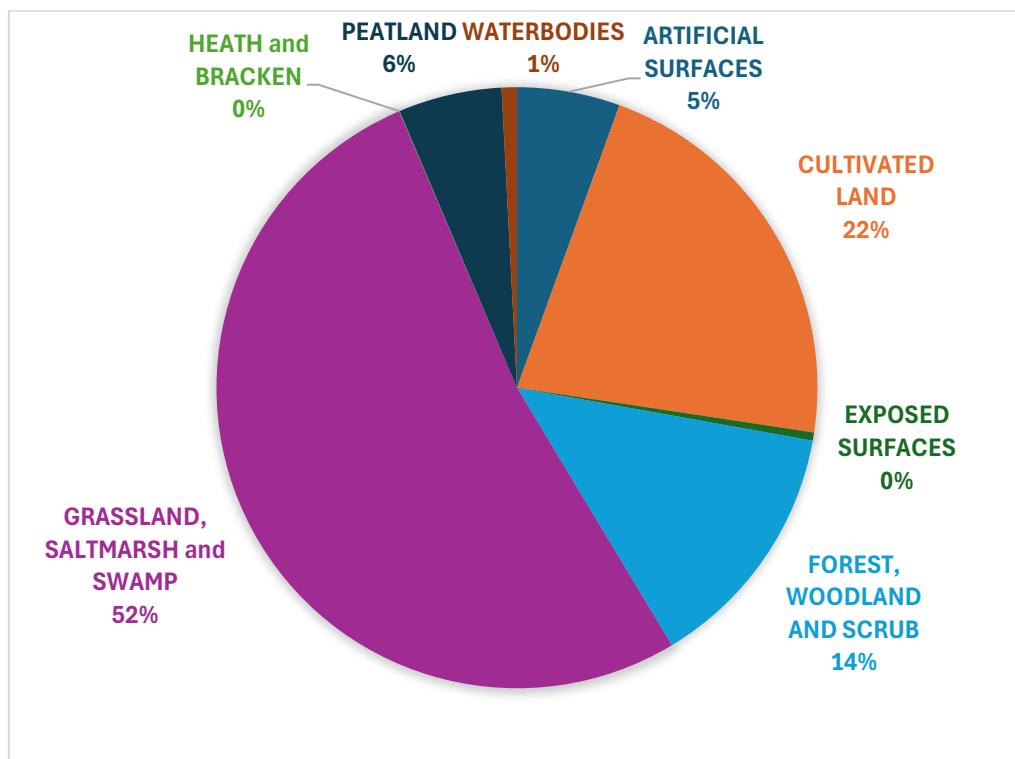


2.2.4 LAND COVER AND BIODIVERSITY

The various soils found in County Kildare, as summarised above, have developed from a combination of factors, primarily the geological parent material, glacial processes, climate and topography. The primary geological areas have given rise, over time, to two principal soil types, though clearly, at more local level, these vary and have been subjected to human activities for hundreds of years. By 5,000 years ago, the landscape evolved from open tundra to woodlands. The exception to this were mountainous areas above the treeline, bogs and watercourses. The arrival of the Neolithic farmers led to profound landscape and environmental changes in response to their agricultural practices and the reduction in foraging lifestyles. Subsequent settlers to Ireland introduced tree species that we now consider native- examples include lime, hornbeam and sycamore.

Today, a range of habitats are associated with the soil types and historical human activities. These include river systems, raised bogs, woodlands and improved grassland. An analysis of the EPA National Land cover Map Level 1 (8 categories) of the County reveals that the greatest land cover at county scale is grassland, and swamp³ (52% land cover) followed by cultivated land (22%) and Forest, woodland and scrub (14%).

CHART 2-1 NATIONAL LAND COVER LEVEL 1 PERCENTAGE (EPA)



Although peatland and waterbodies account for 6% and 1% at county scale; these habitats are the most significant in terms of Natural Heritage designations. The county supports 8 internationally designated sites; these include 7 Special Areas of Conservation (SAC) and one Special Protection Area (SPA). The SACs are designated for several habitats, most

³ Note: The National Land cover includes saltmarsh within the grassland and swamp category; given the absence of marine or coast in the county, the reference to saltmarsh is removed.

commonly wetland habitats comprising raised bogs, mires, fens and degraded raised bogs still capable of natural regeneration and specialist species which rely upon these habitats. The River Barrow and Nore SAC is extensive and forms a significant ecological corridor from County Laois, forming much of the western boundary of Kildare and draining southwards through Carlow, entering the sea at Wexford estuary. The principal habitats relate to riparian habitats and several species including otter, and salmon. The only SPA in the county is designated for Greylag Goose at Poulaphouca Reservoir on the boundary with County Wicklow.

There are 23 designated or proposed Natural Heritage Areas (NHAs), within the county, ranging from wetlands sites such as Carbury Bog to Oakpark a woodland site on the Carlow-Kildare border. The River Liffey is partially designated as a proposed NHA around Osberstown and the Liffey Bank at Athgarvan. Both Grand and Royal Canals are also proposed NHAs and represent a significant east- west corridor nationally. Figure 2.6 presents the sites within the county designated for Natural Heritage.

Wetland and waterbirds move across the landscape of the county, with wetland habitats of particular significance, outside the designated sites⁴ including the Grasslands near Dunlavin, and Gilltown Bridge near Kilcullen. The River Barrow also supports wetland and waterbirds and species including the Golden Plover are recorded on the Curragh. The Kildare Wetland survey (2014) mapped 141 wetland sites within the county.

Hedgerows, treelines, smaller wetlands, stone walls, scrub, and demesne planting are further significant ecological linkages across the landscape, as well as smaller areas of peatland that are not designated or are cutover bog. Figure 2.7 presents Green and Blue Infrastructure map at county level.

⁴ IWM 106 (2019) Irish Wetland Bird Survey 2009/10 - 2015/16

FIGURE 2-5 DESIGNATED CONSERVATION SITES - COUNTY KILDARE (NPWS, RAMSAR DATA)

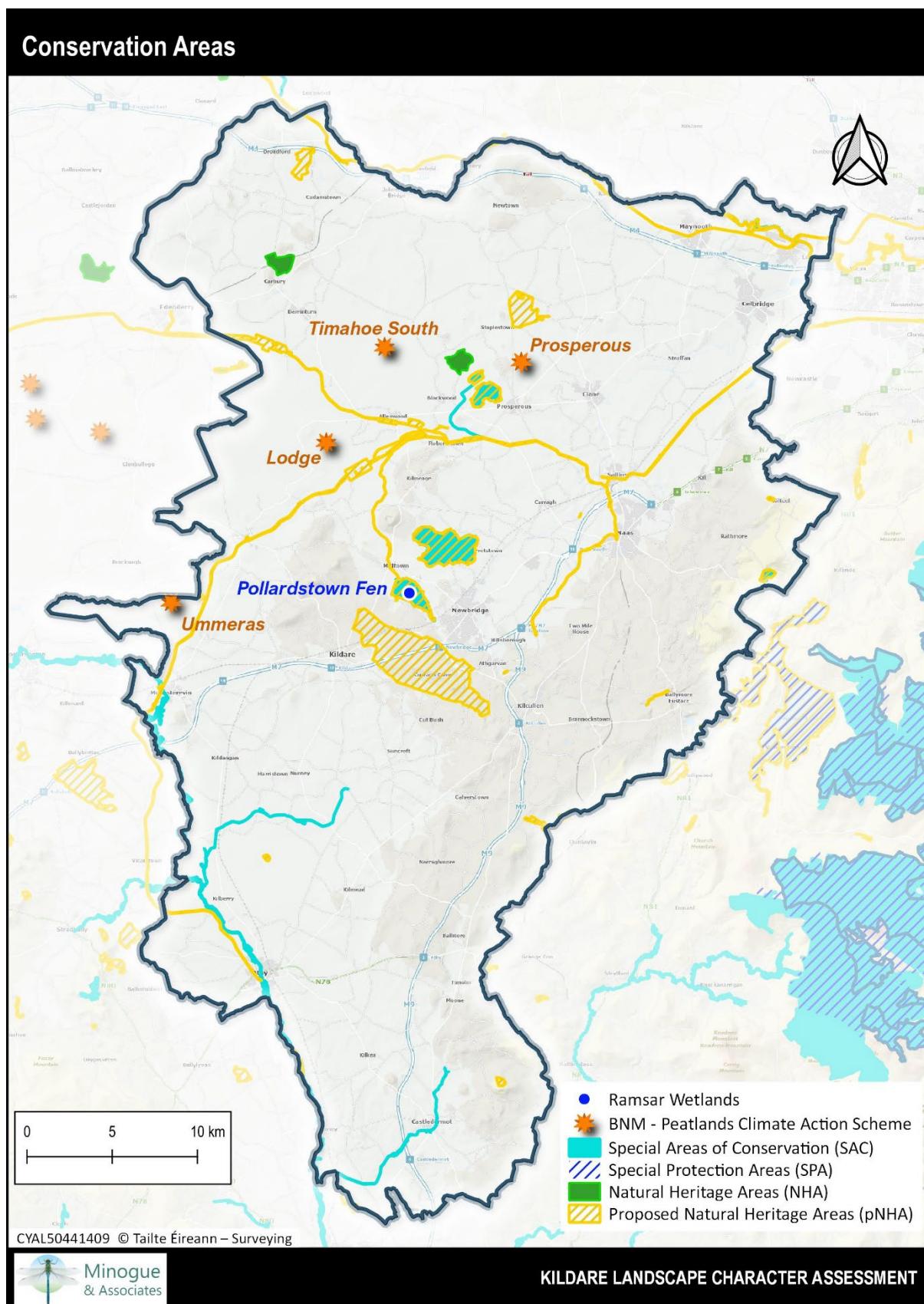
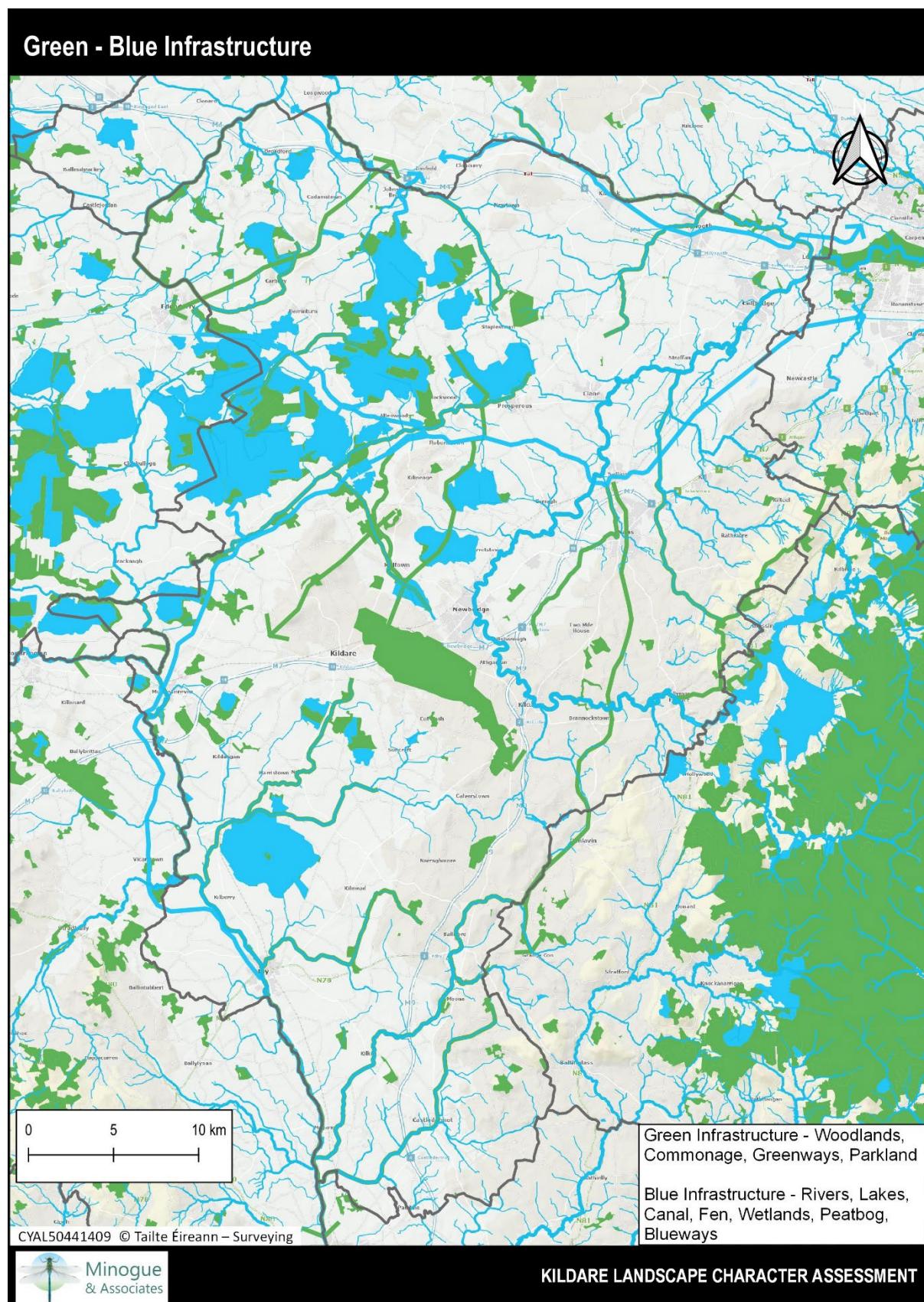


FIGURE 2-6 GREEN - BLUE INFRASTRUCTURE - COUNTY KILDARE (NPWS, RAMSAR, KCC, EPA DATA)



2.3 HUMAN INFLUENCES - BIOGRAPHY OF PLACE, A SETTLEMENT HISTORY OF COUNTY KILDARE

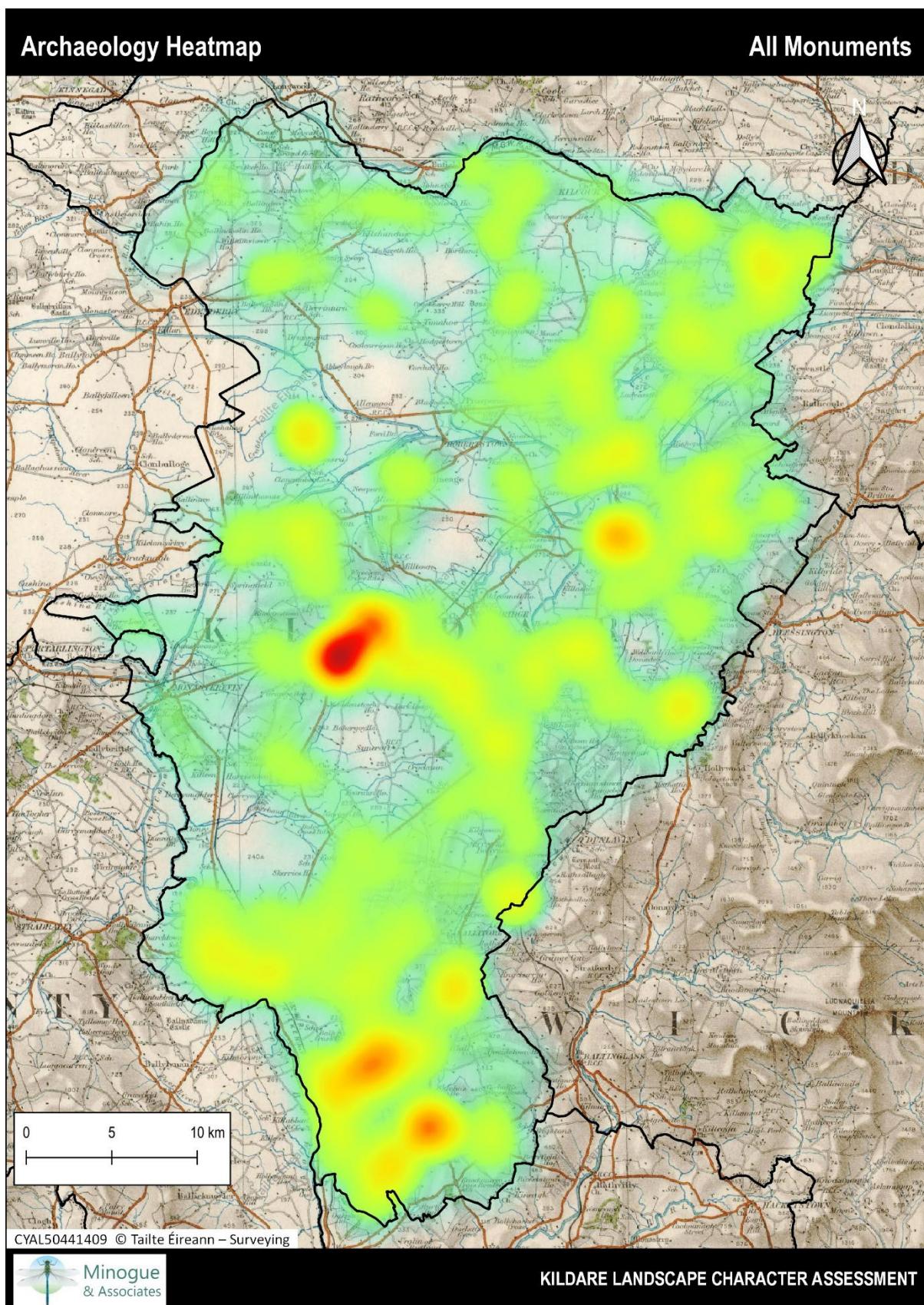
2.3.1 OVERVIEW

In this section, an overview is provided of past human activity in County Kildare and the influence of past generations on the landscape is outlined. A particular focus is paid to elements from the past that remain tangible within the contemporary landscape and highlight the legacy that previous inhabitants of the county have left. This Human Influences section aims to provide a distinctive archaeological and historical dimension of the present-day environment of county Kildare and of the human processes that have formed it over time. Figure 2.8 presents a heatmap created by all the sites on the Sites and Monuments Record, thereafter each archaeological period is presented as a heatmap in subsequent sections.

PHOTO 2-1 ROUND TOWER AT OLD KILCULLEN

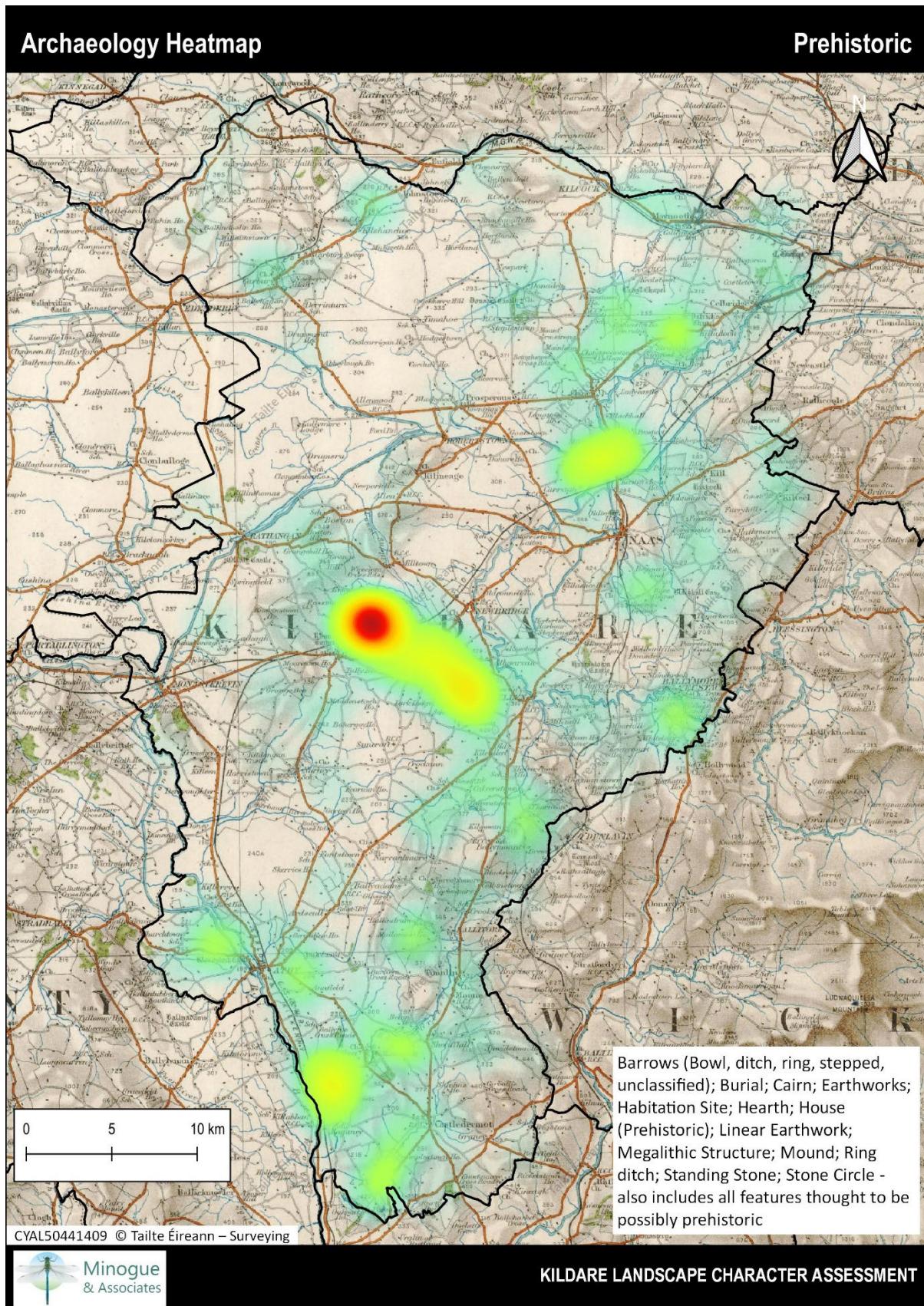


FIGURE 2-7 HEATMAP BASED ON ALL SITES AND MONUMENTS RECORDS



2.3.2 PREHISTORIC PERIOD (C7,000 BC TO AD400)

FIGURE 2-8 PREHISTORIC PERIOD HEAT MAP OF COUNTY KILDARE



The prehistoric period is the longest period of human activity and is usually subdivided into the Palaeolithic (Old Stone Age), the Mesolithic (Middle Stone Age), and the Neolithic (New Stone Age) combined together as Early Prehistory. Later Prehistory is formed of the Bronze and Iron Age, characterised by the introduction of metals, first copper and later Bronze and Iron. County Kildare has a wealth of archaeological heritage, particularly at the Curragh where a large amount of prehistoric burial monuments such as barrows of various type are recorded.

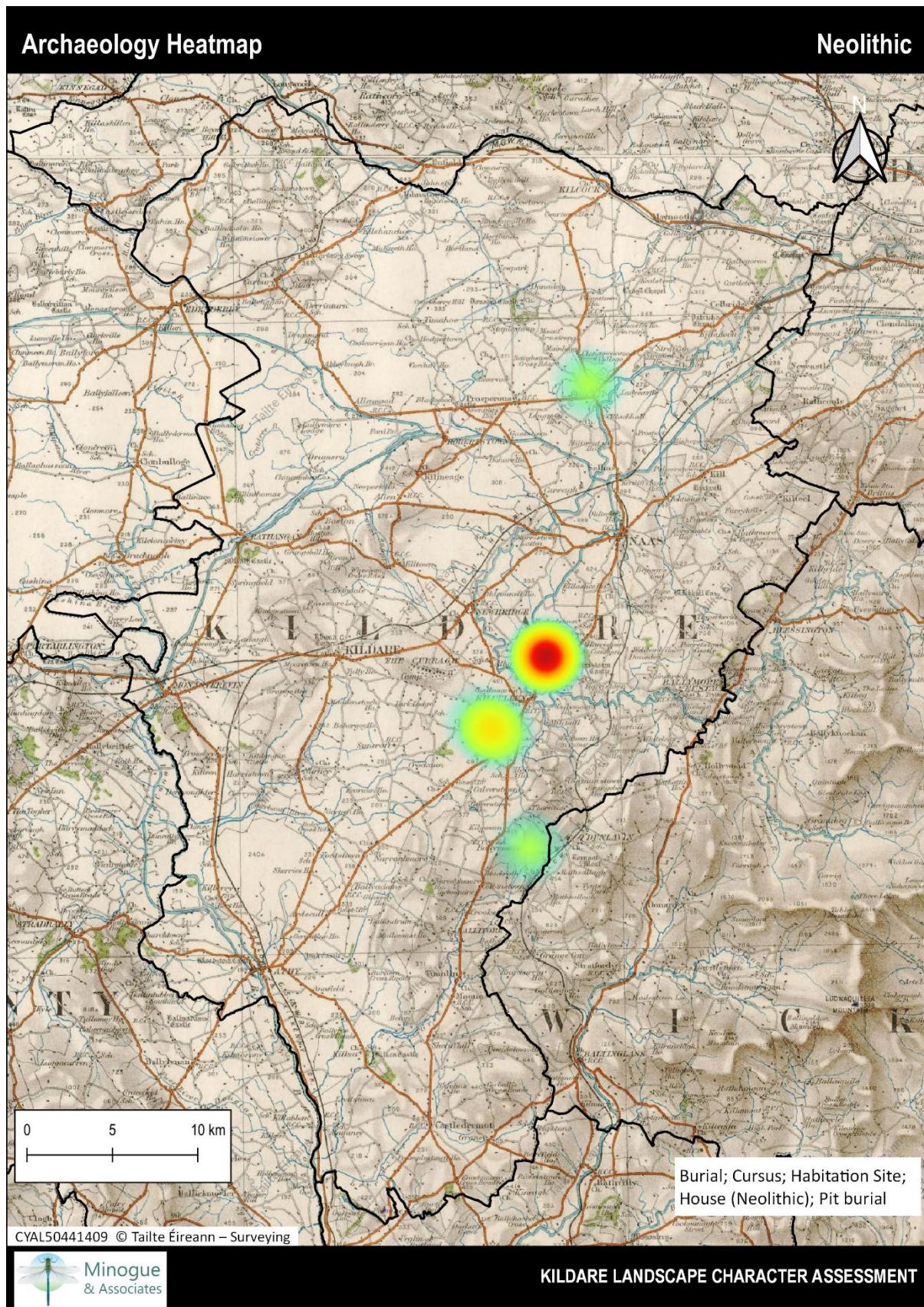
The Iron Age Royal site of Dún Ailinne (together with Cashel, Hill of Uisneach, Navan Fort, Rathcroghan Complex, and Tara Complex) is part of a submission to be inscribed on the list of UNESCO World Heritage. The earliest definitive evidence of human settlement activity in Ireland comes from the Mesolithic Period, for which evidence begins around 7,500 BC. The communities living at this time followed a way of life based on hunting, gathering and fishing when much of the landscape was covered in forest. Throughout the Mesolithic period the environment changed from a Continental climate to a wetter Atlantic type of climate, with a change in forest cover from open woodlands of birch, Scots pine and hazel to one dominated by oak, elm and alder. at the same time there was a rise in sea level, while lakes began to fill in and bogs develop.⁵

Mesolithic sites are rare; evidence of Mesolithic activity can be identified in lithic scatters, such as the site at Morristown, to the west of Newbridge where hundreds of flint and chert artefacts were retrieved from the surface of the plough soil, revealing activity present from the Early Mesolithic to later prehistoric periods. The large expanses of bogs in Kildare were originally lakes, so it is likely that the edges of these bogs may contain may be as yet undiscovered locations of activity in the Mesolithic period.

⁵ ‘Mesolithic Period’ in The Encyclopedia of Ireland. P Woodman, pages 719-20.

2.3.2.1 NEOLITHIC PERIOD C. 4,000-2,400BC

FIGURE 2-9 NEOLITHIC PERIOD HEAT MAP



The Neolithic saw the transition of the early settlers from a hunter-gatherer lifestyle to a sedentary farming economy with the introduction of cattle, sheep, wheat and barley, possibly along with the introduction of a new group of peoples who brought this new way of life to Ireland. This period was characterised by land clearance and the establishment of field systems enclosing the newly cleared land. Permanent sites of habitation were established usually along river valleys. The introduction of farming meant, not only the introduction of non-native cultivated plants and herded animals, but also the development of a more diverse material culture, such as stone axes for clearing woodland, ards (stone points for simple ploughs) for tillage, grinding stones for processing grain and pottery for cooking.⁶

There were also new developments in ritual (or religious) activity at this time and large permanent burial monuments, many of which were re-used over a long period of time, were constructed. These are collectively termed **megalithic tombs** and represent a complex and well-structured social hierarchy in the population of the region at that time. Megalithic tombs were used for burial and are typically, though not exclusively situated on higher ground. No definitive megalithic tombs are known from Kildare. Two megalithic structures have been recorded. The example at Grangebeg, near Kildangan (KD027-038--), consists of a pair of rough boulders which contained a skeleton, according to an antiquarian report. Another example at Carrigeen townland, near Clane (KD014-026016-) was recorded as a 'cromleac' but was destroyed in the nineteenth century. Neolithic ritual activity is represented by a cursus monument (two parallel fosses defining a long linear area), visible only as a cropmark on aerial photographs. Neolithic activity was also identified during the excavations at Dun Ailinne.

Several Neolithic houses are known; all recorded from modern archaeological excavations close to Kilcullen. Another monument which makes its appearance in the Neolithic is the **standing stone**, which may mark a burial or serve some other ritual or secular function (such as modern scratching posts for cattle). These may date anytime from the Neolithic to recent times. There are seventeen standing stones recorded, with a wide distribution throughout Kildare. This relatively low number of standing stones, similar to the lower numbers of megalithic tombs, are associated with disturbance via tillage of land over the millennia. The most well-known is the impressive example at Punchestown Great (KD024-009001-), a National Monument (No 305), which had fallen over and was re-erected in 1934.

2.3.2.2 BRONZE AGE PERIOD C.2,500-500BC

This period is characterised by the introduction of metal and metal working technologies. In addition to the introduction of a new raw material, a change in burial rites from the previous Neolithic period is marked. Bronze Age graves ranged from simple stone-lined pits to more substantial polygonal or rectangular cists. Many of the graves contain grave goods such as beads, daggers or other bronze objects. The graves were frequently in

⁶ Monk, M. 'Neolithic Period' in The Encyclopedia of Ireland. P Woodman, page 775.

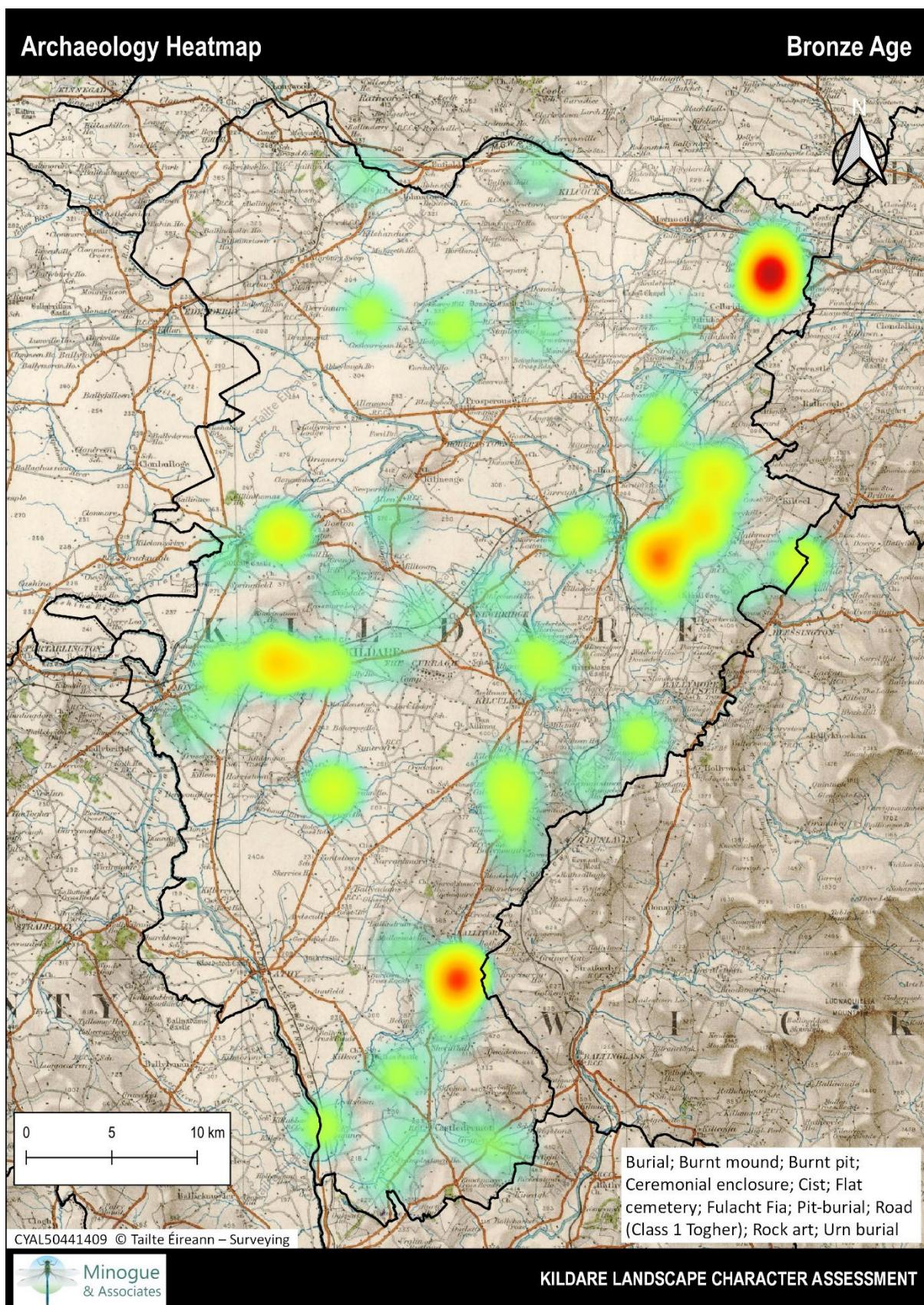
cemeteries, or in barrows (earthen mounds). In the later Bronze Age, cists, pottery and inhumation went out of fashion and burial is characterised by cremation in simple pits.

The Bronze Age of the region is represented both in extant recorded monuments and results from archaeological excavation, although the excavated settlement evidence is scant. This data suggests that in the Bronze Age period there was a dispersed pattern of settlement in the county. Both domestic and ritual activity is represented in the archaeological record.

PHOTO 2-2 KILGOWAN STANDING STONE



FIGURE 2-10 BRONZE AGE PERIOD HEAT MAP



Megalithic monuments, noted for re-use overtime and communal burials, are gradually replaced in this period by more simple **pits and cists** (pits lined with stone flags). Twenty-two cists are recorded from Kildare. Sometimes these burials, are accompanied by grave goods such as specific funerary pottery. These pits and cists may be placed in tumuli, mounds or cairns, and barrows. They may also be situated in more natural features such as sand or gravel ridges and collectively into so-called **flat cemeteries**, which do not have any above ground trace. Two flat cemeteries were excavated during construction work for the N7 motorway near Kill.

Stone circles are enigmatic ritual monuments which may date from the Late Neolithic, but predominantly date from the Bronze Age. There are only three examples in Kildare. The most well known of these is the stone circle known as the 'Piper's Stones' (KD029-023----), south of Ballymore Eustace close to the Wicklow border.

Barrows may also date to this period⁷. A total of 217 barrows is recorded from county Kildare. They are by far the most common monument type in the prehistoric period in the county, with a particular concentration in the Curragh.

Burnt mounds (and **spreads**) typically date to the Bronze Age. This term is interchangeable with fulachta fiadh, which is defined as horseshoe-shaped or kidney-shaped mound consisting of fire-cracked stone and charcoal-enriched soil built up around a sunken trough located near or adjacent to a water supply, such as a stream or spring, or in wet marshy areas. These sites are usually situated near a water source, or in low-lying wetter areas. Ten **burnt mounds** are known from Kildare which all appear to have been identified in the course of archaeological investigations or accidental discovery during agricultural work, as well as forty **fulachta fiadh**. They are widely dispersed throughout the county.

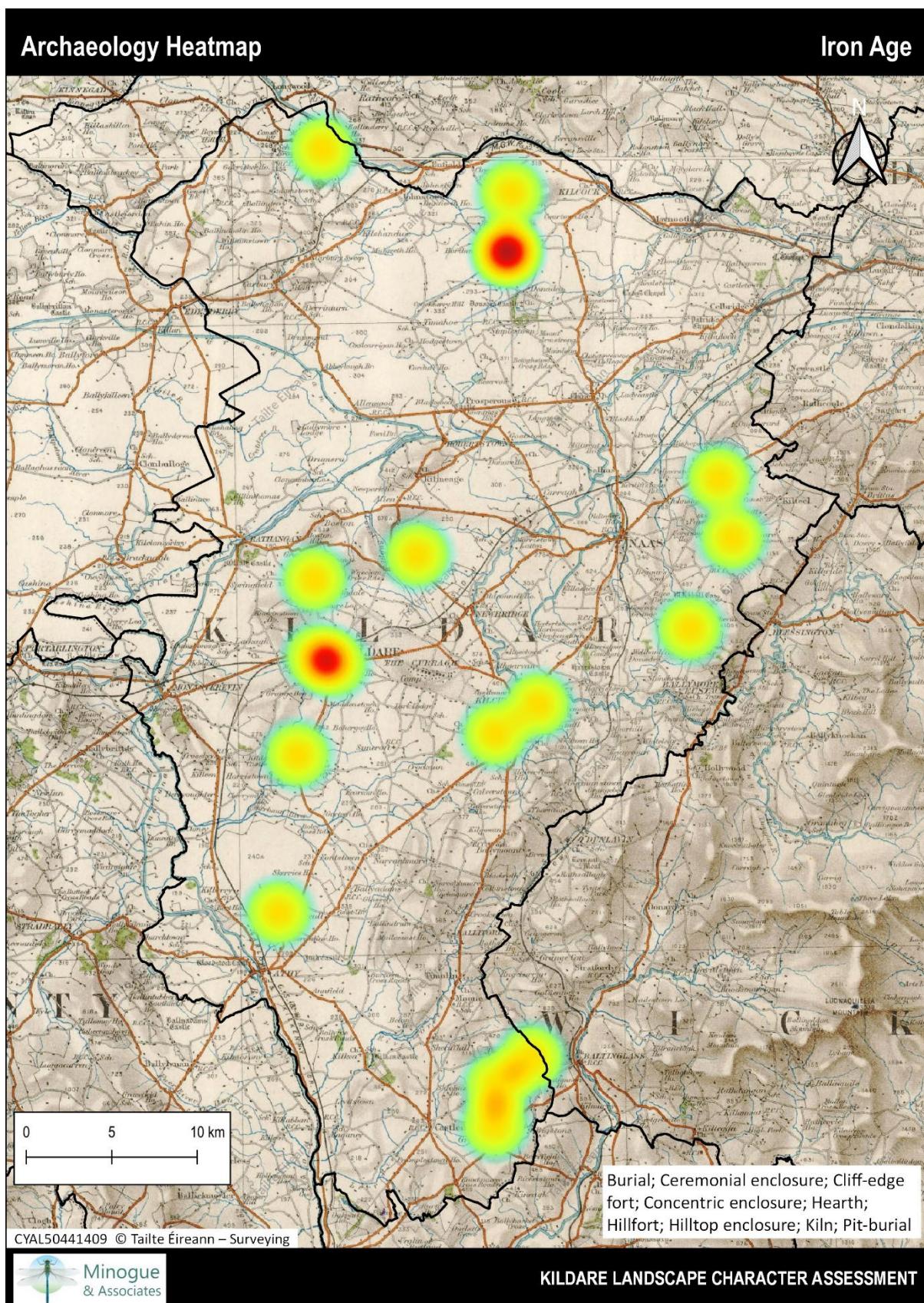
Some of the toghers (wooden trackways) identified in peat cutting have produced Bronze Age radio-carbon dates, for example at Timahoe West, north of Allenwood.

2.3.3 IRON AGE PERIOD c. 500BC-AD500

Ironworking developed in Europe around c. 750 BC. The advantages of iron over bronze would have quickly become apparent, and the ready availability iron ores, particularly bog ores would have facilitated the spread of the new technology. In stark contrast to the previous period of the Bronze Age, the Iron Age is much more elusive to the archaeologist. People of the Iron Age left much less trace in the archaeological record than those who went before and those who came later. The transition between the end of the Bronze Age and the beginning of the Iron Age is also difficult to define and those monuments which can be directly dated to the period are few.

⁷ although have been also known to date to the Neolithic, the Iron Age or indeed the very early part of the early medieval period

FIGURE 2-11 IRON AGE PERIOD HEAT MAP



Within the county there is one **hilltop enclosure**. This site type probably dates to the Iron Age, with their genesis in the Late Bronze Age. These are usually substantial in size, such as the example at Tipperkevin (KD024-271----), which is 110m in diameter. As their name suggests, they are located on hilltops. The example at Tipperkevin is visible only as a cropmark. Four **hillforts** are known, spread throughout the county. Raftery defines a hillfort as 'a hilltop enclosure of considerable size and strength, which deliberately exploits the natural properties of the situation for defensive purposes.'⁸ The example at Killhill (KD020-001----) in the foothills of the Wicklow mountains overlooks the towns of Kill and Naas to the southwest is a particularly large example. Two other examples are located close to the Wicklow border, including a recently discovered example on Corballis Hill (KD038-081----) near Baltinglass (which itself is overlooked by two hillforts in County Wicklow, including the impressive hillfort on Baltinglass Hill) while a fourth example at Dunmurry Hill, north of Kildare town is a relative outlier. The sites located close to the Wicklow border should be considered as part of the wider prehistoric landscape of the Wicklow mountains.

The royal site of Dún Ailinne (KD028-038001-) on Knockaulin Hill to the southwest of Kilcullen also dates to this period. It was once one of the great royal sites of Ireland, and seat of the kings of Leinster. It is subject to a Preservation Order (200/1954.) There is also evidence of Neolithic and Bronze Age activity on the hill, but the Iron age activity is far more extensive.

A bog body was discovered by turf cutters in 1953 on the western edge of Mounds Bog (SAC 022). It was a headless body under a layer of interwoven sticks wrapped in woollen textile and an ox skin. It was radiocarbon dated to between 200-400 AD. The excavated evidence for the Iron Age is quite meagre. However, there are examples of iron age activity identified during archaeological excavations, such as a hearth, excavated as part of the M4 construction works, returned a date of cal. 360 BC to AD 70., placing it firmly in the middle of the Iron Age.⁹

PHOTO 2-3 CROPMARK INDICATING THE REMAINS OF A HILLTOP ENCLOSURE AT TIPPERKEVIN



⁸ Raftery, B. 1994, 38. Pagan Celtic Ireland.

⁹ Licence No. 02E1088, www.excavations.ie

2.3.4 EARLY MEDIEVAL PERIOD (c. AD400-1100)

The introduction of Christianity, and a range of technological and intellectual advances, including writing distinguish this period from early times. These changes transformed the landscape of Ireland. While it is usual for religious and secular monuments of this period (and subsequent periods) to be described separately, it is important to note that many would have been in use contemporaneously. The Christian church was becoming established from the sixth century onwards when monastic sites were founded throughout the country. These played an important role in contemporary settlement, and acted as storehouses for local produce and valuables, and as centres of learning and craft. Early Irish society was strictly hierarchical, although people could move from one class to another. Society was divided into three groups: the nobility, the free and the unfree. The system of clientship that existed consisted of a series of contractual arrangements between the lord or king and socially inferior clients. In return for land or livestock and legal and military protection, the client paid an annual rent or tribute in the form of foodstuffs, hospitality, labour and military service.

Towards the end of this period in the late ninth century saw the arrival of the Vikings or the Norsemen first raiding and then settling in the tenth century. In the mid twelfth century great reform was undertaken in the structure of the Church where parishes and diocesan boundaries were formalised. All these events can be identified in the archaeological record for County Kildare.

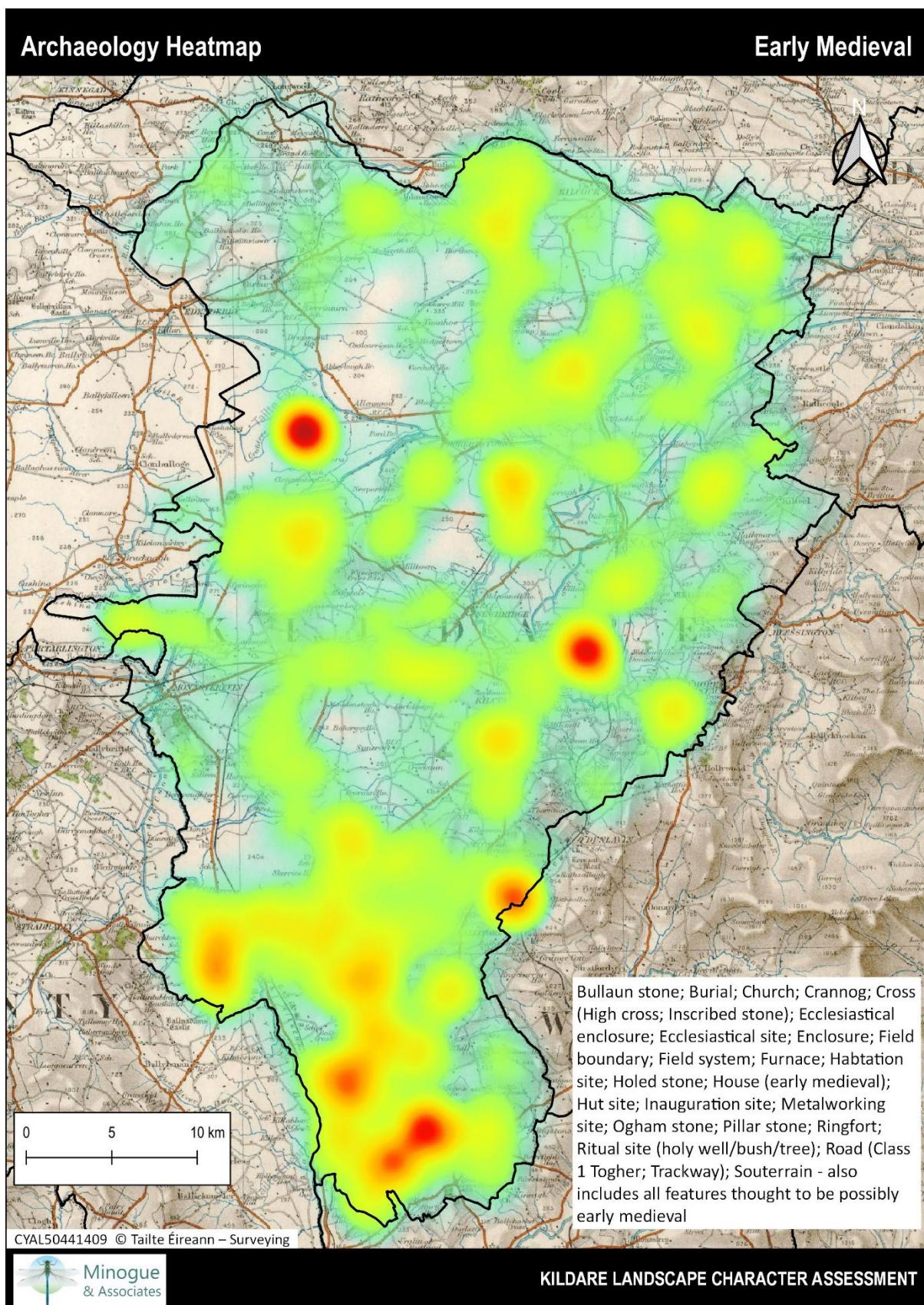
Secular Activity

The period was one of population growth and the **ringfort** – a circular enclosure, was the classic early medieval secular settlement type, consisting of an internal circular area delimited by banks and external ditches.¹⁰ They are considered as homesteads of wealthier farmers and their extended families. They followed a pastoral way of life, with cattle being particularly important. Placenames that incorporate 'rath' or 'lis' in their townlands are usually indicative of a ringfort. Ringforts with more than one bank and ditch, are indicative of high-status family groups. They have a generally dispersed distribution, though can be positioned in discrete clusters. It is possible that the ringfort in these clusters has different contemporary functions, such as habitation and stock enclosure, or alternatively, that they were not in use contemporaneously. Ringforts are among the commonest monument types in the country, also reflected in County Kildare, with 175 ringforts recorded. Underground passages, sometimes which can be quite elaborate, which are known as **souterrains** can be directly associated with ringforts and ecclesiastical enclosures, so-called enclosed settlements. They can also be found in more isolated lowland locations and are then interpreted as being unenclosed. There are several different types of souterrains, and their possible functions included storage, refuge or imprisonment.¹¹

¹⁰ Ringforts are also termed raths, especially when they are constructed of earth. In stonier regions cashels are employed and there are some areas where ringforts and cashels are used. Other non-circular enclosures, such as 'plectrum-shaped' enclosures can also be of this period. They are all considered contemporary monuments and share the same material culture. See Stout 1997.

¹¹ For detail see Clinton 2001.

FIGURE 2-12 EARLY MEDIEVAL PERIOD HEAT MAP



7 **souterrains** are recorded for the study area; Souterrains due to their underground nature have in the past been described as caves on mapping and literature. The relatively low percentage of souterrains to ringforts in Kildare (only 4%) would suggest that the actual number may be a lot higher, but the souterrains haven't been identified on the ground. This can be difficult without archaeological excavation.

There are only 2 **crannogs** recorded in the study area. Crannogs are artificial islands, perhaps with palisades, usually originally situated in lakes. The landscape of Kildare, with its relatively small amount of lakes accounts for the almost complete absence of this particular monument type. The total of ringforts and crannogs amounts to 177 monuments of the total of approximately 2,800 monuments recorded from the county. Therefore, the Early Medieval settlement sites account for only 6% of all archaeological monuments from Kildare. This is a surprisingly low number, and many of these sites may have been levelled as a result of intensive agriculture.

Ecclesiastical and Other Religious Activity

As a result of the introduction of Christianity in the fifth century AD many monastic centres (more recently termed ecclesiastical centres) and smaller church sites were established throughout the earlier part of this period. Many of the larger ecclesiastical settlements later developed into towns, although it is likely that at foundation, they were not urban in character, and this characteristic probably developed over time as places increased in importance. Other features which indicate the relative importance of ecclesiastical sites include an enclosure or enclosures, a round tower, a high cross or other significant stone sculpture.

In total there are 41 **ecclesiastical enclosures** in the study area, many visible as crop marks, identifiable only on aerial photographs, such as the example at Belan (KD038-001003-) near Castledermot. In some cases, an existing later church site is surrounded by a large enclosure, often oval or circular, which would have contained an earlier church and buildings. An example of this can be seen at Rathernan (KD018-006003-), to the southeast of the village of Kilmeague.

In addition to the above, there are 14 sites described as **ecclesiastical sites**. These are sites with their origin in the early medieval period, which later developed into more important and substantial religious sites. One of these ecclesiastical sites at Taghadoe¹² (KD010-014--), close to Maynooth, is the site of a monastery founded by St Tua, and contains one of 5 **round towers** in the county. Round towers were built to achieve an aural and visual presence at considerable height above the ground. They were built as bell towers and acquired further functions that may have led to some minor modifications in their design.¹³. Generally measuring between 20-30m in height, they are referred to in the Annals as *cloigteach* (bell house) and may have had secondary functions such as storage or refuge.¹⁴. The town of Clane appears to have developed around the site of the sixth century

¹² It is also a National Monument in State Ownership (No. 70).

¹³ Lalor, B. 1999, 67.

¹⁴ Lalor, B 2003, p 943.

monastery of 'Cluain Damh', founded by Ailbhe. Although limited in number and distribution, these towers form key local landmarks and associations in the landscape of county Kildare, most visibly at Kildare town¹⁵.

Ogham stones are another monument particular to the Early Medieval period. Ogham script uses tally-like scores instead of conventional letters. Ogham inscriptions date from the fifth to seventh centuries and are the earliest written source in Irish.¹⁶ Eight ogham stones are recorded from County Kildare, an ogham stone (KD006-005002-) from the ecclesiastical enclosure at Donaghmore, east of Maynooth is now in the National Museum of Ireland. The ecclesiastical site (KD032-044020-), known as 'Killeen Cormac' burial ground, at Colbinstown, between Dunlavin and Ballitore, originally contained a remarkable seven ogham stones, together with pillar stones, possible cross slabs and cross bases.

Holy wells and sacred trees, classified as ritual sites, are notoriously difficult to assign a date to, but several may have originated in the early medieval period, perhaps to be abandoned and re-used overtime, some into the present day. Holy wells are also likely to indicate the presence of ecclesiastical sites in their vicinity. Some also suggest that wells may originate in a pre-Christian tradition of sacred springs that were subsequently Christianised. Many wells are associated with specific curative powers, for example, conditions relating to eyes, headaches etc. Not surprising, many holy wells in the County are dedicated to St. Brigid. Arguably the most famous well in Kildare is Fr. Moore's well, named after the eighteenth-century priest, famous for his curative powers during his lifetime. This well is not recorded on the SMR. It is situated in the townland of Rathbride in the Curragh. Landscaping carried out in the 1950s at a holy well at Brallistown Commons (KD027-010001-), close to the Japanese Gardens, may have water flumes belonging to an early Christian horizontal watermill. These are known as St Brigid's kneeling stones¹⁷. Holy trees can sometimes be associated with holy wells and are referred to in popular culture as 'rag trees' where votive deposits such as ribbons, rags, and religious items are hung on the tree. There are 57 holy wells within the county. Five holy tree/bushes are recorded in the SMR, although 7 are extant according to the Kildare pilot survey¹⁸.

There are also seven **bullaun stones** recorded, which are items frequently associated with holy well and ecclesiastical sites. The name bullaun stone derives from the Irish *bullán*, meaning a round hollow in a stone. The term is applied to boulders with artificial hollows or basin-like depressions, which may have functioned as mortars.¹⁹ They are associated with early ecclesiastical sites, with the hollows possibly used for grinding pigments. An interesting example is to be found at Ticknevin, near Allenwood, (KD012-008----) where a circular hollow in a natural rock outcrop is known locally as the 'Wart Well.' Another

¹⁵ The other round towers in the county are at Oughterard (KD015-007003-), north of Kill (part of a complex of National Monuments in State Ownership No. 190), Kildare town (KD022-029020-), Old Kilcullen (KD028-049006-), Kill (part of a complex of National Monuments in State Ownership No. 71) and Castlecomer (KD040-002002-), together with the crosses is part of a National Monument in State Guardianship (No. 471

¹⁶ McManus, D. 2003, 818.

¹⁷ Manning, C. 2007 Could well be a mill. Archaeology Ireland 21 (1), 12-15.

¹⁸ 37 holy wells were visited as part of a pilot project to assess if Defence Force retired personnel could be involved in other surveys of monument types in Kildare and other counties

¹⁹ www.archaeology.ie

example at Clane (KD014-026003-) is cemented on the top of a wall on the bank of a small stream c. 120m to the south of the early monastic site.

PHOTO 2-4 AND PHOTO 2-5 7m High Cross at Moone is the 2nd tallest in Ireland



2.3.4.1 THE VIKING AGE

The Vikings (those who came to Ireland are thought to have been mostly from Norway and hence are termed Norse) began raiding the shores of Ireland in the very late eighth century. By the late ninth and early tenth century the Scandinavians had begun to settle in Ireland, and their urban settlements became towns. Because of its proximity to the Viking settlement of Dublin, Kildare was subjected to numerous attacks and was plundered fifteen times between 836 and 1000. Leixlip formed the most westerly part of the Viking Kingdom of Dublin. In 1788 a skeleton of a possible Viking was found at Barnhall, near Leixlip together with a small iron battle-axe. Raiding Vikings from Waterford also travelled up the Barrow River into the settlement at Athy and pillaged south Kildare. Dublin Vikings made a temporary camp at Cloney in the barony of Narragh and Reban West, just east of the Barrow River. A longphort was situated across the Barrow from this site. Kilcullen was also attacked by the Vikings. Battles took place in Confey in 915 and at Belan, near Athy in 989²⁰. A hoard of 11 Viking-age (Carolingian) coins was discovered at Mullaghboden (Coughlanstown West townland near Ballymore Eustace) in 1871.²¹

²⁰ <https://kildarelibraries.ie/ehistory/the-vikings-in-kildare/> Durney, J 2007.

²¹ A fourth find of Viking Age coins from Ireland. Dolley, M British Numismatic Journal vol. 36 (1967) p. 32-35.

2.3.5 LATER MEDIEVAL PERIOD (TWELFTH TO MID SIXTEENTH CENTURY)

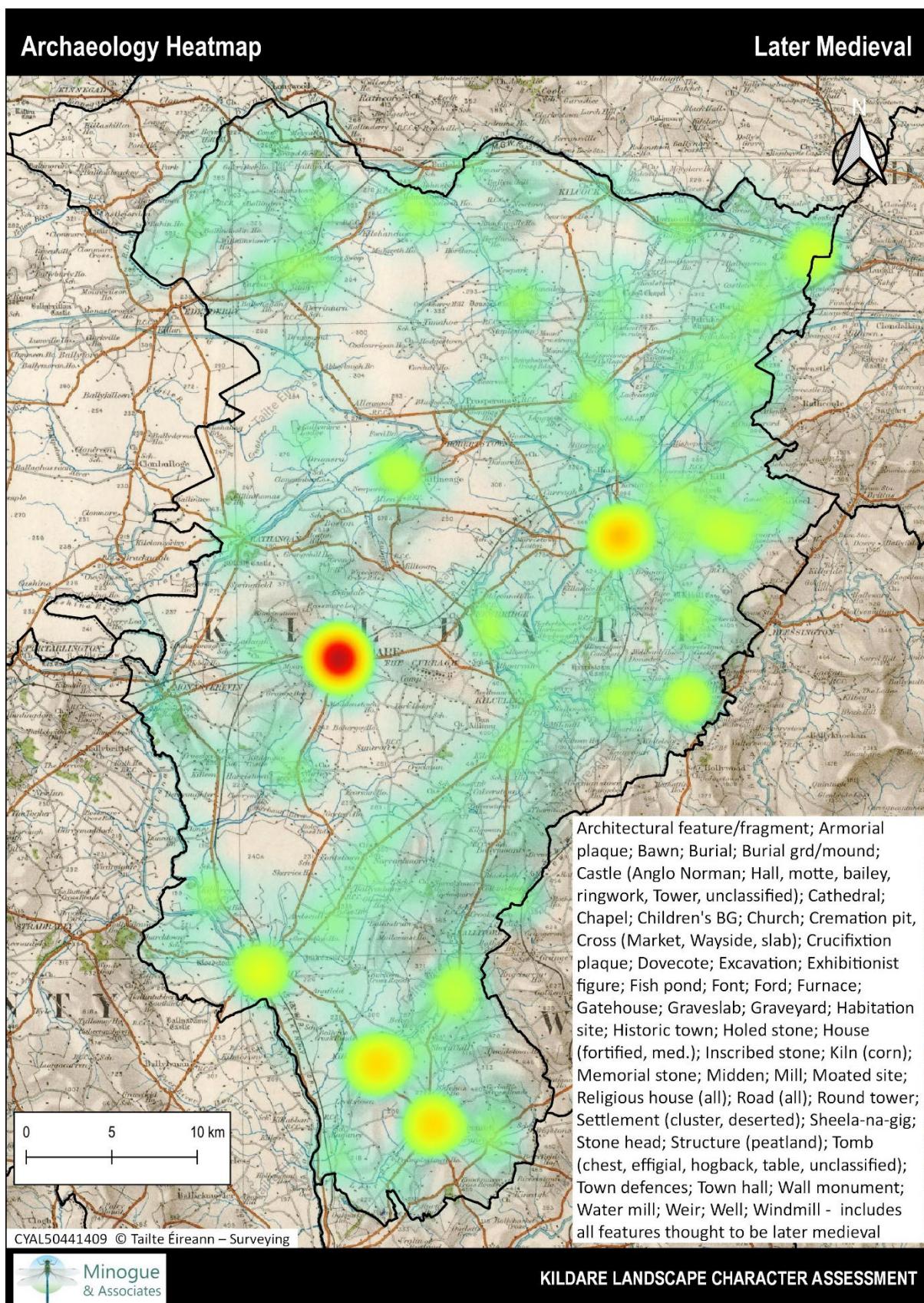
Following the Anglo-Norman invasion in 1169, Ireland was formed into large estates which were then granted to secular and ecclesiastical peers in the form of manors. The church held large tracts of lands in this period and into the post-medieval period. The majority of these manors were located near rivers and very often utilised existing settlements, including the earlier established ecclesiastical settlements. In the initial period of incursion earthen castles (ringworks, mottes) were constructed for defence and consolidation of the new territories. Stone castles were introduced, such as hall houses and towards the end of the period, tower houses. Lesser lords and wealthier farmers constructed moated sites, which were defended earthen rectangular structures. In some cases, the nucleated settlements at manors may have been given the legal status of boroughs, by the Crown, which allowed the settlements to hold fairs and markets, which ultimately made these settlements more economically successful.

Towards the end of the period, in the fifteenth and sixteenth centuries, as tensions rose between English and Gaelic population, the English area of influence contracted to an area known as the English Pale. A particular flashpoint continued to be the Dublin-Wicklow mountains. The Pale (An Pháil) or the English Pale (An Pháil Shasanach or An Ghalltacht) had been reduced by the late 15th century to an area along the east coast stretching north from Dalkey, south of Dublin, to the garrison town of Dundalk. The inland boundary went to Naas and Leixlip around the Earldom of Kildare, towards Trim and north towards Kells. In this district, many townlands have English or Norman-French names, the latter associated with Anglo-Norman influence in England. The Pale as a cultural concept continues today and remnants remain on the maps on contemporary maps of Ordnance Survey of Ireland.

PHOTO 2-6 CARBURY CASTLE



FIGURE 2-13 LATER MEDIEVAL PERIOD HEAT MAP



The Earls of Kildare

In the centuries after the Norman invasion several factors including civil wars, the Black Death, and a preoccupation with fighting the Crusades led to the weakening of English rule in Ireland. Many of the Norman families had intermarried with the Gaelic Irish and only a small territory around Dublin called the Pale was truly English. As a result, Gerald Mór FitzGerald (Gearóid Mór) or 'The Great Earl' the 8th Earl of Kildare served as Lord Deputy of Ireland from 1477 to 1494. a period during which he was the de facto independent ruler of the country. The 16th and 17th centuries saw the final defeat of the Gaelic Irish and many of the Old English dynasties who continued to adhere to Catholicism following the Protestant reformation in England. The Catholic Confederates which included Gaelic Irish and Old English nobles were crushed by the Parliamentarians led by Oliver Cromwell in 1653. In 1690 the supporters of the Catholic James I were defeated at the Battle of the Boyne by William III of Orange. Thereafter the Protestant Ascendancy controlled Ireland, and the Old English dynasties had little option but to convert to Protestantism or be excluded from their titles and their lands. The Fitzgerald dynasty survived in this way and in 1766, John Fitzgerald, 20th Earl of Kildare was elevated to 1st Duke of Leinster ²².

Secular Activity

In the first instance, **castles** were for defence and later for prestige and status.²³ One of the reasons for the success of the Anglo-Norman invasion was that they speedily erected formidable fortresses, and the early earthen fortresses assumed two basic forms-the ringwork castle and the motte and bailey. There are 8 **motte and baileys** recorded in the county. Some have been impacted by later developments, such as the example at Castlewarden North, which is now incorporated into Castlewarden Golf Course. The example in Rathmore village (KD020-009004-) is in good condition, despite being impacted by quarrying in the past. A deserted medieval settlement is in the vicinity, as is a medieval church and graveyard. 13 Individual sites recorded as **castle-motte** are also recorded from the county. These are the mound (motte) without the surrounding bailey.

Broadly contemporary with the motte and bailey is the ringwork, also dating to the Anglo-Norman period. They are morphologically like ringforts and therefore can be difficult to identify. There are 4 recorded **ringworks in the county**. The motte and ringwork castle gradually became obsolete from the early decades of the thirteenth century.

Moated sites are also a secular settlement type of this period. It is likely that some moated sites mark the location of granges - outer farms of religious houses. These sites are associated with the time after castles, when more peripheral lands were being granted to new settlers in the second half of the thirteenth century. Their presence indicates rural settlement, and that farming was taking place. 70 **moated sites** are recorded, with noted concentrations in the northwest and southwest of the county.

²² The Earls of Kildare and their ancestors from 1057 to 1773. The Marquis of Kildare 1862.

²³ For an overview of defence and fortification in the Dublin region see Murphy and Potterton 2010, 111-168.

Anglo-Norman masonry castles were constructed by the Anglo-Normans between the late twelfth and early fourteenth centuries,²⁴ and all of these are fortresses, built in strategic positions to control and dominate the newly acquired territories.²⁵ The great period of castle building was from c. AD 1190-1310, with the size and layout of castles varying considerably.²⁶ At least 4,000 stone castles of different types were built in Ireland between c. 1170 and the mid seventeenth century., and the island of Ireland was one of the most castellated parts of Europe by the mid-sixteenth century.

Most castles were the defended residences of people of lordly status, ranging from kings to, in later periods, local gentry. Their purpose was not simply defensive, but also to impress others. There are six **Anglo-Norman masonry castles** in County Kildare. The Manor of Maynooth was granted by Strongbow to Maurice Fitzgerald who erected Maynooth castle, probably in the late 1180s. Maynooth castle (KD005-015----) is a National Monument in State Ownership (No. 485). Leixlip castle (KD011-004002-), originally built in the twelfth century, is now an amalgam of several building phases. Kildare Castle (KD022-029004-) was one of the most important castles in Leinster. This 12th century castle may have been built by Strongbow himself. Only one of the original four mural towers, and parts of the castle wall survive. Other castles have been incorporated into later buildings (e.g. Rathcoffey Castle (KD010-018001-), or only portions remain such as at Carbury, (Carbury Hill (KD008-001002-). Reban Castle (KD030-008----), situated on the right bank of the River Barrow, comprises the poorly preserved and heavily overgrown remains of a possible 13th-century masonry castle, subsequently altered, and later incorporated into a 17th-century fortified house.

There are 54 castles recorded as 'unclassified' throughout the county. These have been identified from early maps, early aerial photos or a documentary reference to a castle, some of which are no longer extant. They can date from the 12th to the 16th centuries. Some of these are native Irish castles, or tower houses. for example, it is recorded that the crown made a grant in 1569 to build a castle of bawn and stone at Clonkeen (KD008-014---), on the bank of the Boyne, close to the county boundary near Edenderry, County Offaly. **Bawns**, which are enclosures associated with castles of all types are recorded in 15 instances in the study area.

Three **unclassified mills** of probable late medieval date are recorded. Many mills were used in the medieval period for various purposes, for example flour or fulling. A single windmill is recorded at Hortland (KD009-045----). These date from the late medieval period onwards. The example at Hortland, southwest of Kilcock was annotated as 'Old Windmill' on the 1838 ed. OS 6-inch map. It is no longer extant, and so all that can be said is that it dated from the eighteenth century, or earlier. A possible medieval **bridge** (Caragh Bridge) over the Liffey at Halverstown (KD019-012----) near Naas. It dates from between 1450-1650²⁷. In all there are references to seven bridges which are of possible medieval date in

²⁴ Archaeological Survey of Ireland Class List Definitions

²⁵ Sweetman 1999, 41

²⁶ Sweetman 1995, 8

²⁷ Simington, T. and O'Keeffe, P. 1991 Irish stone bridges: history and heritage. Dublin. Irish Academic Press.

the county. For example, there is a reference to a bridge in Leixlip (KD011-017----), which was swept away in a flood in 1646 ²⁸.

PHOTO 2-7 AERIAL IMAGE OF CARAGH BRIDGE (KILDARE COUNTY COUNCIL)



Ecclesiastical and Religious Activity²⁹

The church was inextricably linked to secular settlement, and many had a parish church in the midst of the manors and boroughs. In all there are 147 **later medieval churches**, in all states of preservation. Many are founded in the medieval period and were used or re-used in later periods. Some of these are no longer extant and only known from cartographic evidence. Many of these churches may have been medieval parish churches. The primary indicators of parish church status are a baptismal font and an enclosed graveyard. The parish church was the most significant building in the medieval community. Adjacent to the church was the glebe, a small piece of land with grazing and tillage for the priest. Larger parishes might have smaller dependant chapels to serve outlying areas. These differed from parish churches in that neither burial nor baptism could be performed within them. The psychological scars left by the Black Death in 1348 led to a renewed fixation on morality, and a renewed focus on the parish church. This includes features such as *Memento Mori*, incorporated into design features, as seen at Kildare Cathedral. Church naves were expanded, and regular prayers for the souls of the departed were secured in

²⁸ Sherlock (1909-11, 305) JCKAS Vol VI 1909-11. Some notes on the fords and bridges over the river Liffey.

²⁹ For detail on the church and its structures and administration in this region see Murphy and Potterton 2010, 209-263.

the fifteenth century. There are 112 civil parishes in Kildare.³⁰ Civil parishes are units of territory in the island of Ireland that have their origins in old Gaelic territorial divisions. They were adopted by the Anglo-Norman Lordship of Ireland and then by the Elizabethan Kingdom of Ireland and were formalised as land divisions at the time of the Plantations of Ireland³¹.

Twenty **Religious Houses** are recorded for Kildare. There are three religious houses of Augustinian Canons. St. Wolstans (KD011-014---) at Celbridge, also known as 'Scala Caeli' or 'Steps of Heaven'. No ecclesiastical buildings survive. Elsewhere at the Franciscan friary at Castledermot (KD040-002005-) only the church survives. In Athy, the Priory of St. Thomas and Hospital of St. John (Fratres Cruciferi) (KD035-022006-) only a possible portion of an original wall survives. In Castledermot, the Priory and Hospital of St John the Baptist (Fratres Cruciferi) (KD038-045001-) is a National Monument in State Guardianship (No. 503). The only visible remains consist of a square tower. four religious house-Knight's Hospitallers are known; at Kilteel (KD020-007003-), only poorly preserved ruins remain. The Order of the Hospital of St John of Jerusalem in Ireland consisted of a central Priory founded at Kilmainham County Dublin in 1174 with subordinate houses known as preceptories located through the country. Tully church KD022-034----), is one of these preceptories³². Other possible Knight's Hospitaller remains are located at Kilberry (KD030-005----) and Killybegs Demesne (KD013-019001-). There are also three unclassified religious houses in the county.

At Greatconnell, near Newbridge (KD023-016----), most of the buildings of the early 13th century abbey were demolished at the beginning of the 19th century, and the material was used for the erection of military barracks at Newbridge. One Cistercian foundation is recorded, at Moore Abbey Demesne near Monasterevin. No visible surface trace of the abbey survives either, but some of its foundations and/or fabric may be incorporated into the present Moore Abbey house.

There are a number of smaller features recorded that are likely to date to this period, or perhaps the early medieval period, these include 13 burial grounds specifically identified as children's burial places, usually these burial plots were for unbaptised children.

Walled Towns

At the end of the 12th century, when the Anglo-Normans arrived, most Irish settlements were rural except for the Viking port towns like Dublin, Waterford and Limerick. This was a time that saw unprecedented urban growth across Europe, and Ireland was no exception. The colonising lords and the king quickly began to establish manors and towns in the Irish countryside. Medieval towns were issued charters granting them borough status. Defence was a primary concern and as time went on, murage grants were sought from the king to enable the construction of town walls. There are eight medieval walled towns recorded in County Kildare. Naas, Kildare, Castledermot and Athy were the four principal towns in

³⁰ <https://www.logainm.ie/en/100007/>.

³¹ A guide to using the Land Index Book. Property Registration Authority of Ireland.

³² Information from www.archaeology.ie.

medieval Kildare. The other walled towns were Clane, Kilcullen, Calverstown and Timolin³³. County Kildare now has four designated Walled Towns – Athy, Castledermot, Kildare and Naas³⁴.

2.3.6 POST-MEDIEVAL PERIOD (MID TO LATE SIXTEENTH CENTURY TO MID NINETEENTH CENTURY)

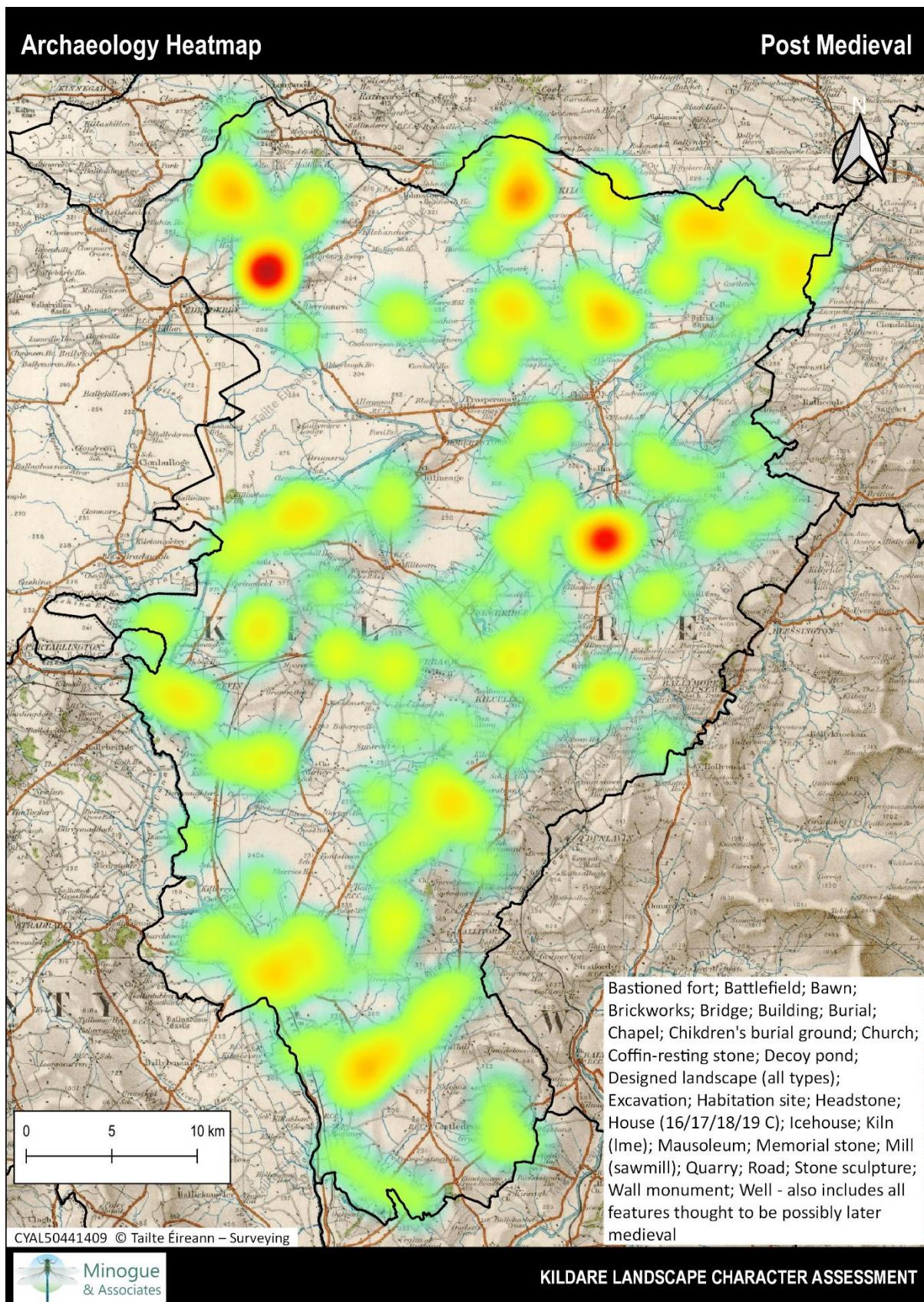
The sixteenth century dissolution of the monasteries profoundly altered the landscape by the erosion of these institutions that had dominated the landscape since the 12th Century.³⁵ The transfer of lands and centralisation of the English Crown in the pale of Dublin extended its reach to County Kildare. The 1798 Rebellion saw mobilised forces in Kildare, Meath and Wicklow. After the massacre at Gibbet Rath on the 29th of May on the Curragh plain, the rebellion in Kildare was effectively over. In the county of Kildare, 16 separate battles or engagements took place, and three battlefield sites are recorded on the SMR -at Narraghmore (KD032-062----), Ovidstown (KD004-043----) and Old Kilcullen (KD028-049015-).

³³ The Medieval walled Towns of Kildare. Kildare County Council and Abarta Heritage 2023.

³⁴ Further information on these Walled Towns is found under the Irish Walled Town Network: <https://irishwalledtownsnetwork.ie/leinster/>

³⁵ Bradshaw 1974. Gaimster and Gilchrist 2003. Ó Fearghail 1992, 229-250.

FIGURE 2-14 POST MEDIEVAL PERIOD HEAT MAP



County Kildare, for hundreds of years, had provided agricultural produce to serve the towns and the Pale; this accelerated in the eighteenth century, reflecting the wider drive to improve agricultural techniques and access larger markets. In 1757 Rocque³⁶ undertook a major commission for James FitzGerald, 20th earl of Kildare, and mapped an area of almost 28,000ha. These covered lands in Maynooth, around Kildare town and Rathangan, in the south-west around Athy (the manors of Athy and Woodstock) and in the south (the manors of Kilkea, Castledermot and Graney). These maps show the different land uses and how parts of the county were already enclosed and divided, such as around Maynooth. These maps also show the extent of tillage production covering almost two fifths of the land surveyed in this area, later to be replaced largely by livestock on grassland to serve the Dublin region. The southern part of the county from this period shows richer, well drained lands contrasting with boggier lands around the Barrow River; with the southeastern hills around Corballis showing more varied enclosure patterns and more commonage.

New crop rotations, agricultural implements, and a focus on improving agricultural practice and land resulted in significant landscape changes. There was an emphasis on applications of lime for soil improvement, enclosure, and reclamation, and drainage projects of bogs, and indeed reorganisation of the farm outbuildings in line with this rational, improving spirit of agricultural change. The Bog Commission mapped from 1809 to 1814 a series of bogs including the Bog of Allen. Drainage schemes were favoured to improve these habitats, seen as wastelands. An example from 1768 won a gold medal from the Royal Dublin Society for the drainage of 21 acres at Swordlestown Bog, South Naas Barony³⁷

"I cannot avoid to remark it, as a pleasing and romantic sight, to see large and numerous clumps of turf, large plantations of fine corn, great gardens affording prolific crops of potatoes, and fine grass, all upon the seam black bog, so lately under water, and in a manner useless "

With the relative peace and prosperity, the requirement for defensive settlement declined. The move away from fortified houses to Georgian styles was reflected in a move from more formal gardens to naturalistic landscapes. Lake views, and slopes of hills that could offer commanding views over the surrounding areas were preferred sites for this new type of settlement. Not surprisingly, where resources permitted, this is the pattern that took place in the county over this period.

'Because of the developing interest in pastoral, 'natural' landscapes with emphasis on water, river valleys were favoured locations for houses and demesne in the later eighteenth century; the Boyne and Liffey Valleys.... where the park landscapes were laid out with a southerly aspect from the house who's rooms, like their walled fruit and vegetable gardens were heated by the sun'.

³⁶ Retrieving the landscapes of eighteenth-century county Kildare: the 1755-60 estate maps of John Rocque
Author(s): Arnold Horner Source: Archaeology Ireland ,2017

³⁷ The Reclaiming and Cultivation of a Bog in the County of Kildare: By John Wynn Baker 1773

PHOTO 2-8 MAGANEY BRIDGE, FIVE-ARCH LIMESTONE ROAD BRIDGE OVER RIVER BARROW, C. 1800,



This expansion can be particularly noted on the lands around the Liffey River and at the northern and eastern part of the County³⁸. As Big houses and their demesne became one of the dominant landscape features during this time, the earliest planned farmyards were also associated with these - all part of the improving and remodelling processes taking place, although the levels of investment in Ireland were modest compared to England.

In 1837 it was observed that the

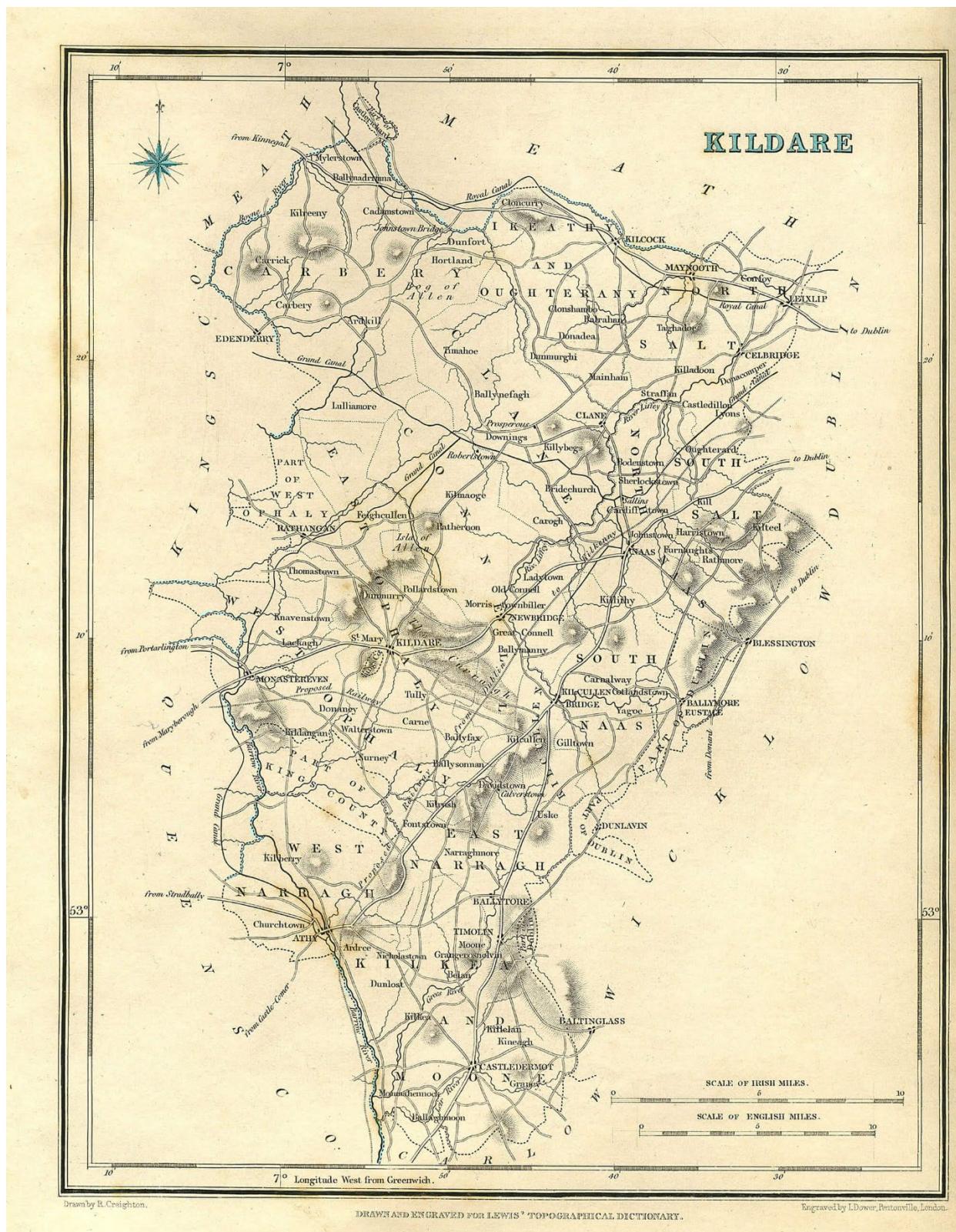
"countryside around Leixlip concentrates much that is pleasing and picturesque in landscape. The surface is finely undulating and richly diversified with wood and water, and the view embraces the town with its ancient bridge, numerous elegant seats and highly cultivated demesnes, ancient and picturesque ruins, distant mountains and a variety of other interesting features of rural scenery"³⁹.

The map of the County as of 1837 Lewis Topographical Survey is presented overleaf:

³⁸ Smyth 1992, 175.

³⁹ S. Lewis, A topographical dictionary of Ireland [London, 1837], ii, 257).

FIGURE 2-15 MAP OF COUNTY KILDARE, 1837



Today large estates bounded by mature trees, parkland, stone walls remain a feature particularly concentrated around the Liffey, the northeastern limestone land and a cluster around Athy also. These include the earliest and largest Palladian House in Ireland at Castletown House with important vistas from the house to local landmarks such as the

Wonderful Barn. The parkland itself is a significant historical landscape and example of eighteenth-century gardening with deciduous trees, radiating avenues and the above long vistas.

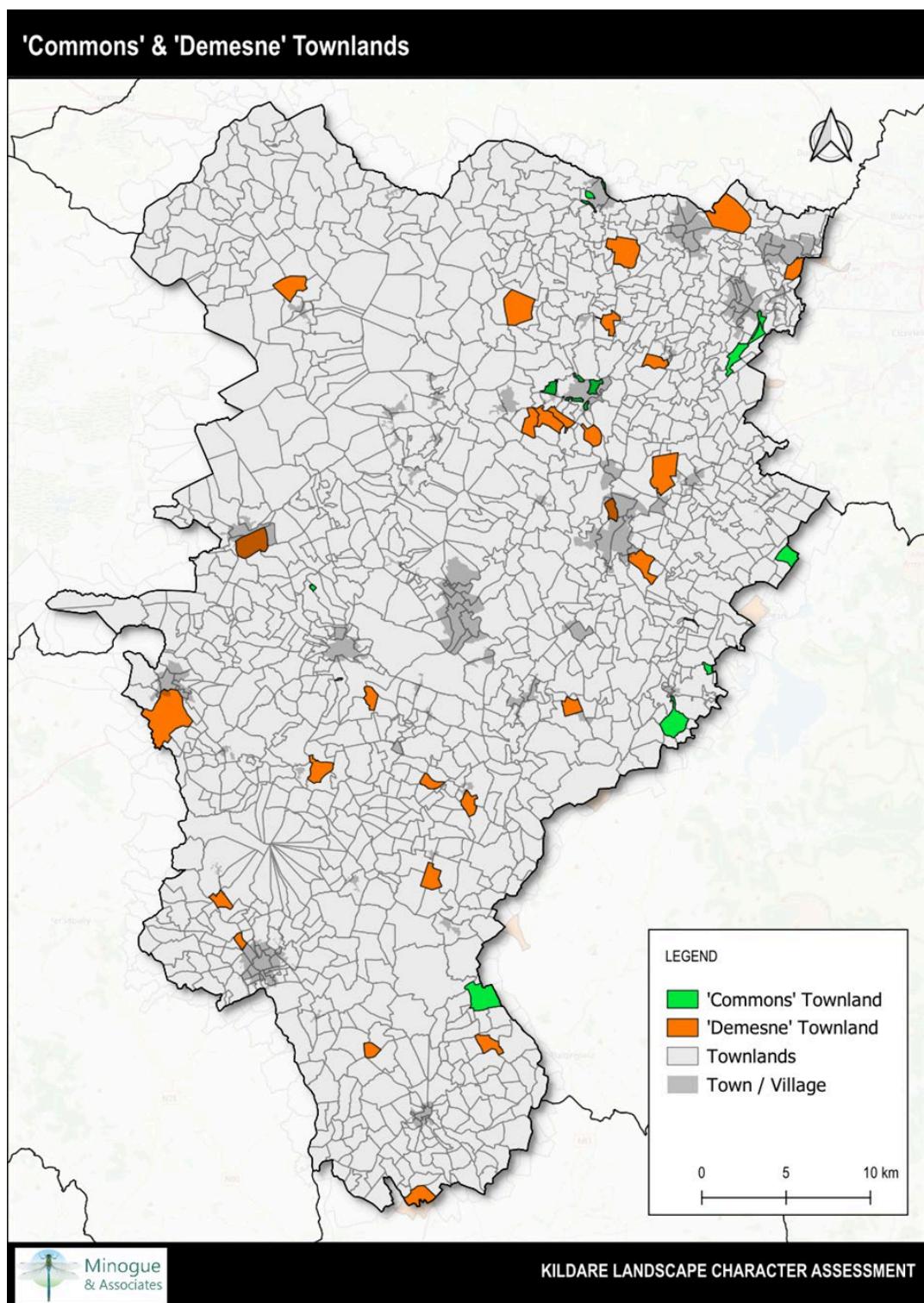
Other houses and gardens such as Larchill close to the Meath border, remain one of the remaining Ferme Ornee gardens, which were an expression of the Romantic movement with decorative farm buildings of a working farm situated within a parkland landscape with grottos, follies and lakes. Today many of these estates are primarily equestrian related land uses, hotels or in private ownership.

Figure 2.17 below shows the townlands of the county with demesne and commons in the names from the townland name analysis of Logainm.ie. No clear conclusions can be made on the map other than noting the higher density of demesnes in the north and eastern lands of the County.

PHOTO 2-9 : THE WONDERFUL BARN



FIGURE 2-16 TOWNLAND NAMES WITH DEMESNE AND COMMON



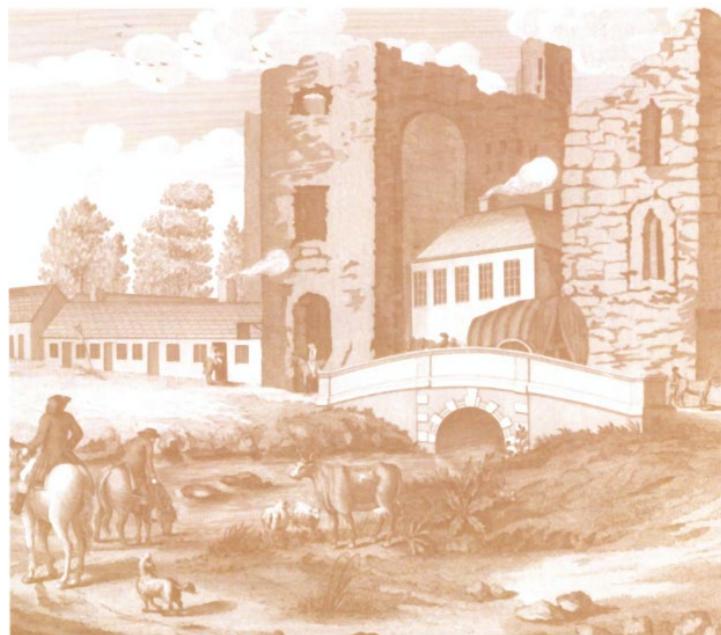
2.3.6.1 TRANSPORT AND COMMUNICATIONS

The transport network also saw significant improvements in this period; 1729 saw the construction of the first turnpike road from Dublin to Kilcullen; whilst other villages such as Kill became a post town on this route, allowing the changeover of horses. In tandem with stops for horses to rest or swap over, inns providing services to the travellers were built in the same period. Such inns on the Dublin to Kilkenny Road included the Angel Inn at Kill,

the Great Inn of Naas, the Red Lion and Black Lyon at Kilcullen Bridge, the George at Timolin and the George at Castledermot.⁴⁰

Along the Great Connaught Road (old N4 route), inns were present at 5 to 10 mile intervals, with inns located at Leixlip, Maynooth, Kilcock in County Kildare. These inns with services for travellers and horses were significant to the local economy and villages themselves. Evidence of these turnpike roads, of higher quality construction and frequently straight alignments can be seen in the regional road today from Kilcullen to Athy.⁴¹

FIGURE 2-17 TAYLOR'S MAP OF CO KILDARE 1783, ROAD WITH INN AT CASTLE GATE OF MAYNOOTH⁴²



2.3.6.2 THE GRAND CANAL AND ROYAL CANAL

Two rival schemes to link Dublin with the River Shannon were laid before the Irish parliament in February 1756. The route through the bog of Allen was accepted, and the first section to Sallins was opened to freight in 1779, with a passenger service added the following year. After numerous delays, the service was opened for traffic through Shannon Harbour in 1805. In 1791, a branch giving access to the River Barrow at Athy was completed, with further branches opened to Naas in 1789.

In 1792 the Barrow Navigation Company was established to canalise the River Barrow to make it navigable for boats and to link up with the recently built Grand Canal. The non-tidal river navigation featured 23 locks, continuing 66 km inland from the tidal limit of the Barrow at St Mullin's (County Carlow) to Athy. Until the second half of the twentieth century the Barrow was a commercial canalised waterway with New Ross, Graignamanagh, Carlow and Athy important ports. In the face of competition from the railways, the last of the passage boats was withdrawn in 1852. In 1950, the Grand Canal Company, which had

⁴⁰ Horner, 2007

⁴¹ Horner, 2007

⁴² *ibid*

operated the canal since 1772 merged with CIE, which withdrew the remaining trade boats in 1960 ⁴³.

As the Grand Canal was built, proposals for the Royal Canal advanced, albeit slowly with the first section from Dublin to Kilcock opened in 1796. The Royal canal suffered from the construction of the railway lines and was passed into the ownership of the Great Western Railway in 1845 ⁴⁴. By the mid-1850s, some of the main railway long distance routes were completed. The Dublin to Galway, Dublin to Cork and Dublin to Waterford lines all radiated from Dublin and traversed through Kildare, reaffirming the transport and communications routes through the county. The impact of the railways ended the coaching era and with the decline of same, the villages that supported these inns also suffered with places such Kilcock and Leixlip adversely affected.

Landscape change came in the eighteenth and nineteenth century from the Georgian agricultural and construction boom but also via the roads, canals, and railways. Features including the straightening of older roads, new crossings of rivers, built development via inns, stables, toll collectors' houses, the canal locks and towpaths. The introduction of the railways further influenced the landscape, opening up the landscape, increasing communications, and shortening journey times between the main urban centres and markets. The landscape legacy relates to the great industrial heritage such as bridges, viaducts, cuttings and embankments and of course railway stations themselves.

PHOTO 2-10 ALLEN CHURCH



⁴³ Bernard Share 2003. 'The Grand Canal' in 'The Encyclopaedia of Ireland' p 453.

⁴⁴ Bernard Share 2003. 'The Royal Canal' in 'The Encyclopaedia of Ireland' p 945.

Extensive church building was also a feature of this period. Numerous churches were built in the 19th century to cater for the large population. The Board of First Fruits funded Church of Ireland buildings, and Catholic Emancipation ensured considerable church building for Catholics. For many of these churches, the gothic revival style was favoured.

The landscape legacy of this intensive period of church building is the numerous steeples seen associated with settlements throughout the county. These remain key landmarks and features in the County, particularly prominent in the central lower lands and indicating the presence of towns from a distance; good examples include the church steeples at Kildare and Maynooth towns.

The surviving vernacular architecture, becomes increasingly important to provide insight into the lives of the less prosperous inhabitants of County Kildare, as Duffy writes:

*'Vernacular buildings, including fences, gate piers and other furniture of the local environment are especially important signatures of the local in landscape. In the absence of documentary evidence, vernacular buildings are often the only sources of information on life and landscapes of households of more modest or poorer circumstances.'*⁴⁵.

PHOTO 2-11 OLD FARM GATE AND POSTS OVERGROWN WITH IVY, DOWDENSTOWN LITTLE



⁴⁵ Exploring the history and heritage of Irish Landscapes, Duffy, 2007, 124

2.3.6.3 19TH AND 20TH CENTURY

Pre-famine, population increases over the 19th century led to settlement and reclamation of marginal lands, including peatlands particularly in the western part of the county around the Bog of Allen⁴⁶ and higher lands along the Kildare -Wicklow border.

Although County Kildare was not affected in the same way as the midlands and western counties of Ireland with the famine, in part due to only 8.2% of arable land given over to the potato crop compared to other counties⁴⁷ . Decline was apparent and visible.

Workhouses were built at Athy, Naas and Celbridge which contributed in part to retention of population levels and post famine towns such as Naas and Newbridge reversed the population trend, where the decline was negligible or rose slightly.

The post famine period saw a decrease in population with the county's population declining by 16.39% between 1841 to 1851, the exception to this was the slight increase in the barony of North Salt (the Maynooth - Leixlip area). Different areas of the county were affected with Athy experiencing the greatest decline of almost 53% of its population compared to towns such as Naas at -15.71 per cent)⁴⁸. Marginal lands were depopulated, and a greater focus was on cattle production to feed the urban populations of Dublin and England. Kildare is notable in retaining tillage production today.

Post famine measures to improve housing and sanitation for farm workers saw the first social housing for farm workers, provided in Grey Abbey, Whitesland West, and Tully East, around Kildare Town⁴⁹. In the 20th century, the Lands Commission in 1922 was given the power to purchase and break up large landholdings not being farmed by the owners. In tandem with this, support for migration from western seaboard counties such as Kerry, led to families moving to the County between the 1920s to 1960s under the Resettlement Programme.

The establishment of the Turf Board and subsequent Bord na Mona also led to changes in the peatlands of the county and settlements close by. This included using the Bog Commission maps to inform drainage scheme, industrial rail construction, and provision of housing for Bord na Mona workers replacing previous hostels for turf workers; one such example, of Beaux art design by Frank Gibney is at Coill Dubh, between Prosperous and Timahoe, built to supply housing for the Allenwood Power Plant⁵⁰ nearby.

⁴⁶ Whelan, K in *Atlas of the Irish Rural Landscape*, 2nd ed, 2011

⁴⁷ For example, Co Cork had 28% arable land under potato crops.

⁴⁸ Helen Litton, *The Irish Famine*, (Dublin, 1996),

⁴⁹ Durney, Corrigan and Connelly, *Hearth and Home*, 2012

⁵⁰ [allenwood-pr-pamphlet.pdf](#) ESB Archives

PHOTO 2-12 AERIAL PHOTO OF COILL DUBH WITH HOSTELS FOR BORD NA MONA WORKERS IN THE HINTERLAND (BORD NA MONA)



The introduction of the rural electrification and group water schemes had both landscape and social impacts on the rural parts of the county; improving quality of life for people and introducing into the landscape water treatment features, (such as water towers), electricity poles (telegraph poles as they are called) and pylons. This mechanisation also affected farming practices, with the decline of horses and increasing use of tractors. Following membership of the European Community, greater investment has led to intensification of farm production methods and a significant expansion in mechanised farm activity. These developments have often resulted in the creation of larger, more intensively fertilised fields and larger scale farm buildings to accommodate machinery and livestock.

The role of County Kildare as a communications corridor has continued well into the modern day with the construction of the M4, M7 and M8 motorways (that broadly follow much more ancient routes) and continued use of the main railway lines radiating from Dublin. Again, the re-shaping associated with these projects has seen new vistas open up or the re-orientating of the landscape, with accompanying changes from familiar to new landmarks in the landscape. What is important to note however that so much of the contemporary landscape is the result of generations of people working in the landscape. To conclude this section, Duffy⁵¹ writes:

'At a superficial level in rural landscapes, much of the distinctive colour (of buildings and crops, for instance) and sounds (human voices, dogs barking, livestock) are part of our humanised landscapes, which are also inevitably distinguished by topographies of families linked by kinship, marriage and experience of the same place, lives taking place within the farmscapes and

⁵¹ Duffy, 2007 pg. 149

townlands of the landscape. Rural landscape reflected the unceasing labour which was involved historically in 'making' landscapes, the large investments of time and energy by earlier inhabitants in constructing, reclaiming and 'taming' the landscape for subsequent generations; even more so with the material infrastructure of streets, pavements and drainage systems of urban landscapes. Later generations inherit a largely completed infrastructure which usually only required maintenance or minor modification. This is a universal aspect of all narratives of landscape evolution.'

PHOTO 2-13 VIEW NORTHWARDS ALONG THE GRAND CANAL – BARROW LINE, ATHY



3 LANDSCAPE CHARACTER TYPES

3.1 INTRODUCTION

In this section, the landscape character types are discussed in more detail. A definition of a landscape character types (LCT) is provided below:

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 the county. Nonetheless, where they do occur, they commonly share similar combinations of geology, topography, land cover and historical land use. For example, *River Corridors* are a distinct landscape character types and is recognisable as such, whether they occur in County Kildare or other counties

3.2 IDENTIFYING LANDSCAPE CHARACTER TYPES

Through a combination of Steps Two and Three of the methodology (desktop, GIS and field survey), and professional judgement, several draft LCTs were identified through GIS analysis and then ground-truthed through field surveys over September 2024 to January 2025. Figure 3.1 presents the GIS layers contributing to the identification of the LCTs. Figure 3.2 illustrates the LCTs identified in the county and Table 3.1 onwards provides a description of each LCT identified.

FIGURE 3-1 GIS LAYERS CONTRIBUTING TO LANDSCAPE CHARACTER TYPES

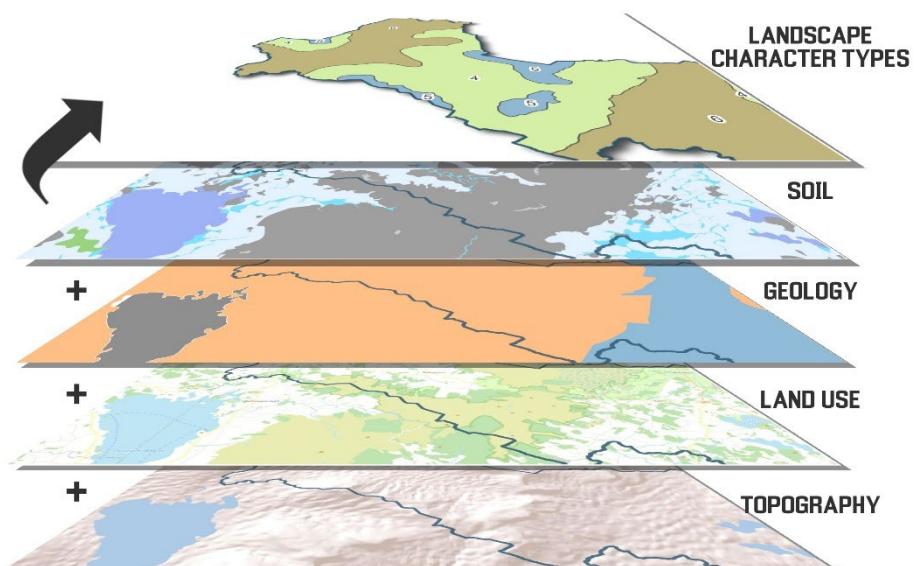


FIGURE 3-2 LANDSCAPE CHARACTER TYPES OF COUNTY KILDARE

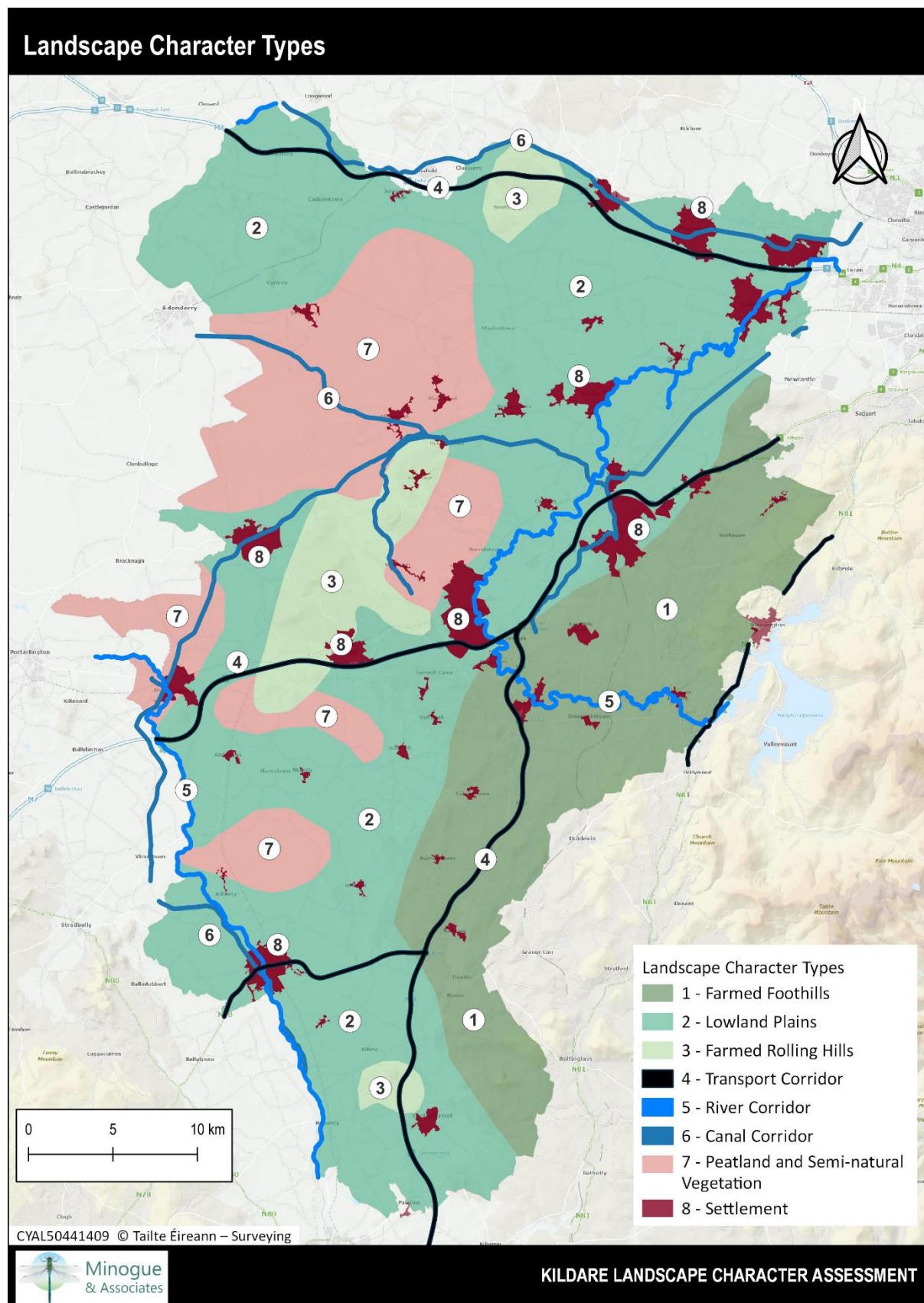


TABLE 3-1 LANDSCAPE CHARACTER TYPES IDENTIFIED FOR COUNTY KILDARE

Kildare LCT	Summary	Image
LCT 1 Farmed foothills	<p>Foothills: characterised predominantly by Clastic (Sedimentary) bedrock - marine sandstone, siltstone and shale</p> <ul style="list-style-type: none"> Visually conspicuous when seen from lowland areas where they often form the skyline. These relatively elevated locations can provide panoramic viewpoints across the county. Topography comprising elevation, ridgelines, plateaus and steep slopes. Elevation ranges from 100m to 350m. Soils in the area are dominated by Grey Brown Podzolics combined with Brown Earths and mineral The general land use on the foothills is pasture; however, some areas are occupied by arable lands and conifer plantations. Hedgerows tend to be mixed heights with some mature trees. Evidence of mineral extraction in places. Dispersed rural house in a range of architectural styles. 	
LCT 2 Lowland plains	<ul style="list-style-type: none"> Lowlands characterised by Carbonate (Sedimentary) bedrock - mostly marine limestone with some shale Soils in the area are largely dominated by Grey Brown Podzolics, although pockets of gleys and mineral soils also occur Comprises extensive plains of fertile land with elevation commonly around 100m. Typically smooth, flat or very gently sloping terrain. Frequent extensive vistas. River, canal corridors and nucleated settlement present. Land use both tillage and pasture; with pasture more prevalent in the north and tillage more prevalent in the south. Some mixed forest and coniferous plantations in the northwest. Variable field size, some very large and hedgerows often well maintained and cut neatly in box shape 	
LCT 3 Farmed rolling hills	<ul style="list-style-type: none"> Discrete areas of elevated land within LCT 2 "Lowland plains" where prominent hills reaching 100 to 150m form important visual features in the landscape. 	

Kildare LCT	Summary	Image
	<ul style="list-style-type: none"> Central Hills (NW of Kildare to Robertstown) - characterised by sandstone, siltstone and shale (Clastic, which is Sedimentary) bedrock. Basalt bedrock forms hills such as Hill of Allen. Any other hills within this LCT are mostly below 100m and are minor topographic rises on the limestone plains. The rolling hills can provide extensive open views of the lower Kildare landscape at certain locations. Occasional forestry plantations on higher elevations. Medium to large-sized field, principally pasture fields with sheep and cattle with some arable present. Many large present-day farm buildings as well as modest to medium-sized vernacular farmhouses along regional and local roads. 	
LCT 4 Transport corridor	<ul style="list-style-type: none"> A linear component of significant transport corridors transversing east to west (M7) and north to south (M9); M4 also runs east west along Kildare Meath Border. Often built close or parallel to historic routes These corridors connect or run adjacent to fast-growing areas and act as magnets for urbanisation and other development. This Landscape type offers a variety of views depending on the height of the earthen borders and the direction of travel if facing mountain and hill ridges. These motorways are relatively new and the low immature shrubs and trees of the roadside planting allow for occasional farmland and hill views. These major transport routes for commuters and freight; often their singular experience of the Kildare landscape 	

Kildare LCT	Summary	Image
LCT 5 River corridor	<ul style="list-style-type: none"> LCT 5 is generated as 200 m wide zone (100 m on each side of river line in GIS, not the actual width of the river in GIS) along the major river routes Principal rivers of the county with alluvium soils draining east and southeast. Generally, rise in the foothills or mountains and ultimately drain north-easterly to Dublin Bay (Liffey) or southeasterly to Wexford harbour (Barrow); these represent significant ecological corridors. Rivers vary between wider, more mature river valleys and incised, narrow valleys that create more dramatic landscapes. They provide amenity and recreational resources. The river corridors vary in width and edge condition but often are characterised by riparian species such as birch, ash, alder and willow. Riparian vegetation and treelines including alluvial woodland are present Extant and remnant evidence of former demesne landscape associated with mature stretches of river. 	
LCT 6 Canal corridor	<ul style="list-style-type: none"> Manmade watercourses of historic importance. Embankments are a feature, and alignment is often associated with the railway lines. Woodlands and habitats associated with the canal are important ecological features. Offers an accessible recreational route. Canal locks and stone-cut bridges are distinctive features of these water corridors. The smooth terrain, generally gentle landform and low canal bank grassland that characterise the canal corridors allow vistas over long distances without disruption, where the canal flows in a straight-line direction. 	

Kildare LCT	Summary	Image
LCT 7 Peatland and seminatural vegetation	<ul style="list-style-type: none"> Overlying Carbonate (Sedimentary) bedrock – marine limestone with some shale, these are low lying peatlands are below 100m. Soils are dominated by peat soils with some areas of grey brown podzolic and complex mineral soils. The high-water table and poor drainage result in a landscape that can be precarious to traverse and often unproductive in terms of agriculture. Flat topography, and smooth terrain with few fences or hedges, provide wide-open panoramic views where access is possible. Transitional areas of reclaimed improved pastureland at the boundaries of the peatlands. The typically large open areas are often bordered by unmaintained hedgerows and scrub. Land cover in the area is largely dominated by raised cutover bog with some remnant intact bog and reclaimed peat for agriculture and development. Bog roads are characterised by their elevation, uneven surface and deep ditches flanking the road. 	
LCT 8 Settlement	<ul style="list-style-type: none"> The urban settlements of the county, with an historic core reflected in Architectural Conservation Area designations across numerous towns. Market towns and Estate towns remodelled in the 19th century. Settlement edge and rapidly growing urban developments on edges of town boundaries and zoned residential lands. 	

4 LANDSCAPE CHARACTER AREAS

4.1 INTRODUCTION

This section provides a description of the Landscape Character Areas (LCAs) identified through the LCA methodology.

Each LCA description includes the following:

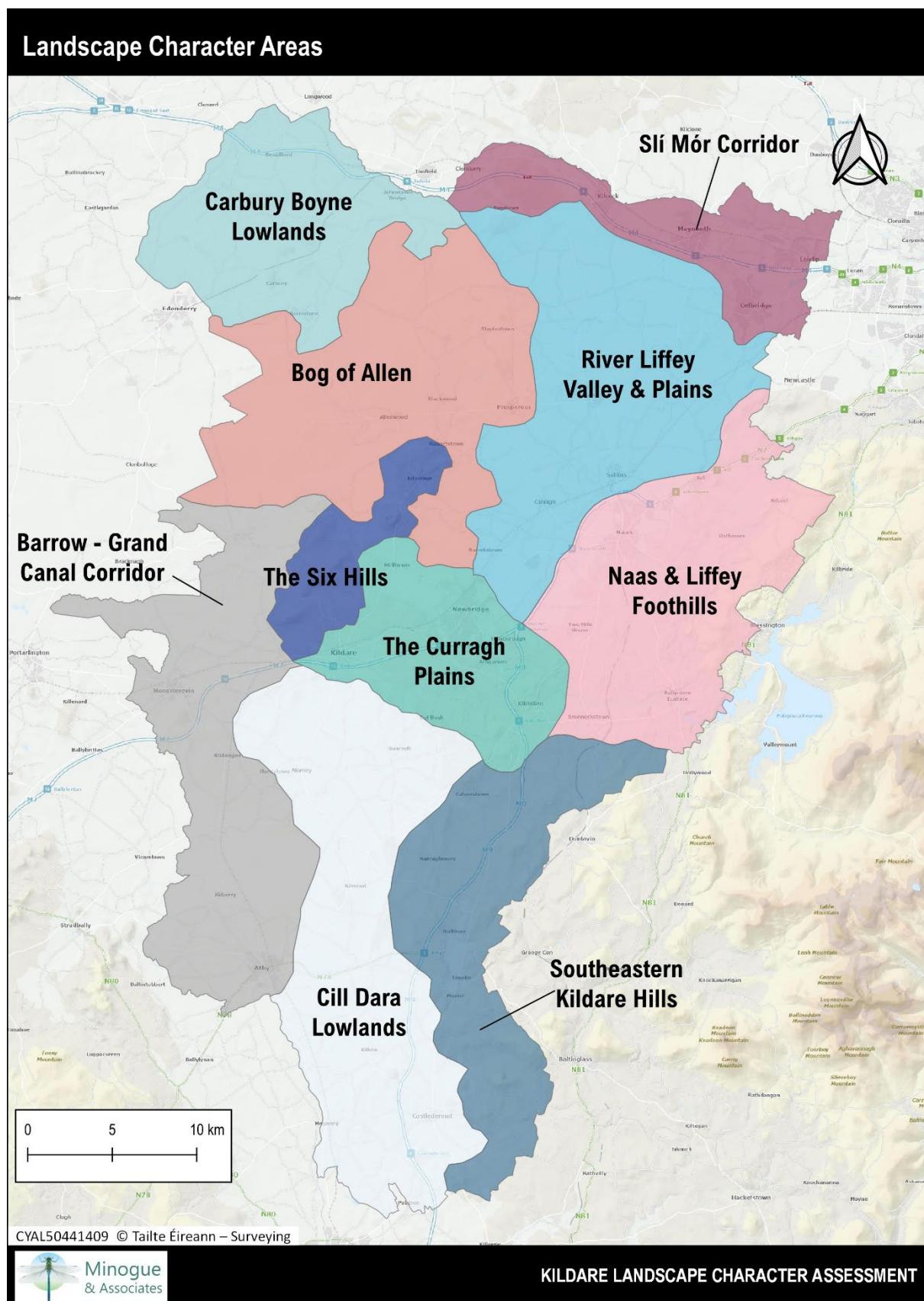
- Name and extent
- Key characteristics
- Geology and landform
- Land cover and ecology
- Historic and human influences
- Landscape values
- Landscape condition and drivers of change.

Figure 4.1 presents the Landscape Character Areas.

PHOTO 4-1 HORSES GRAZING NEAR MAGANEY



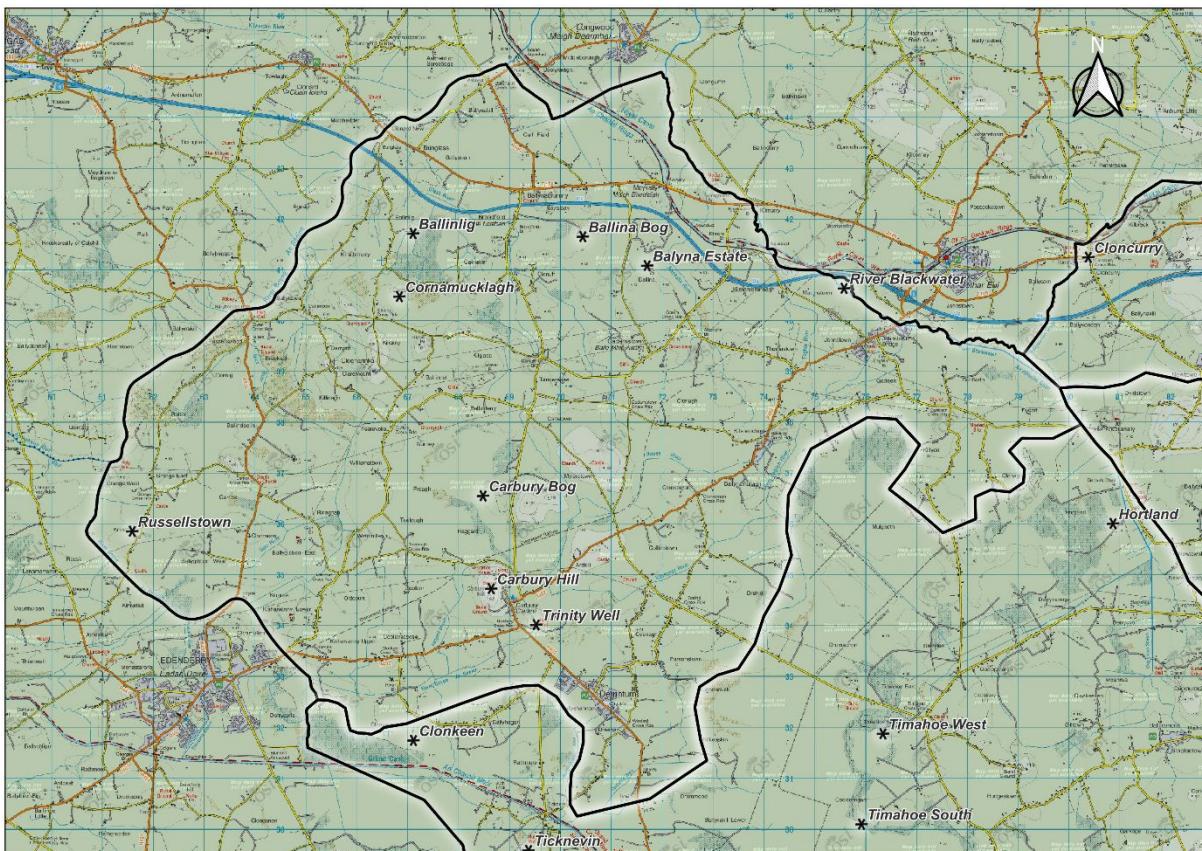
FIGURE 4-1 LANDSCAPE CHARACTER AREAS OF COUNTY KILDARE



4.2 LCA 1 CARBURY BOYNE LOWLANDS



FIGURE 4-2 CARBURY BOYNE LOWLANDS BOUNDARY



4.2.1 EXTENT

This LCA extends along the western boundary of the County, adjoining County Offaly and County Meath. The River Blackwater forms the boundary with LCA 4 Bog of Allen whilst the River Boyne forms the northern boundary, and the Royal Canal runs close to the boundary with Co Meath further east.

PHOTO 4-2 VIEW FROM CARBURY HILL WITH WICKLOW MOUNTAINS IN DISTANCE



4.2.2 KEY CHARACTERISTICS

- The River Boyne rises at Carbury Bog but is traditionally associated with the Trinity Well on Carbury Hill. Bordered by the Grand Canal on the Northern Side and the River Boyne on the Western edge, these water features influence the character of the area.
- Carbury Hill is a prominent landmark, noted for its historic and topographical significance. Extensive panoramic views across the county and northwest to County Meath are possible from the hilltop.
- The area historically served as a borderland with several defensive settlements, including castles and fortifications.
- The low-lying topography provides broad, open views across agricultural fields.
- The landscape is strongly shaped by its agricultural activities, with extensive pasturelands and some tillage farming.
- Villages such as Johnstownbridge are small with rural dispersed settlement pattern; Carbury and Derrinturn are the principal nucleated settlements.
- The absence of large towns in the LCA, contributes to a predominantly rural landscape that maintains a largely peaceful and tranquil character.

- Tree-lined hedgerows, demesne woodland, small, forested areas, occasional mixed woodland, and sparse coniferous forestry confer a more wooded feel to the landscape.



4.2.3 GEOLOGY AND LANDFORM

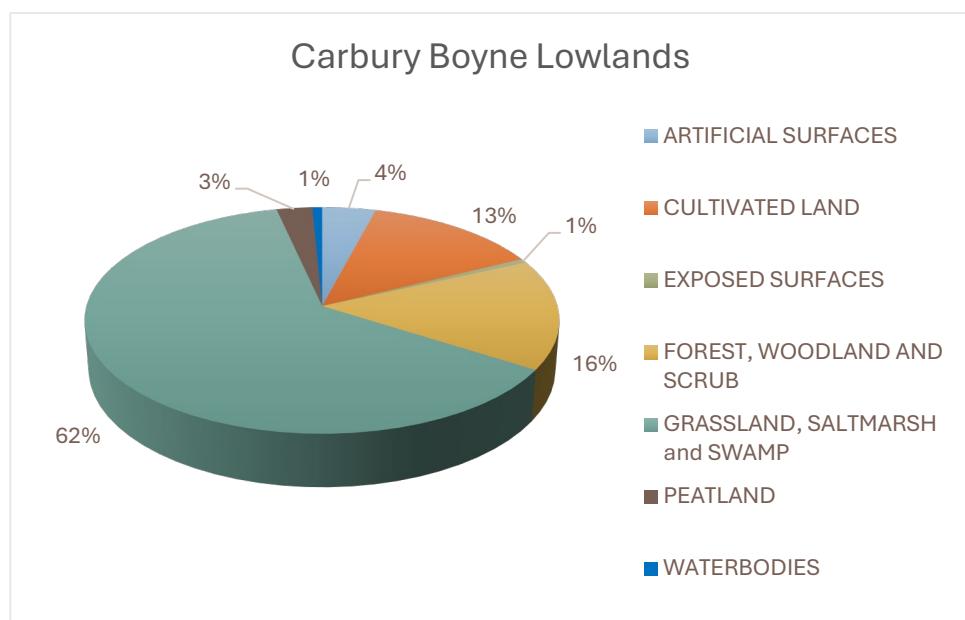
Topographic elevation in the Carbury Boyne Lowlands LCA is mainly 60 m to 100 m, with Carbury Hill (142 m) the highest hill, along with some isolated hills above 100m. Geology is almost entirely Carboniferous limestone and shale, with two isolated areas of Carboniferous volcanic rock. Surficial sediments (unconsolidated cover over bedrock) comprise mostly limestone till and limestone gravel. Some cut-over raised peat areas are present. Alluvium occurs along the course of the River Boyne and River Blackwater. Eskers are present in northwestern parts of the LCA.

The Carbury Boyne Lowlands LCA is almost entirely to the Boyne Catchment (95%), with areas in the south in the Barrow Catchment. The River Boyne begins south of Carbury. Flowing west towards Edenderry, the river turns northwest, and its course demarcates the Offaly County boundary, and the Meath County boundary before striking northwards, west of Longwood. Other rivers include the Killinagh, Glash, Kilshanchoe, and Coolree rivers.

4.2.4 LAND COVER AND ECOLOGY

The LCA (146 km²) comprises 91 km² grassland, 23 km² forest/woodland/scrub, 20 km² cultivated land, and 4 km² peatland. Chart 4.1 below presents the broad land use categories in terms of hectares under different land use in this LCA.

CHART 4-1 NATIONAL LAND COVER - PERCENTAGE LAND COVER



Although peatland land cover is quite low, two of the sites designated for Natural Heritage are Ballina Bog and Carbury Bog both designated for raised bog habitat and The Royal



Canal pNHAs. The hedgerow network is relatively intact and strong across much of this LCA, combined with the wetlands and the Rivers Boyne and Blackwater, the LCA includes a diverse mosaic of habitat types.

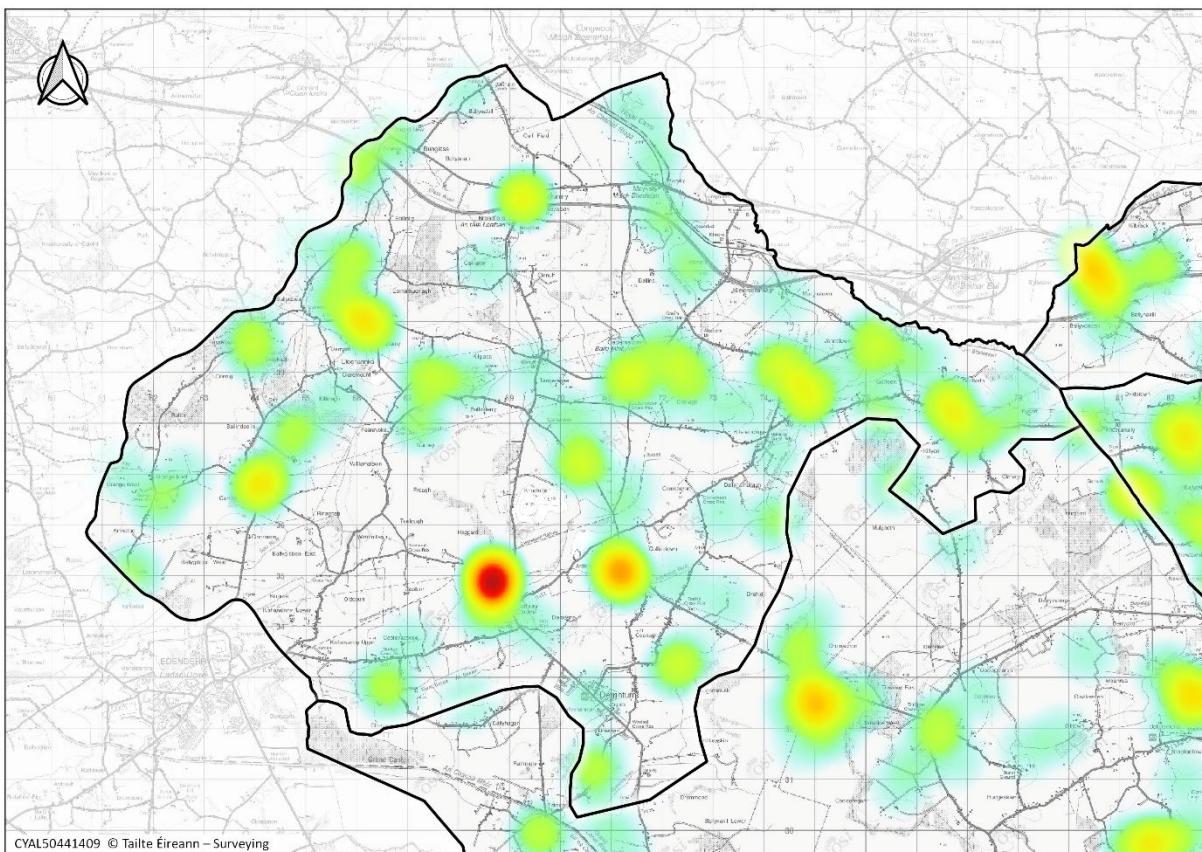
4.2.5 HISTORIC AND HUMAN INFLUENCE:

There is a total of 161 archaeological monuments in this LCA. The prehistoric period is quite poorly represented, with only a single fulachta fiadh uncovered during excavation. However, there are ten barrows of various types, as well as a single ring-ditch, which date to the prehistoric period, but can't be definitively assigned to any particular period. A hearth, uncovered during excavation, dates to the Iron Age. The Early Medieval period is represented by fourteen ringforts. Seventeen enclosures are recorded. While these may date to any period, there is a likelihood that many of them relate to farmsteads of the Early Medieval period. Also dating from this period are eight holy wells. Three early ecclesiastical enclosures are recorded. The Later Medieval period is represented by an Anglo-Norman castle (Carbury castle KD008-001002-) which is part of a complex of monuments on Carbury Hill, including a motte, church and fortified house. A single hall house (Carrick castle, KD002-009----) is also recorded. Twelve moated sites and a deserted medieval settlement are also known from this period, as well as five tower houses, giving this area a very distinct Anglo-Norman character. The Post Medieval period is represented by monuments such as a lime kiln, a designed landscape feature (tree ring), an icehouse and a mausoleum.

The River Boyne is traditionally considered to rise at Trinity Well, Carbury Hill within Newberry Demesne, flowing onwards through County Meath and through some of the most significant archaeological landscapes in the region. Today, villages and settlements are small and scattered with no large towns in this LCA, contributing to a predominantly rural landscape. On the local roads, farm buildings and rural housing are dispersed throughout the area, reflecting its agricultural use and low population density. Drainage ditches are a feature in the wetter lands, often running along the roadside. There is an increase in historic estates closer to Carbury, itself an estate village.

Recreational uses are associated with the golf course on former demesne (Balyna Estate, now Moyvalley golf course) and Royal Canal greenway that forms the boundary between County Kildare and neighbouring County Meath.

FIGURE 4-3 ARCHAEOLOGICAL HOTSPOT MAP OF CARBURY-BOYNE LOWLANDS



4.2.6 LANDSCAPE VALUES

In addition to the Natural Heritage areas listed above in Section 4.2.4, Rahin Wood, located on the western edge abutting County Meath, forms an important component of the Kildare County Council (KCC) Green Infrastructure Map. There are several NIAH Historic Gardens and Designed Landscapes within this LCA.

- KCC identifies Scenic Route 26 to the north of Carbury Hill (Views from the county roads (L1005, L5019, L5018, L1006, L5017 and L5011) of Carbury road junction with the R402 and upland area at Mylerstown)
- Carbury Hill is listed as a hilltop view.

Landscape values identified from consultation include:

- The canal corridors are of particular value:
- Carbury Castle is a significant landmark and central influence in the LCA.
- Mythology associated with the Salmon of Knowledge caught on the Boyne in County Kildare.
- The source of River Boyne at Boann's source/ Boinn's Womb is significant, Carbury Castle and village came later.



"The blue ways along our beautiful canals. The woods, forests and bog lands that run alongside them and in the surrounding areas. These are special as they provide places for leisure, they are full of Biodiversity & nature and home to many different animals & birds."

4.2.7 LANDSCAPE CONDITION AND DRIVERS OF LANDSCAPE CHANGE:

Overall, the LCA is intact and in good condition; the integrity of the landscape character is largely strong and maintained with a landform and land cover that contributes to a cohesive landscape character. The landscape is strongly shaped by its agricultural activities, with extensive pasturelands and some tillage farming. Although woodland habitat land cover is relatively low, the combination of tree lined hedgerows, occasional mixed woodland, small forestry and sparse coniferous forestry, combine with the field pattern and topography to confer a more wooded character to the landscape.

Long distant views of the Newtown Hill to the east and Allen Hill to the south-east. The panoramic views from Carbury Hill are significant and present visual connections to the wider landscape including County Meath. The low-lying topography provides broad, open views across agricultural fields. Despite agricultural activity and urban influence, the region maintains a peaceful and tranquil atmosphere.

Drivers of change:

- Potential landscape change arising from changing agriculture practice as the sector adapts to climate change and/or afforestation.
- Increased development pressure along the motorway corridor and its junctions.
- Increased ancillary tourism activities and facilities along the canal corridor.



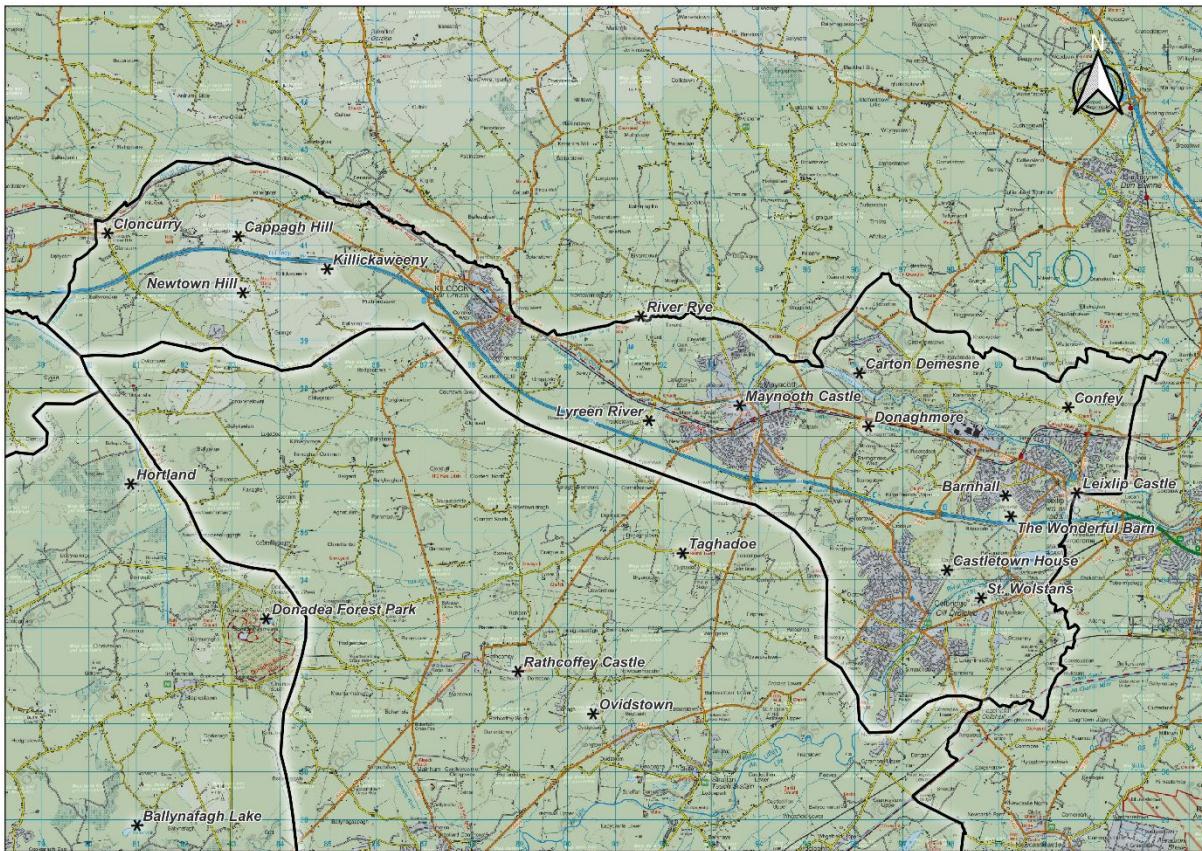
PHOTO 4-3 BARROW WITHIN NEWBERRY DEMESNE



4.3 LCA 2 SLÍ MHÓR CORRIDOR



FIGURE 4-4 SLÍ MHÓR CORRIDOR BOUNDARY



4.3.1 EXTENT

This character area forms a boundary with County Meath to its north, and with South County Dublin and Fingal to the east. It is bounded to the north by the former N4 (Slí Mhór route), the M4 and the Royal Canal. This LCA includes the towns of Celbridge, Leixlip, Maynooth and Kilcock. The River Blackwater forms its western boundary with LCA 1 Carbury Boyne Lowlands and includes Newtown Hills.

PHOTO 4-4 EAST OF PITCHFORDSTOWN LOOKING NORTH ACROSS M4



4.3.2 KEY CHARACTERISTICS

- Sizeable and fast-growing urban centres include Celbridge, Kilcock Leixlip and Maynooth
- Significant historical associations of the Viking settlement at Leixlip and ancient routes include the Slí Mhór that bisected the ancient territories of Ireland.
- Communications remain a feature of this LCA, with the Royal Canal, railways, former N4 (Slí Mhór route), and current route of the M4 motorway, creating an active and busy character to much of this LCA.
- The River Liffey Valley running through the southeastern lands of the LCA forms a spine that has profoundly influenced the formation of the landscape and landscape character. Adjacent to the town of Celbridge, several designed landscapes of large and small demesnes border the River Liffey.
- The Newtown Hills stand out as a group of isolated hills that rise prominently from the surrounding plains and offer extensive views of the Allen peatlands, creating an important visual feature of the region. The hills are surrounded by predominantly flat or gently undulating lowlands.

4.3.3 GEOLOGY AND LANDFORM

Elevation is predominantly in the range of 50 m to 100 m. Terrain in the western part of the LCA reaches a height of 145 m around Cappagh Hill. The course of the Rye Water flows southeastward along the county boundary towards Leixlip along a low-lying channel of 30 m to 40 m elevation. Geology across the LCA is almost entirely Carboniferous limestone and shale and is reflected in low-lying terrain. Hilly terrain around Cappagh Hill is Carboniferous Namurian shale. There is a noticeable pattern of low-lying terrain in

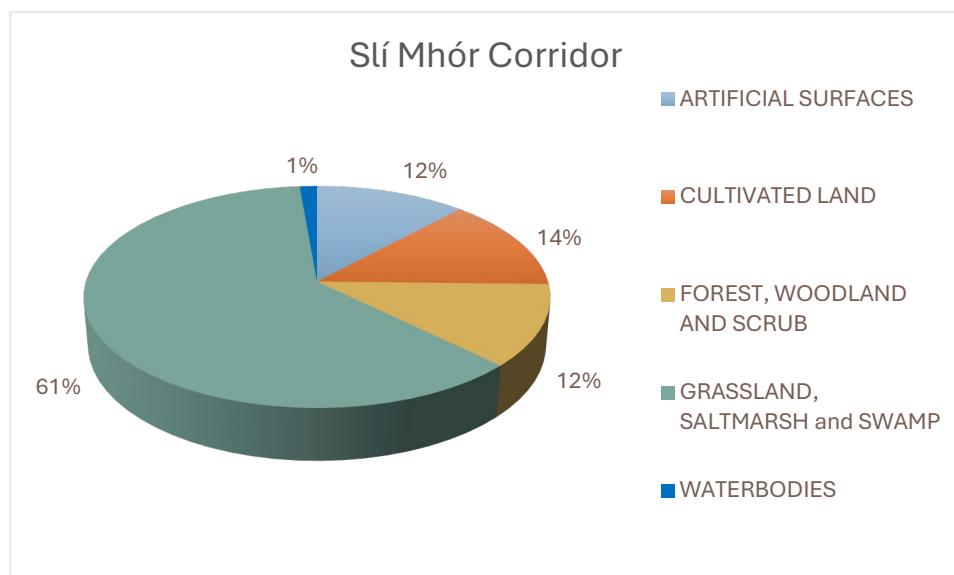


limestone/shale areas and hilly terrain in areas of Namurian shale. Surficial sediments comprise predominantly limestone till, with lesser cover of limestone gravels, cut-over raised peat, and alluvium. The westernmost part of the Slí Mhór Corridor LCA is in the Boyne Catchment, whilst the majority (~90%) of the LCA is in the Liffey and Dublin Bay Catchment. The River Liffey flows northeastward across southeastern lobe of the LCA. Other rivers include the Rye Water which flows east along the Kildare-Meath County boundary, the Lyreen, Cloncurry, and Ovidstown rivers.

4.3.4 LAND COVER AND ECOLOGY

The LCA (92 km²) comprises 56 km² grassland, 12 km² cultivated land, and 10 km² forest/woodland/scrub. Chart 4.2 below presents the broad land use categories in terms of hectares under different land use in this LCA.

CHART 4-2 NATIONAL LAND COVER PERCENTAGE LAND COVER



This LCA is largely absent peatland habitats in contrast to many of the other LCAs. Sites designated for Natural Heritage are the Rye Water Valley/Carton SAC designated for the River Rye flowing north of Maynooth to Leixlip and the Royal Canal pNHA, and Rye Water pNHA. The Liffey Valley pNHA is designated east of Leixlip as it flows through neighbouring South Dublin and onto the City of Dublin.

4.3.5 HISTORIC AND HUMAN INFLUENCE:

There is a total of 204 archaeological monuments in this LCA. The prehistoric period has a broadly Bronze Age characteristic, with seven fulachta fiadh/burnt mounds recorded, as well as seven pit burials, all found as part of a burial mound (KD011-060----) excavated at Castletown Demesne, near Celbridge. Barrows are indicative of prehistoric burial, generally dated to the Bronze Age but can date broadly from the Neolithic to the Iron Age. Five barrows of varying type are known, as well as twelve ring ditches, a cliff edge fort at Newtown (KD004-058----), visible only as a cropmark may date to the Iron Age. The Early Medieval period is well represented. However, settlement evidence is relatively poor, only six ringforts are recorded, although excavation has revealed five houses dating from this



period. Three of these were excavated as part of the M4 Kinnegad-Enfield-Kilcock Motorway Scheme in 2002, and two were identified as part of the excavation of the keep of Maynooth Castle in 1996.

Twenty-one enclosures are recorded, many of which may relate to farmsteads of the Early Medieval period. The Early Medieval period is also represented by six ecclesiastical enclosures and three ecclesiastical sites (although these are known from historical sources only, and medieval churches now stand on these sites). It is interesting that there are more ecclesiastical sites than ringforts in this LCA. Nine holy wells are also recorded. The later medieval period is represented by two Anglo-Norman castles-Maynooth Castle (National Monument No. 485) and Leixlip Castle. Only one motte and one moated site are known. The religious landscape is visible as nine churches and two religious houses- The Augustinian house (KD011-014----) near Celbridge, and an unclassified foundation at Oldcastle. One deserted settlement is also known at Cloncurry. The Post Medieval period is represented by monuments such as five seventeenth-century houses, a limekiln and bridges. In general, all periods from the prehistoric to Post Medieval periods are represented in this LCA, with a notable clustering of monuments at the eastern side of the LCA, and a smaller dense cluster at the extreme western edge of the LCA.

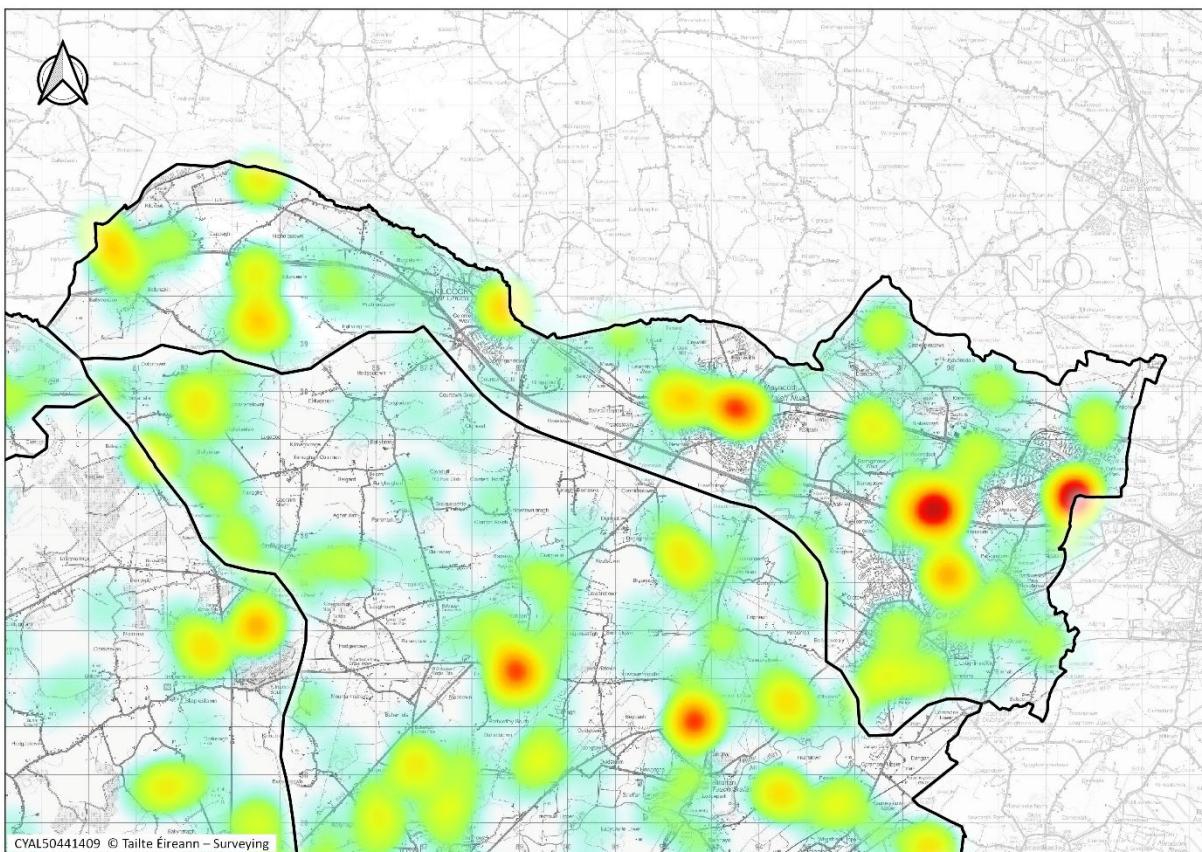
The long-established urban centres such as Leixlip located at the confluence of the Rivers Rye and Liffey have provided historical and industrial heritage features associated with a variety of mills including corn, paper, and flax. The famous Salmon Leap at Leixlip was flooded as part of the ESB hydroelectric scheme in the 1940s.

Powerful families were attracted to settle along the valleys of the River Liffey and the River Rye. In the 18th century large scale designed landscapes such as Carton Demesne (River Rye) and Castletown House (River Liffey) were created. The objective of the time was to form a composite designed landscape along these valleys uniting the design of the various estates. The creation of such powerful estates influenced the form of adjacent towns, e.g. the main street of Celbridge extends into the grand straight avenue that leads towards Castletown house. Similarly, Main Street Maynooth and the Carton Estate are connected via grand avenue.

Today, towns such as Leixlip, Celbridge and Maynooth function as important service and educational towns, their layout largely formed in the nineteenth century. Surviving visible historic features and townscapes confer a distinctive character on the towns. Strong urban influence evidenced via the growth of Celbridge, Kilcock, Maynooth and Leixlip given their proximity to Dublin and transport connections.

Outside the towns, the agricultural landscape is well maintained, with strong agricultural quality, predominantly under pasture with an intact hedgerow and treeline network enclosing fields.

FIGURE 4-5 ARCHAEOLOGICAL HOTSPOT MAP OF SLÍ-MHÓR CORRIDOR



4.3.6 LANDSCAPE VALUES

There are a number of NIAH Historic Gardens and Designed Landscapes within the LCA and remnant ancient woodland along River Liffey.

- Kildare County Council (KCC) identify the following scenic routes; Scenic Route 15 (Views of the Plains of Kildare and West Central Boglands, to and from Newtown Hills), Scenic Route 28 (Views within the Carton Demesne Walls, to and from Carton House, the Lake and Woodland Areas), and Scenic Route 29 (Views of the River Liffey from the Main Avenue of Castletown House).
- Hilltop views are recorded at Ovidstown and Killickaweeny.
- KCC Green Infrastructure Strategy shows green corridors along the River Rye, The River Liffey and the River Lyreen, and a Blueway along the Royal Canal. Carton Demesne and Castletown House are identified as GI stepping stones.

Landscape values identified from consultation include:

- The River Liffey, canal corridors and hill views.
- Associations with Arthur Guinness, Leixlip and the Wonderful Barn.



"I love the view of Newtown from Ovidstown Hill. I have many memories of cycling up and down from Tiermohan to Cappagh GAA pitch. It's a very pretty view especially the road from Ovidstown towards Kilcock, both in winter (snow) and in summer."

4.3.7 LANDSCAPE CONDITION AND DRIVERS OF LANDSCAPE CHANGE:

Overall, this is a diverse and relatively coherent LCA with the influence of the communications corridors strong throughout. The historical influence of the Slí Mhór combined with the Royal Canal, River Liffey and Rye confer a distinctive character that is present via the necklace of settlements along the northern part of this LCA. The proximity to and similar landscape character with parts of County Meath highlight potential cross boundary landscape impacts and the need for co-ordinated responses to landscape management. Traffic on the motorway can be heard when travelling along northern stretches of this LCA.

Drivers of change:

- Increased urbanisation and growth associated with fast growing settlements: Maynooth (Key Town), Kilcock (Self -Sustaining Town), Celbridge (Self-Sustaining Town) Leixlip (Self-Sustaining Town).
- Supporting services such as recreation, community and sports spaces to complement urban centres.
- Growth in land and water-based tourism activity associated with the River Liffey, Rye River, the Royal Canal and the historical demesne lands.
- Global demand for aggregate and stone and the potential growth of the existing established extractive industries in the area (Current prospecting Licenses in Newtown Hill area).
- Telecoms and associated infrastructure on elevated sites.
- Increased development pressure along the motorway corridor and its junctions.



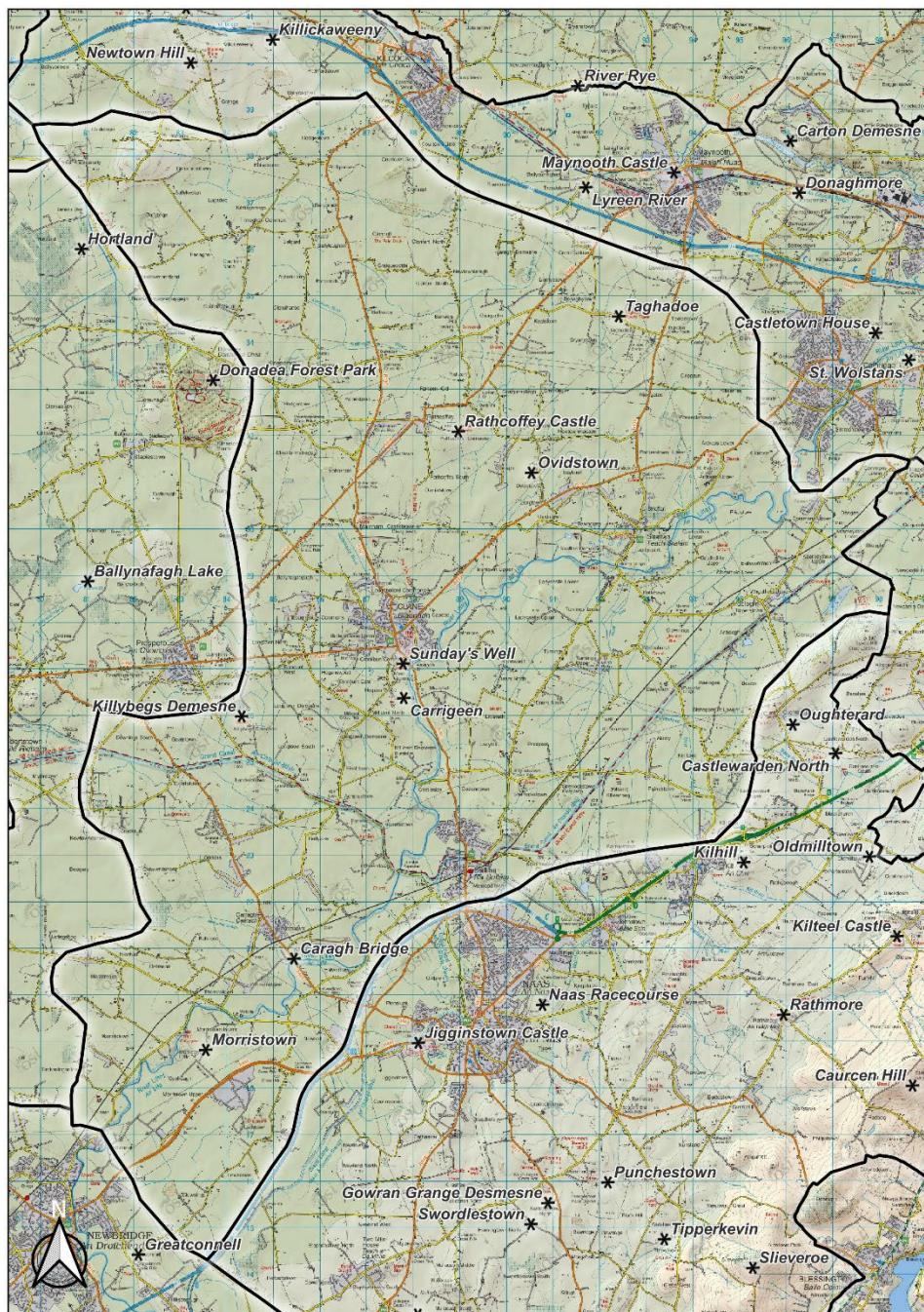
PHOTO 4-5 FERRANS LOCK (17TH LOCK) ROYAL CANAL, ON CO KILDARE AND MEATH BORDER





4.4 LCA 3 RIVER LIFFEY VALLEY AND PLAINS

FIGURE 4-6 RIVER LIFFEY VALLEY AND PLAINS BOUNDARY



4.4.1 EXTENT

This extensive character area forms a boundary with South County Dublin to its east. The River Liffey drains much of the LCA, and connects the towns of Clane, Straffan and Sallins. The M7 forms its southeastern boundary with LCA 7 Naas and Liffey Foothills.



PHOTO 4-6 VIEW ACROSS THE PLAINS NEAR OVIDSTOWN

4.4.2 KEY CHARACTERISTICS

- Historical associations and surviving built heritage evidenced in clustering of demesne lands and large, predominantly 18th century estates. Frequently overlooking or adjacent to the River Liffey as it meanders from source towards Leixlip at county boundary with South Dublin and Fingal.
- Historical affluence and influence also noted through the presence of key communication corridors, Grand Canal and railway, parts of the Pale ditch traverse this LCA.
- Predominantly pasture on fertile farmland with limited tillage.
- This area is characterised by the predominantly flat terrain, offering open, expansive views, across farmland.
- Areas of older woodland associated with the many former estates flanking the Liffey.
- Dense network of well-maintained hedgerows with medium to large-sized fields.
- Rural area under urban influence, away from the main settlements the area still maintains a rural character.
- Sizeable and fast-growing urban centres include Clane.
- Low-lying floodplains close to rivers and streams, with drainage ditches evident on many roadsides.

4.4.3 GEOLOGY AND LANDFORM

Topography throughout the LCA invariably ranges in elevation from 60 m to 90 m with the exception high ground (135 m) in the northwest of the LCA, near Newtown. The geological character of the LCA is typical of the Irish midlands lowland limestone landscape.

Carboniferous limestone and shale are found throughout the LCA, with only a small area of

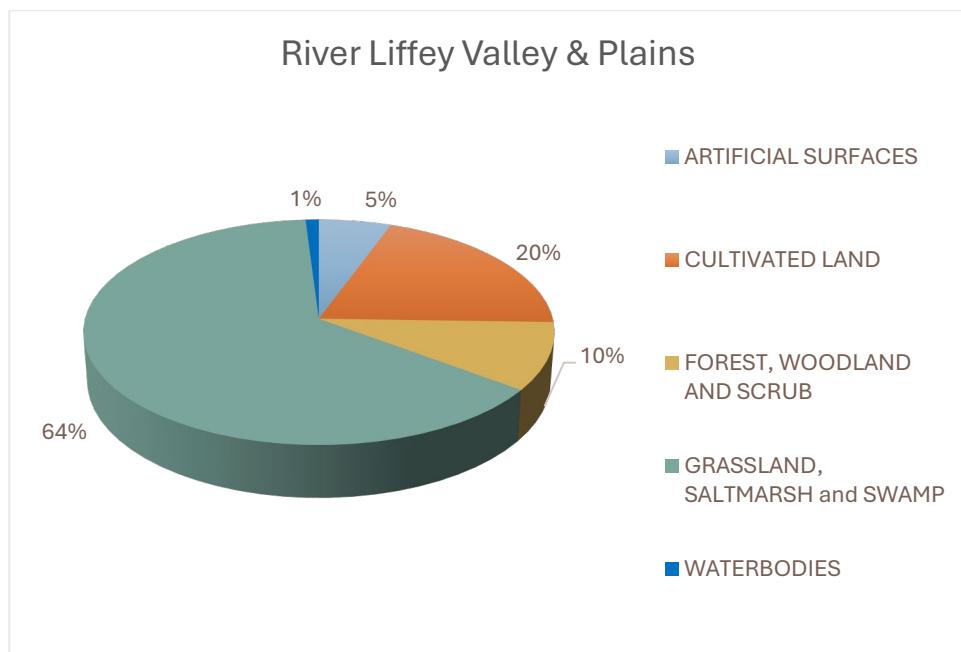


Silurian greywacke and Devonian Old Red Sandstone found in the east, near Kill. Surface cover comprises almost entirely limestone gravel and limestone till across the LCA. The River Liffey, fed by its tributaries, flows northeastwards across the LCA. The Clonshanbo River, the Baltracey River, and eventually the Lyreen River, flow to the west. All land in the LCA drains to the Liffey and Dublin Bay Catchment. The Grand Canal crosses through the LCA.

4.4.4 LAND COVER AND ECOLOGY

The LCA (233 km²) comprises 148 km² grassland, 46 km² cultivated land, and 23 km² forest/woodland/scrub. Chart 4.3 below presents the broad land use categories in this LCA.

CHART 4-3 NATIONAL LAND COVER - PERCENTAGE LAND COVER



Sites designated for Natural Heritage are the Grand Canal pNHA, part of the Donadea Woods pNHA and the Liffey as Osberstown pNHA. The mature demesne and parkland habitats, tree lined avenues are important ecological and historical features and merit replacement planting over time. The field network comprising mostly medium sized fields form important landscape linkages particularly when close to the riparian habitats present at the River Liffey and parts of the canals.

4.4.5 HISTORIC AND HUMAN INFLUENCE:

There is a total of 360 archaeological monuments in this LCA. One Neolithic burial is known (KD014-019----) from near Clane, excavated in 1971. The Bronze Age is represented by seven *fulachta fiadh*/burnt mounds and a cist burial. There are thirty-seven barrows of various types. There are only three sites which may date to the Iron Age. These are two concentric enclosures and a cliff-edge fort, all visible as cropmarks only. The Early Medieval period is well represented by ringforts, of which thirty are known. However, ninety enclosures are also recorded, many of which may relate to farmsteads of the Early Medieval



period. The Early Medieval period is also represented by seven ecclesiastical enclosures, and four ecclesiastical sites. One of these is the important site of Taghadoe (KD010-014---), which is also a National Monument (No. 578). Another is KD014-026017-, from which the town of Clane appears to have developed. Six holy wells and two holy trees are recorded. The later medieval period is represented by castles, most notably the Anglo-Norman castle at Rathcoffey Demesne (National Monument No. 404). There are three mottes and two motte and baileys, as well as six moated sites, which testify to the early Anglo-Norman advance into this area. There are also eight tower houses which date to later in the castle building sequence. The round tower at Taghadoe (National Monument no. 70), testifies to the continuance of religious architecture between the early and later medieval period. A total of 22 churches is known, as well as two religious houses: The Franciscan house at Abbeylands (KD014-026005-) at Clane and a preceptory of the Knight's Hospitallers (KD013-019001-) south of Prosperous. The Post Medieval period is represented by monuments such as formal gardens and designed landscape features, seventeenth-nineteenth-century houses, bridges and limekilns. One battlefield is also recorded at Ovidstown (KD004-043---), the scene of a military engagement during the 1798 rebellion.

The prevalence of ringforts and enclosures gives this LCA a notable early medieval settlement character.

This landscape is shaped by River Liffey and its valley and the generally western slope providing wide views across central plains. As with LCA 2 "LCA 2 Slí Mhór" these favourable landscape attributes have led to site selection by the powerful and wealthy.

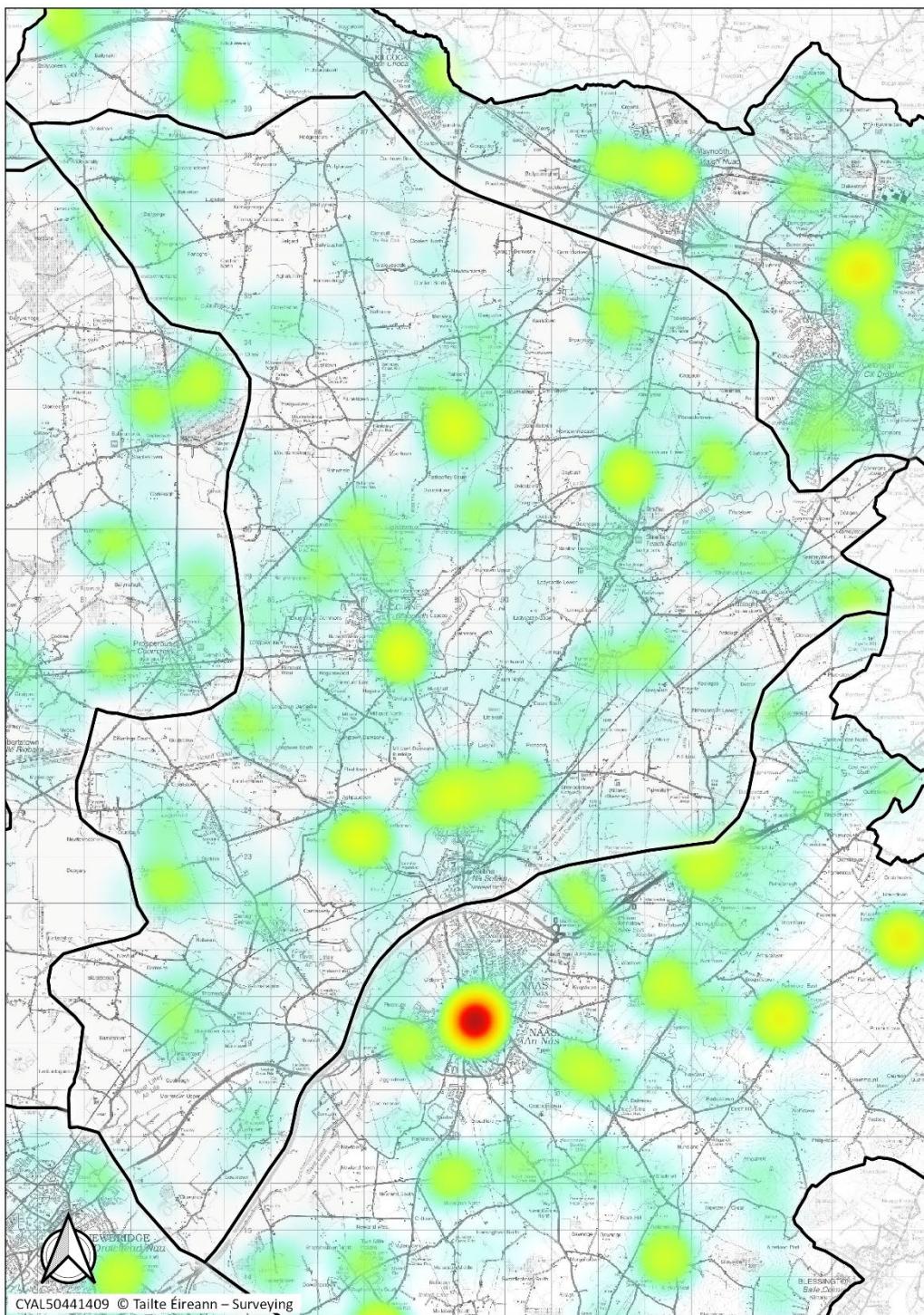
Today, several estates now serve a recreation function comprising hotels and golf courses. The Grand Canal greenway runs through much of the LCA with recent upgrades to the towpath from Sallins. The equine industry including stud farms and training centres is also located around the limestone rich soils of this LCA and benefits from proximity to international transport links, including ferry and airport access via/in Dublin.

Whilst the railway line and Grand Canal traverse this LCA the modern motorway network is absent from this LCA and this contributes to a largely rural, active but quite tranquil LCA with strong agricultural character.

Clane is the largest town ("the slanted ford") located north of the River Liffey and a crossing point of the Liffey; the town is of early ecclesiastical origins founded by St. Ailbe around 520. The demesne landscapes associated with some of these towns such as Straffan create attractive wood lined approaches to the towns (e.g. Bohereen, the Glebe and Lover's Lane roads to Straffan).



FIGURE 4-7 ARCHAEOLOGICAL HOTSPOT MAP OF RIVER LIFFEY VALLEY AND PLAINS



4.4.6 LANDSCAPE VALUES

There are a number of NIAH Historic Gardens and Designed landscapes within the LCA, with concentrations within the river valley and on the slopes close to the Wicklow border.



- Kildare County Council's Green Infrastructure Strategy promotes green corridors along the River Liffey and Morell Valley and a Blueway along the Grand Canal.
- Kildare County Council identifies Scenic Route No 31 (St Patrick's Hill and Holy Well north of Straffan).

Consultees to date have identified waterbodies, the Liffey, Canals and habitats associated with same as of value. Other sites referenced by consultees include Lyons Hill, the importance of recognising the cultural and environmental significance of the River Liffey, the role of the former estates as luxury destinations e.g. for golf.

"The Liffey incidentally is named after Mag Liffe, the plain in Kildare through which the Liffey flows"

"The River Liffey - a hugely important element of the Kildare Landscape. The river is one of the County's jewels"

4.4.7 LANDSCAPE CONDITION AND DRIVERS OF LANDSCAPE CHANGE:

This complex LCA comprises a variety of landscape types and is generally in good condition. The land is typically of good quality and bisected by the Liffey Valley and the Grand Canal corridors. There is predominantly grass based agriculture with well-maintained hedgerows and small areas of woodland. Mature vegetation along the River Liffey is often evidence of current and former designed demesne landscapes.

Drivers of landscape change include:

- Changing agriculture practice as the sector adapts to climate change
- Solar farm applications.
- Population growth in the north of this LCA and associated demand for housing.
- Increased ancillary tourism activities and facilities along the river and canal corridors.
- Increased recreational and sports activities propelled by population growth.
- Changing agricultural practice as the sector adjusts to national and European Policy changes and geopolitical events.
- Infrastructure proposals: Uisce Éireann's proposed Water Supply Project Eastern and Midlands Region (WSP EMR).



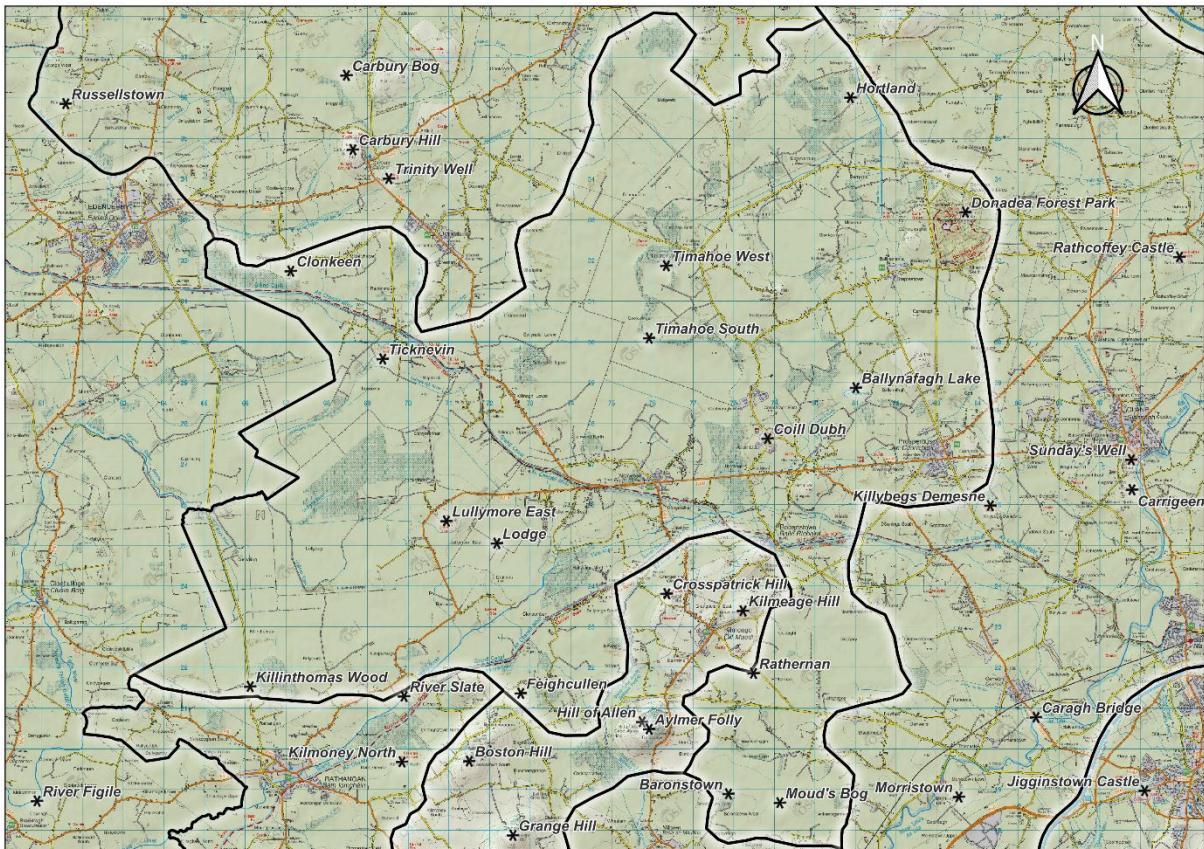
PHOTO 4-7 RIVER LIFFEY AT CLANE





4.5 LCA 4 BOG OF ALLEN

FIGURE 4-8 BOG OF ALLEN BOUNDARY



4.5.1 EXTENT

This large character area encompasses part of the former Bog of Allen, the largest raised peat bog in Ireland. This LCA is located south of LCA 1 Carbury Boyne Lowlands. County Offaly forms the western border and LCA 6 The Six Hills forms part of its southern boundary.



PHOTO 4-8 EAST OF PROSPEROUS BOG



4.5.2 KEY CHARACTERISTICS

This area is characterised by flat topography, smooth terrain and a high-water table comprising:

- Historically a significant area of peat extraction and relics of this abound through roads, housing and narrow-gauge railway lines, reflecting the economic significance of peatlands to the region and a strong peatlands community.
- Three former industrial peatlands are included in the Bord na Mona Peatlands Climate Action Scheme for post extraction decommissioning and rehabilitation, at Lodge, Timahoe South and Prosperous.
- Most of this area is categorised as 'Rural' and under moderate to high urban influence, settlements are sparse, with a few small villages or farmsteads on the periphery of the peatlands, low population density with scattered settlements such as Prosperous. The Grand Canal crosses this area in an east west direction.
- Long, very straight roads traverse the peatlands, characterised by uneven surfaces and large wide ditches on either side.
- Generally extensive views, intermittently obscured by fringe vegetation, such as wetland scrub and hedgerows.
- The open character and expansive scale create a remote character to much of this LCA providing a distinctive aesthetic value.

4.5.3 GEOLOGY AND LANDFORM

The Bog of Allen LCA covers an area of 230 km² and makes up 13.5% of total area of the county. Topographic elevation is consistent within a 20 m range (70 m to 90 m). A few



isolated hills in the east of the LCA reach heights of 100 m to 110 m. Overall, the LCA has level, uniform topography, much of which is characterised by the expansive cut over peatlands, such as the Bog of Allen and Timahoe Bog. Bedrock geology comprises Carboniferous beds of limestone, and to a lesser extent shale. This low-lying Carboniferous limestone landscape is a prominent feature of central Ireland, extending from Dublin to Galway. Almost 75% of the LCA is cut over raised peat. The remaining areas comprise almost entirely limestone tills. Surface drainage is largely to the Barrow Catchment via the Slate River and Cushaling (Figile) River, and to the Boyne Catchment via the Clogheraun Stream (Blackwater) in the northern portion of the LCA. Some areas in the south and east are located on the western margin of the Liffey and Dublin Bay Catchment. The Grand Canal and Grand Canal Barrow Line cross through the LCA.

PHOTO 4- 9 GRAND CANAL WEST OF ALLENWOOD

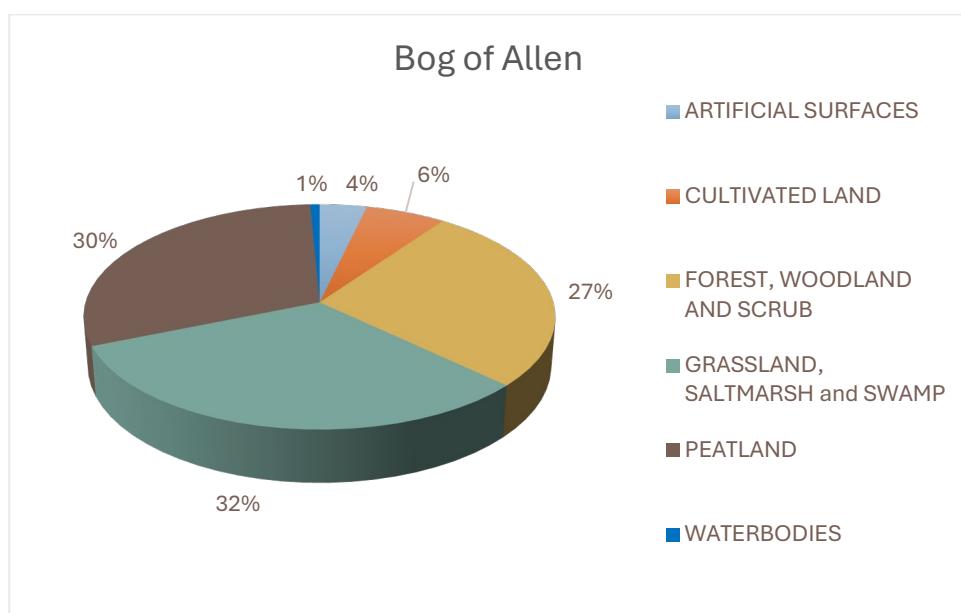


4.5.4 LAND COVER AND ECOLOGY

The LCA (209 km²) comprises 72 km² grassland, 70 km² peatland, 62 km² forest/woodland/scrub, and 14 km² cultivated land. Chart 4.4 below presents the broad land use categories in terms of hectares under different land use in this LCA. Of note, this large LCA includes the largest peatland land cover than the rest of County Kildare. The bog woodland and scrub associated with the fringes of these bogs are significant habitats.



CHART 4-4 NATIONAL LAND COVER - PERCENTAGE LAND COVER



Pollardstown Fen, which is the largest spring fed fen in the country, is located north of Newbridge and is designated as a SAC. A restoration plan is being prepared under the Tóchar Midlands Wetlands Restoration led by the National Peatlands Parks and Wildlife Service (NPWS).

Other sites designated for Natural Heritage within this LCA are Ballynafagh Lake SAC (001387), Ballynafagh Bog SAC (000391), Mouds Bog (002331) and Hodgestown Bog (001393) comprising a substantial network of wetland sites within this LCA. These sites are also designated as pNHAs in addition to the Grand Canal pNHA and Donadea Woods pNHA. Three of the four Kildare sites included in Bord na Mona's Peatlands Climate Action Scheme (PCAS) are in this LCA at Lodge, Timahoe South and Prosperous.

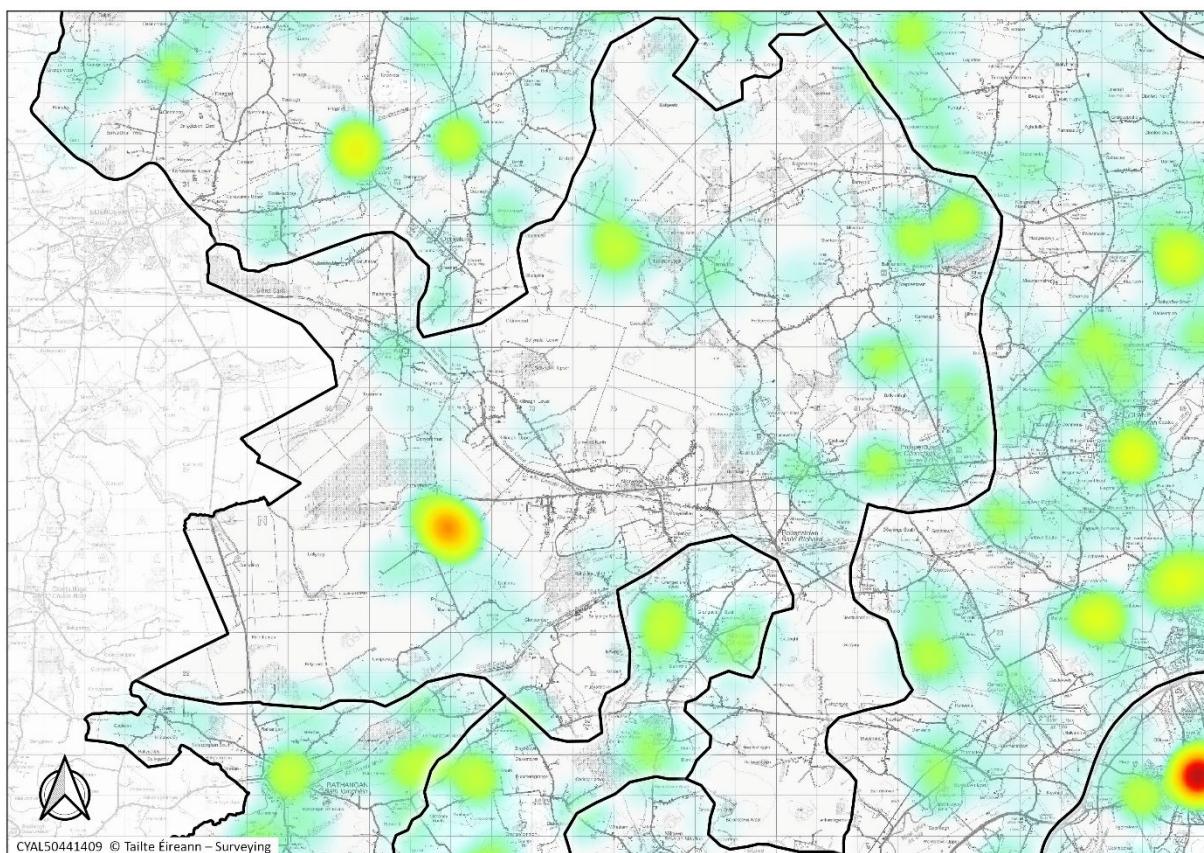
4.5.5 HISTORIC AND HUMAN INFLUENCE

There is a total of 162 archaeological monuments in this LCA. The prehistoric period is represented by a Bronze Age burial and one *fulacht fiadh* (a poor return given that these sites are usually found in wet/marginal locations). Six barrows of varying type are also recorded. Many of the archaeological sites in this LCA have been discovered as a result of peat harvesting. Three toghers (wooden trackways or roads dating to the Bronze Age) have been recorded. The Iron Age is represented by a bog body, discovered by peat cutters in 1953 at Baronstown (KD018-035----). The Early Medieval period is represented by twenty ringforts, sixteen enclosures, many of which may relate to farmsteads of the Early Medieval period. A crannog is recorded (KD004-014--), originally located in the River Blackwater, and discovered during dredging works in 1973, six ecclesiastical enclosures, one ecclesiastical site and two holy wells. Many of these ecclesiastical sites are located on the edge of bogs, such as at Lullymore East (KD012-006003-). Four toghers dating to this period are also recorded. The Later Medieval period is represented by two moated sites, dating to the early part of the Anglo-Norman advance. Three tower houses and one unclassified castle are also



known. Ten churches are also recorded. Three toghers have been discovered in the peatlands, as well as four wooden structures. The post-medieval period is poorly represented in the archaeological record for this LCA, with six churches noted. There are also three toghers from this period and five structures from the peatlands. It is notable that the archaeological evidence has a distinct bias toward the monuments discovered during peat cutting. It appears that the bogs were traversed from at least the Bronze Age through to the Post Medieval period, during which time toghers and other associated timber structures were constructed. Many of the monuments in this LCA date to the Early Medieval period.

FIGURE 4-9 ARCHAEOLOGICAL HOTSPOT MAP OF BOG OF ALLEN



Today, Prosperous is the main nucleated settlement and serves the wider rural areas. Dispersed settlement is informed by the peatlands with large areas absent built development due to the wetlands. Bord na Mona houses are present at Coill Dubh, between Prosperous and Timahoe, built to supply housing for the former Allenwood Power Plant⁵² nearby.

The soils are generally poorer for agricultural use but where drained, support grassland with pasture for livestock. Drainage channels, streams and large ditches are strongly characteristic in the landscape commonly draining east to west. Varied field sizes are

⁵² [allenwood-pr-pamphlet.pdf](#) ESB Archives



present, with medium fields more common, usually enclosed by post and wire fencing, hedgerows enclose fields in drier lands.

Recreational use is associated with the Grand Canal greenway as well as Donadea Forest Park. The Bog of Allen Nature Centre and Lullymore Heritage Park are close to Lullymore and the Killinthomas 70-hectare woodland operated by Coillte is mixed coniferous and broadleaved forestry and is known for its bluebell and wild garlic in spring.

4.5.6 LANDSCAPE VALUES

Kildare County Council (KCC) identify Scenic Route No. 32 (Views of Ballynafagh Lake north of Prosperous), Scenic Route 34 (Views of the Bog of Allen and the Hills of Allen, Grange and Dunmurry along the R403 and R414 from Allenwood to Rathangan).

Consultees have identified the Bog of Allen, and peatland habitats as of particular value. The biodiversity value, climate adaption, variety of bog habits present are all noted by consultees as conferring value on this LCA. Long views are possible across the county from Ballynafagh Hill even though it is less than 100m OD.

"Bog of Allen. Important (now rare) habitat for biodiversity but also for carbon sequestration. Very rich heritage in the history of Ireland"

"The Lullymore Bog Complex is feature rich// it is the largest piece of the Bog of Allen and nowhere else in Europe has this accolade. It features mineral islands, intact and degraded raised bog, restored raised bog//The potential in terms of biodiversity recovery is immense as landscape-scale conservation is needed to reverse biodiversity decline and mitigate climate change. Lodge Bog an IPCC reserve overlooks the Hill of Allen, which the Bog of Allen was named after and is one of the last homes to native Curlew in Kildare."

4.5.7 LANDSCAPE CONDITION AND DRIVERS OF LANDSCAPE CHANGE:

This LCA comprises a mosaic of land use, with pasture and woodland along with significant areas of bog. This area is on the cusp of significant change following Bord na Mona's cessation of peat production on their bogs and subsequent rehabilitation and restoration measures.

- Local Just Transition Plan for West Kildare.
- Proposed new National Peatlands Park for Ireland.
- Rewilding and restoring the cutaway peatlands following the cessation of industrial scale peat extraction.
- Growth in ancillary tourism infrastructure associated with the proposed National Peatlands Park.
- Afforestation on cutaway bogs.



- Population growth and pressure for rural housing.
- Changing agricultural practice as the sector adjusts to national and European Policy changes and geopolitical events.
- Change associated with the cessation of industrial peat extraction by Bord na Mona and subsequent diversification of former cutaway peatland.
- Proposed new land uses range from rewetting/rewilding to renewable energy.
- Increased urbanisation and growth associated with fast growing settlements: Prosperous (town)
- Infrastructure proposals: (Uisce Éireann's proposed Water Supply Project Eastern and Midlands Region (WSP EMR))

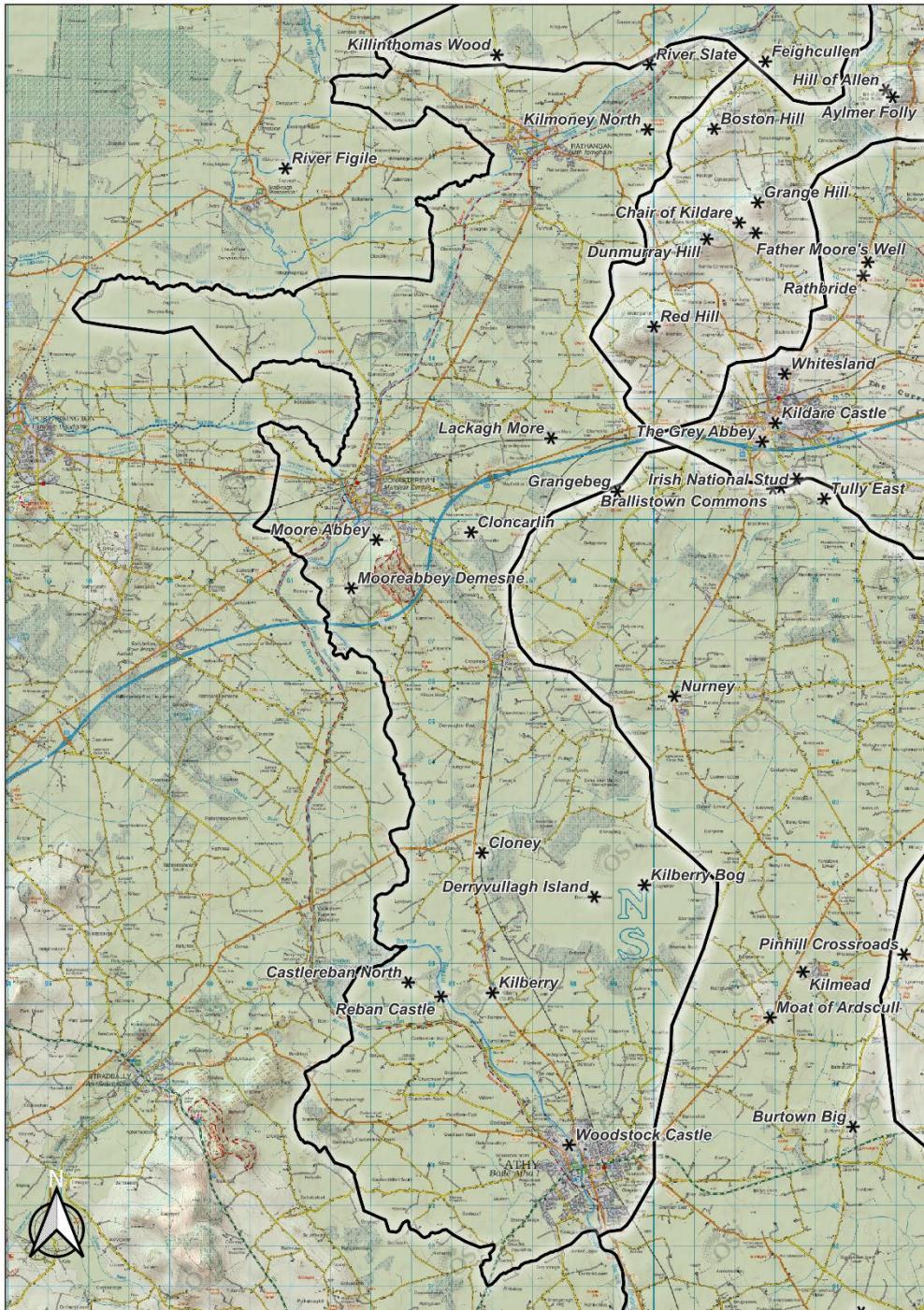
PHOTO 4-9 VIEWS WEST TOWARDS COUNTY OFFALY FROM KILLINTHOMAS



4.6 LCA 5 BARROW GRAND CANAL CORRIDOR



FIGURE 4-10 BARROW – GRAND CANAL CORRIDOR BOUNDARY



4.6.1 EXTENT

This character area is located along the western boundary of the County with County Laois where the tributaries of the Barrow River form a natural boundary. The Barrow line of the Grand Canal extends to Monasterevin and the M7 forms the southern boundary; eastern boundary is formed by LCA 6 the Six Hills.



PHOTO 4-10 VIEW WEST FROM DRINNANSTOWN NORTH



4.6.2 KEY CHARACTERISTICS

- Strong influence of historical transportation routes, westwards routes through Monasterevin, railway line and the Grand Canal Barrow spur.
- This creates a distinctive industrial heritage legacy with canal settlements and related historical canal infrastructure including bridges, stone walls, mills etc.
- Demesne and ecclesiastical legacy of Moore Abbey and grounds south of Monasterevin.
- Rathangan and Athy are the other principal nucleated settlements. The former was remodelled in the late 18th century with the extension of the Grand Canal to Monasterevin and Athy.
- Old farm buildings and stone walls are a feature of parts of this character area.
- Strong influence of the River Barrow water table in the wetlands, floodplains etc.
- Legacy and potential of Bord na Móna peatlands e.g. Ummeras Bog straddling the Kildare Offaly border north of Monasterevin (part of the Bord na Móna Coolnamona group of works; been in active peat production since 1980, with industrial peat production ceased in 2019.



- The largely flat topography creates an open, expansive character to much of this character area, with long views afforded east to LCA 6 The Six Hills. Along the canal corridor, vistas are directed along the canal itself from canal arch bridges and frequent attractive woodland vegetation and industrial heritage.
- More enclosed and intimate character closer to Monasterevin particularly around the Moore demesne.

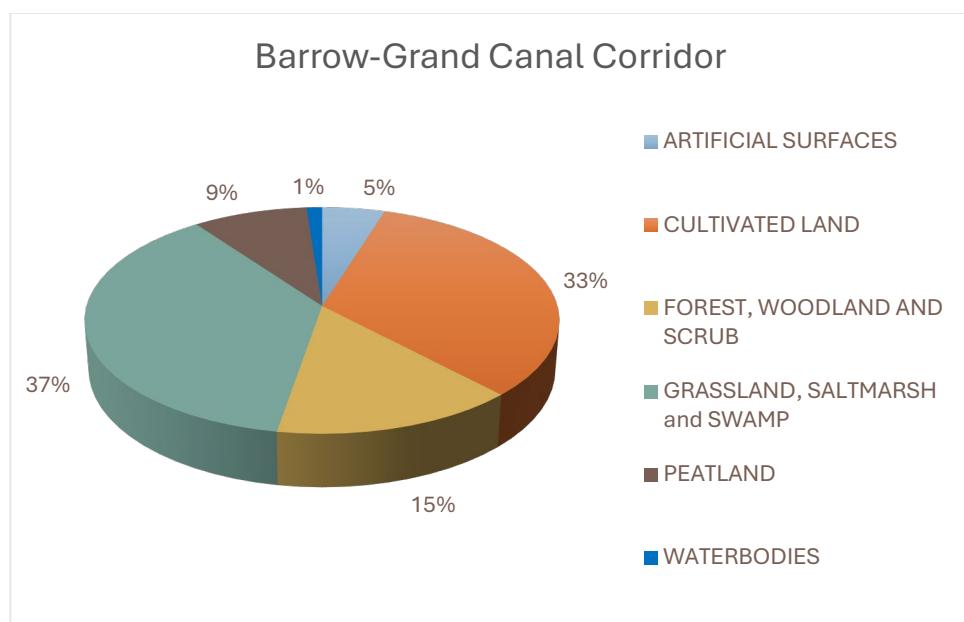
4.6.3 GEOLOGY AND LANDFORM:

The Barrow-Grand Canal Corridor LCA comprises lowland topography, with elevation ranging from 50 m to 90 m throughout. A solitary hill (Moore Abbey) south of Monasterevin rises to 122 m. Geology across the LCA is almost entirely Carboniferous limestone and shale. A band of Devonian Old Red Sandstone occurs southwest of Red Hill. Surficial sediments mainly comprise cut-over raised peat and limestone till in equal portions, with area of limestone gravels in the southernmost part of the LCA. Alluvial sediments are found along the course of the River Barrow valley on the Laois County boundary. The LCA is entirely within the Barrow River Catchment. The River Barrow flows south along the west of the LCA, demarcating the Laois County boundary along sections of its course. Other rivers include the Slate, Figile, and Oghil rivers. The Grand Canal Barrow Line crosses through the LCA.

4.6.4 LAND COVER AND ECOLOGY:

The LCA (209 km²) comprises 78 km² grassland, 69 km² cultivated land, 31 km² forest/woodland/scrub and 18 km² peatland (National Land cover Map data). Chart 4.5 below presents the broad land use categories in terms of hectares under different land use in this LCA.

CHART 4-5 NATIONAL LAND COVER - PERCENTAGE LAND COVER





Sites designated for Natural Heritage in this character area include the River Barrow SAC with Annex 1 alluvial forests present around Kilberry. Proposed Natural Heritage sites are the Grand Canal (002104) and Derryvullagh Island (0001390). Ummeras Bog is included in Bord na Mona's Peatlands Climate Action Scheme (PCAS).

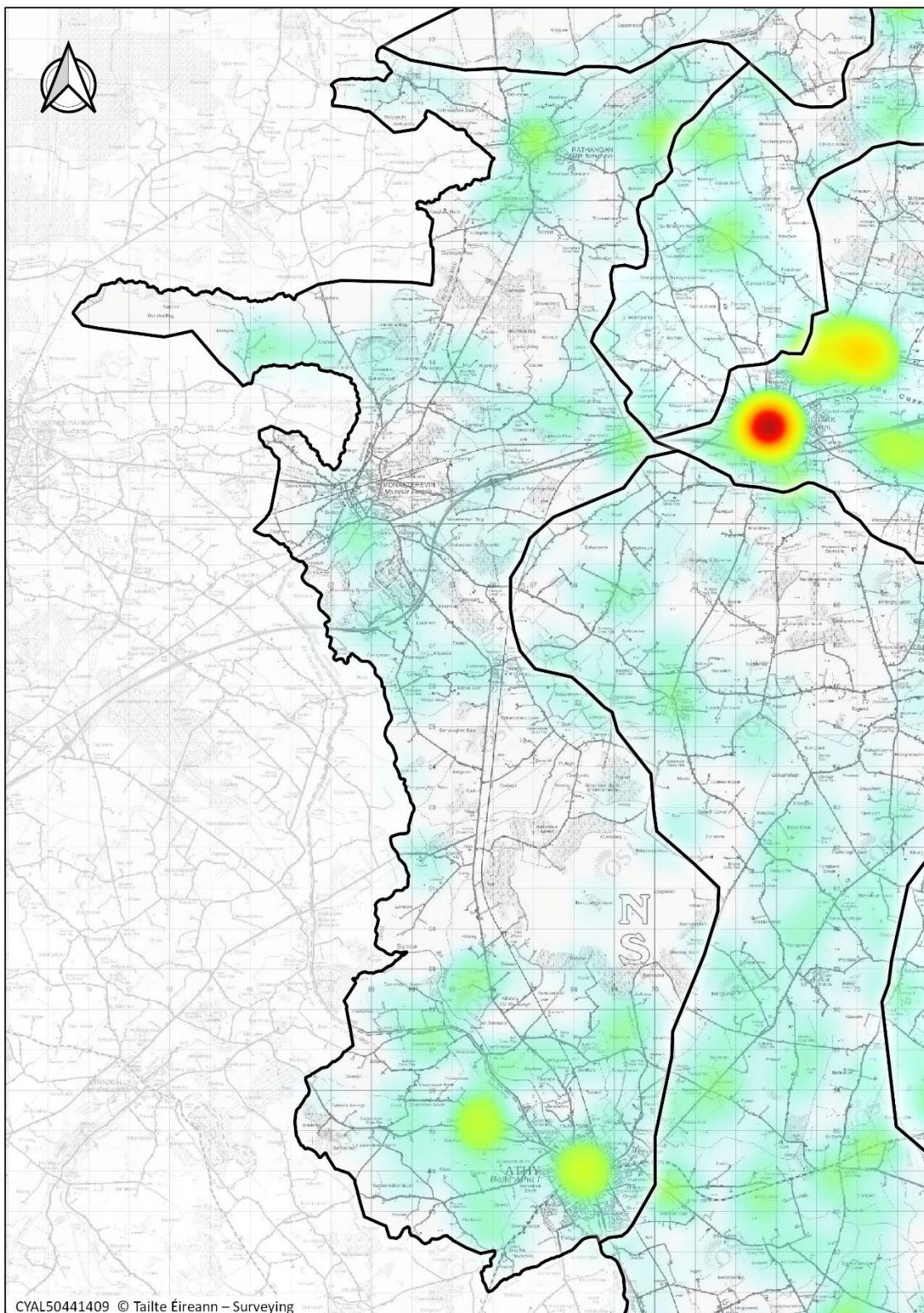
The mosaic of land use and habitats associated with the River Barrow and Canal, in addition to demesne woodland and bog habitats increase the ecological significance of the LCA. The LCA is notable for the tillage land use that extends further south and east towards LCA 10 Cill Dara lowlands.

4.6.5 HISTORIC AND HUMAN INFLUENCE:

There is a total of 227 archaeological monuments in this LCA. No Neolithic activity has been recognised. A single standing stone is recorded. The Bronze Age is represented by ten *fulachta fiadh*/burnt mounds. Two barrows and fifteen ring itches are known from this LCA. A concentric enclosure (KD035-108----) at Clogorow, visible only as a cropmark may date to the Iron Age period, but this is not definitive. Thirteen ringforts are recorded from the Early Medieval period, including the royal ringfort at Rathangan (KD017-011001-), from which the town derives its name. However, ninety enclosures are also recorded, many of which may relate to farmsteads of the Early Medieval period. One crannog (KD022-038----), is also recorded, discovered at the edge of a bog at Lackagh More between Monasterevin and Kildare in 1895. Ninety enclosures are also known, many of which probably date to the Early Medieval period. Three ecclesiastical enclosures are known, all situated close to the edge of bogs. One ecclesiastical site (KD021-001005-) is also recorded at Clogheen, reputedly where St Evin's bell was kept. Seven holy wells are also recorded. A togher (KD027-001001-), known locally as the 'Dane's Road' near Monasterevin bog has been dated to the end of the Early Medieval period. The Later Medieval period is represented by an Anglo-Norman castle (KD030-008----) at Castlebran North, originally built to control a fording point over the river Barrow and now incorporated into a seventeenth-century fortified house. One ringwork, one motte, two hall houses and eleven moated sites testify to a strong Anglo-Norman influence in this LCA. The historic town of Athy (KD035-022----) contains two of the four religious houses in this LCA, namely the Dominican Friary (KD035-022004-) and Fratres Cruciferae (KD035-022006-). The other recorded religious houses are the Cistercian House at Moore Abbey Demesne (KD026-001----) and the Knights hospitallers at Kilberry (KD030-005----). Interestingly Athy also contains a deserted medieval settlement, one of three in the LCA. Three tower houses are recorded and three unclassified castles. Eighteen churches are also known. The Post Medieval period is represented by monuments such as designed landscape features, two seventeenth-century houses century house. The character of this LCA would seem to have an Early-Late Medieval signature.



FIGURE 4-11 ARCHAEOLOGICAL HOTSPOT MAP OF BARROW-GRAND CANAL CORRIDOR



Today this LCA supports both pasture and increasing tillage towards the south; this is reflected in field sizes with large fields associated with the tillage. Field boundaries are



commonly hedgerows with box hedging more prevalent with the tillage land use. Drainage ditches along the roads in wetter lands are common feature.

Some parts of the LCA are more tranquil in character, mostly associated with stretches of the Grand Canal and the larger peatland areas where present; this contrasts with the more active regional roads (e.g. R417) and the towns of Athy, Monasterevin and Rathangan that serve the dispersed rural population. The historical town of Athy situated at the strategic crossing of the River Barrow provides a range of services to the surrounding lands and has a cluster of significant architectural heritage. It was an outlier of the Pale due to its strategic location at the River Barrow. The town was the birthplace of Ernest Shackleton whose father established a Quaker school in the village of Ballitore to the east.

The River Barrow exerts a strong influence on character, though not always visible in the relatively flat landscape; its presence has affected significantly the historical landscape and evolution of the character of the LCA. Cut-stone bridges of various sizes and spans are a feature of this LCA crossing the Barrow and the Grand Canal Barrow navigation.

The Barrow line spur of the Grand Canal runs parallel to the main channel for much of its alignment and forms part of the Barrow way from Robertstown in Kildare to New Ross in Co Wexford. Recreational use associated with the Grand Canal include the Blueway and Greenway.

4.6.6 LANDSCAPE VALUES

There are several NIAH Historic Gardens and Designed landscapes within the LCA, mainly located along the River Barrow or west of Athy. Kildare County Council (KCC) identifies key green corridors in their Green Infrastructure Strategy, the River Slate, the River Boherbaun, the Athy Stream and the Barrow along with its tributary River Figile. The Grand Canal Barrow Branch forms a blue corridor with Ummeras Bog forming a stepping stone. Moore Abbey Woods is another stepping stone.

The following scenic routes have been identified in this LCA: Scenic Route 18 (Views of the Grand Canal, River Slate and surrounding countryside from R414 at Rathangan from Rathangan Bridge to Spencer Bridge), and part of Scenic Route 34 (Views along Roads R403 and R414 from Allenwood to Rathangan).

Consultees have identified the Grand Canal, the Barrow and Blueway's of particular value. The canal banks and the mature River Barrow are identified as conferring value and character. The Barrow SAC floodplain is identified as a Curlew Action Site. The consultees identified the views from the river bridge across the River Barrow wetlands towards Ummeras Bog as a valued view.



“Canal walks in Kildare, an environment that supports biodiversity and natural habitats, largely undisturbed, from heritage perspective opportunity to enjoy older infrastructure, bridges etc”

“The Barrow and blueway are identified as of particular value by consultees to date.

“The blue ways along our beautiful canals. The woods, forests and bog lands that run alongside them and in the surrounding areas. These are special as they provide places for leisure, they are full of Biodiversity & nature and home to many different animals & birds.”

4.6.7 LANDSCAPE CONDITION AND DRIVERS OF LANDSCAPE CHANGE:

This LCA, with its diverse land cover of peatland, pasture and woodland, is generally in good condition. The River Barrow forms its western edge bordering onto Co Laois. The cessation of peat production on areas of bog will result in subsequent rehabilitation and restoration measures.

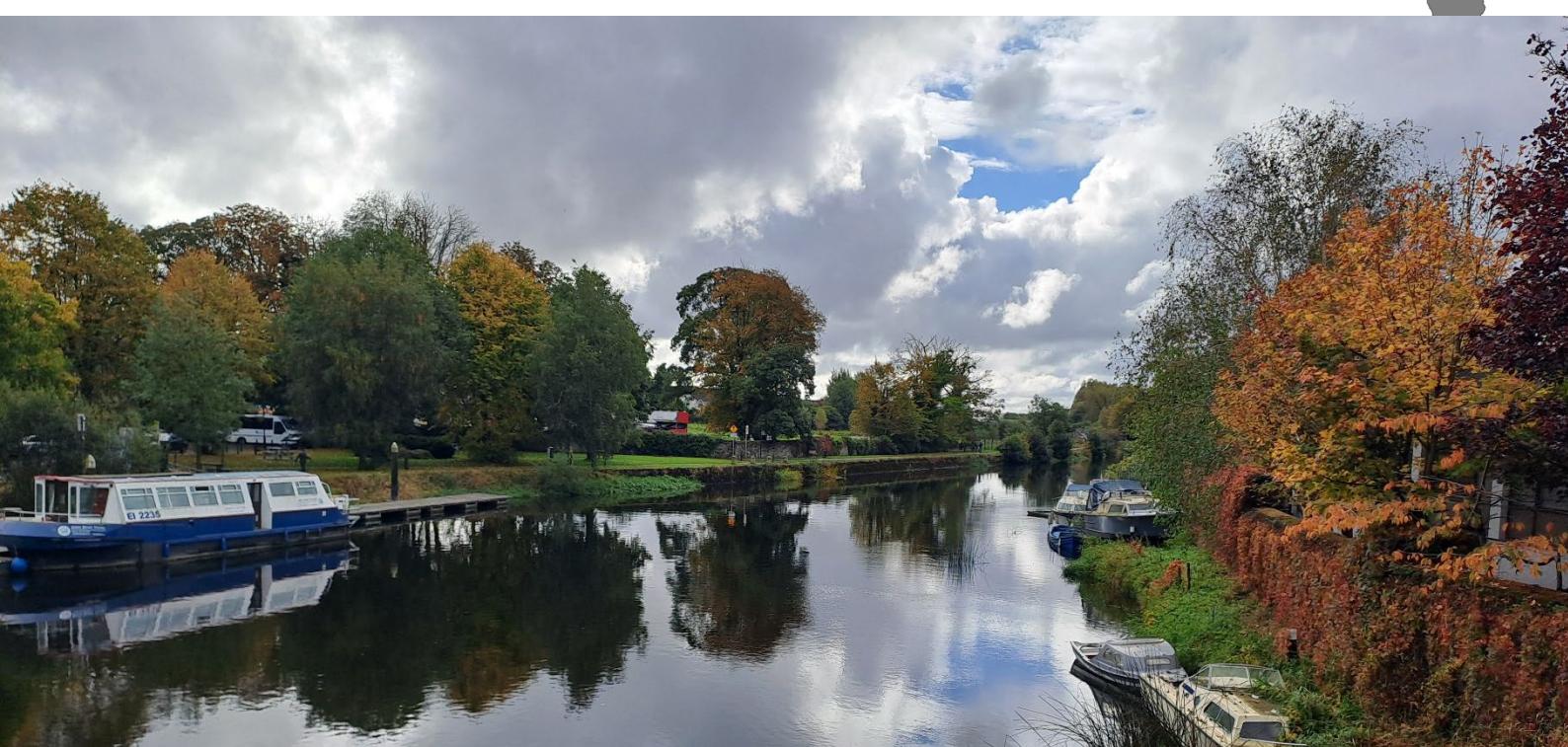
The LCA generally has good agricultural land and large fields with a high percentage of arable crops. Athy and Monasterevin are busy, fast-growing towns with notable new residential and infrastructural developments having the potential to exert development pressure on its immediate surroundings.

Drivers of change identified include:

- Changing agriculture practice as the sector adapts to climate change.
- Tourism, the Barrow Blueway runs through the LCA the potential for new community marinas and facilities and growth in land and water-based tourism activity.
- Climate change and impact on water quality and quantity. Fluctuating water levels arising from extreme weather events. Potential flooding and damage to riverside and canal side structure
- Population growth in and around settlements. Signs of residential development pressure.
- Solar farm applications (Cluster around Athy: see Solar Planning applications).
- Change associated with the cessation of industrial peat extraction by Bord na Mona and subsequent diversification of former cutaway peatland. Proposed new land use range from rewetting/rewilding to renewable energy.



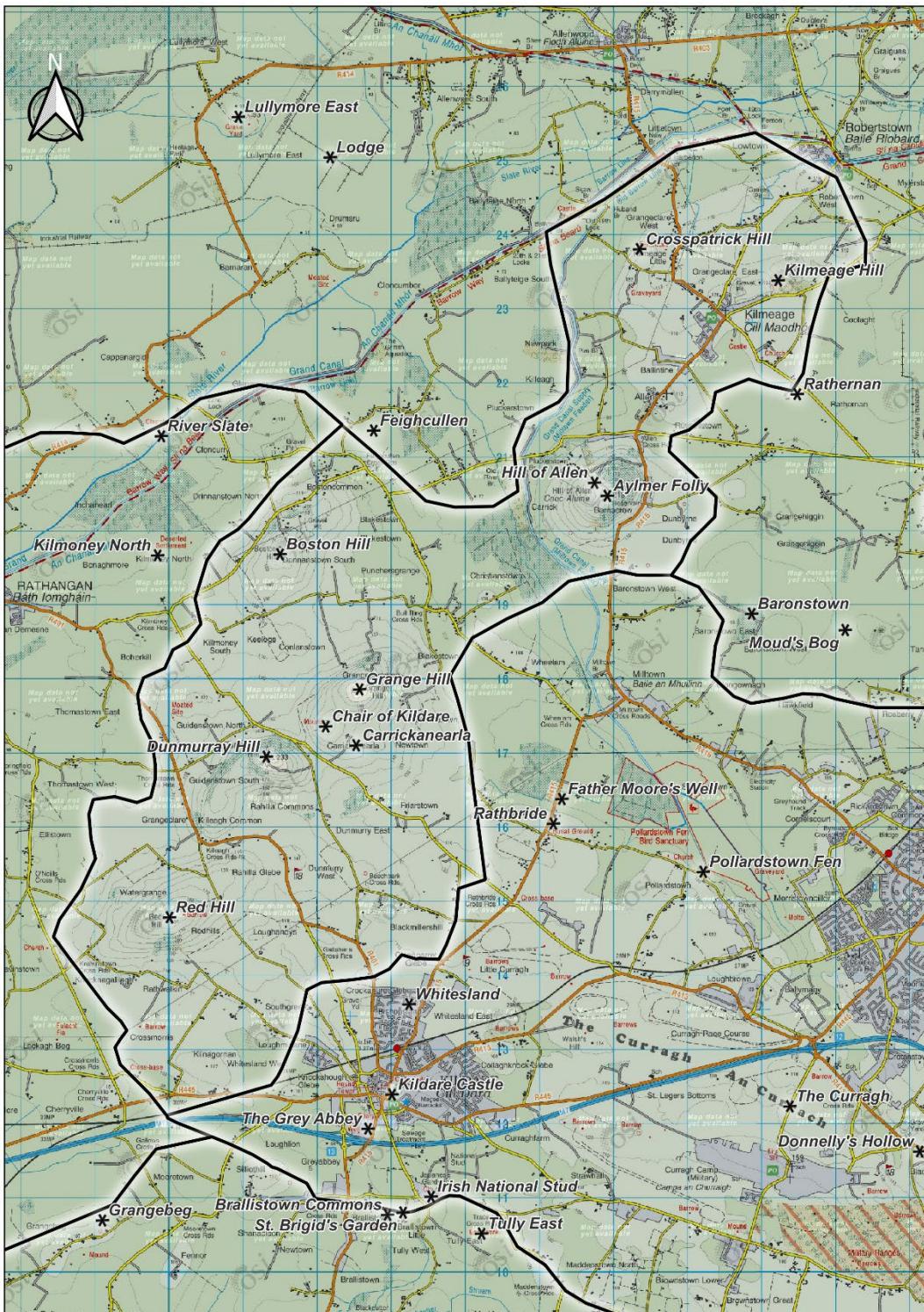
PHOTO 4-11 RIVER BARROW AT ATHY





4.7 LCA 6 THE SIX HILLS

FIGURE 4-12 THE SIX HILLS BOUNDARY



4.7.1 EXTENT

This relatively small character area comprises the Kildare Hills or the Chair of Kildare, as the area is also known as. This area is bounded on the north by Robertstown and LCA 4 Bog



of Allen wraps around this LCA. Kildare town and LCA 7 The Curragh Plains are located on its southern boundary

PHOTO 4-12 PANORAMA OF FOUR OF THE SIX HILLS FROM CONLANSTOWN



4.7.2 KEY CHARACTERISTICS

- This character area consists of a number of hills that interrupt the continuity of the Kildare plains. Located north of Kildare town this series of hills run in a north-easterly direction
- The elevated nature of this area provides highly scenic views over the central plains and boglands of Kildare. These hills and their characteristic ridgelines are a significant feature in the surrounding landscape.
- The local roads curve around and up the hills conferring a sometimes hilly and disorientating feel to parts of the LCA. This contrasts with the long views afforded from some hills particularly south and west.
- Mature tree lined roads, and well-manicured hedgerows are a feature of this LCA, reflecting primarily pastoral land use with increase in equestrian uses closer to the Curragh and Kildare.
- Mixed woodland and coniferous plantation are visible on some of the flanks of the hills such as Boston Hill.
- Hill of Allen associations with folklore and Fionna Mac Cumhaill and the Fianna.
- Mineral extraction, some gravel pits, quarries and associated infrastructure and transportation.



PHOTO 4-13 RED HILL VIEWED FROM GRANGECLARE



4.7.3 GEOLOGY AND LANDFORM

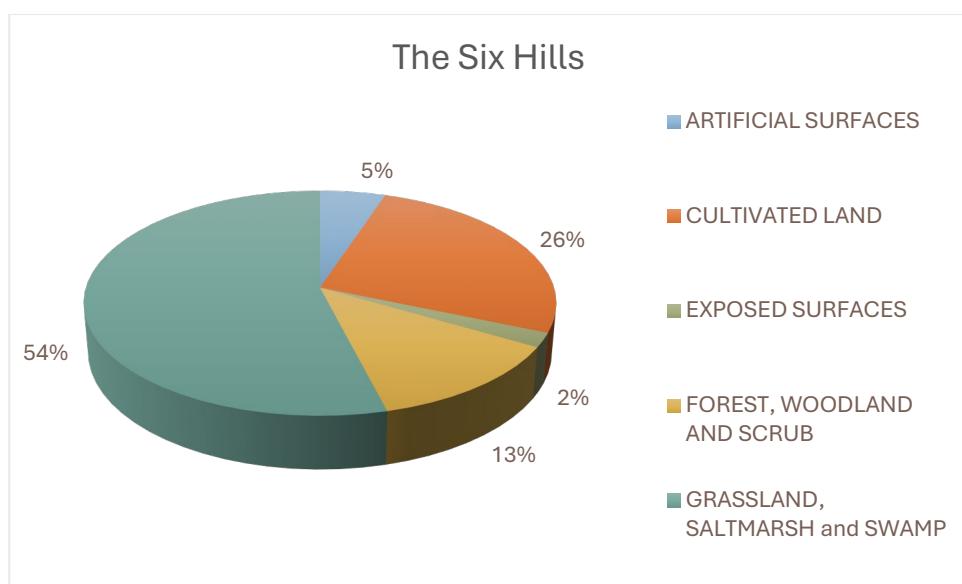
Topographic elevation is mainly above 90 m, with hill summits reaching above 200 m. The topographic landscape of the Six Hills LCA is a characteristic feature of the Kildare landscape. Rising from low-lying, often flat landscape of central Kildare, a group of hills rise proud above the landscape. The six hills are, from south to north: Red Hill (197 m); Dunmurray Hill (233 m); Grange Hill (223 m); Boston Hill (159 m); the Hill of Allen (219 m); and Kilmeage Hill (133 m). With the exception of Boston Hill, the geology of these hills' contrasts with the surrounding expansive limestone lowlands. Red Hill is formed of both Silurian greywacke and Devonian Old Red Sandstone; Dunmurray Hill is Silurian greywacke and shale; Grange Hill and Hill of Allen are Ordovician andesite (volcanic) and shale; and Kileague Hill is Devonian Old Red Sandstone. Geologists refer to the NE-SW oriented hilly area where older rocks are surrounded by younger rocks as the 'Kildare Inlier'. Boston Hill is Carboniferous limestone. The Cloncumber Stream (Barrow Catchment) drains northwestwards along a course flowing between Grange Hill and Hill of Allen. Surficial cover in the north of the LCA comprises mostly limestone till and limestone gravel. In the south, till derived from the greywacke and sandstones on Red Hill, Dunmurray Hill and Grange Hill spread southeastward towards Kildare and the Curragh. Limestone till cover occurs west of these hills. The Grand Canal Milltown Feeder crosses through the LCA.

4.7.4 LAND COVER AND ECOLOGY

The LCA (51 km²) comprises 27 km² grassland, 13 km² cultivated land, and 7 km² forest/woodland/scrub (National Land cover Map data). Chart 4.6 below presents the broad land use categories in terms of hectares under different land use in this LCA. Peatland land cover is largely absent from this hilly LCA.



CHART 4-6 NATIONAL LAND COVER PERCENTAGE LAND COVER

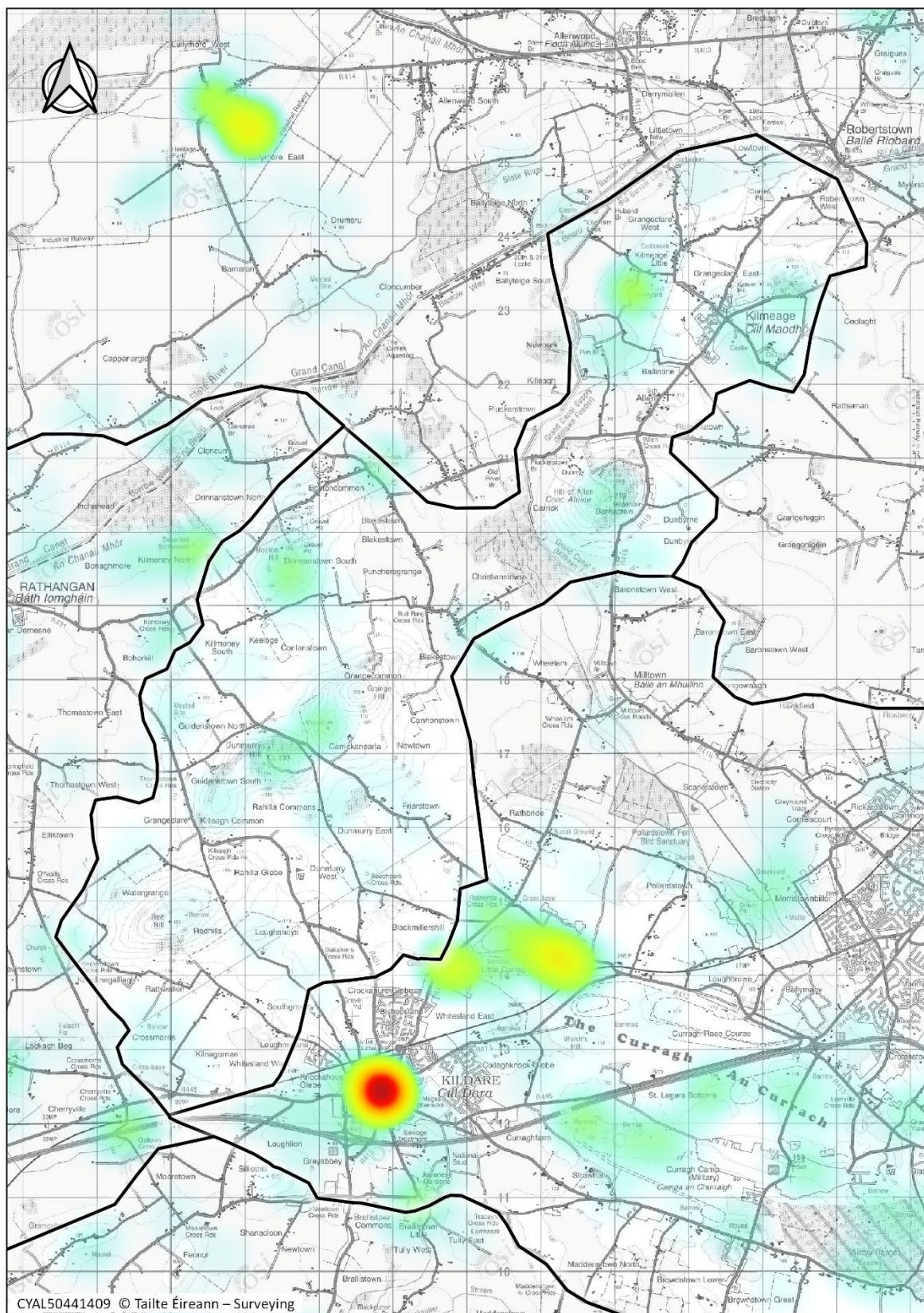


Other than the Grand Canal pNHA that skirts the northeast border of this LCA, no other sites are designated for Natural Heritage. The six hills are subject to different activities including forestry, quarrying and telecoms. The lands between the hills are generally under pasture with frequently box shaped hedging enclosing medium to large fields. Occasional equestrian activity is also present with occasional tillage fields.

4.7.5 HISTORIC AND HUMAN INFLUENCE

There is a total of nine archaeological monuments in this LCA. The prehistoric period is represented by a Bronze age cist, fulacht fiadh and two ring barrows and two ring ditches. There is a hillfort (KD022-001001-) of possible Iron Age date on Dunmurry Hill. There are very few definitive monuments from the Early Medieval period. Five ringforts and three ecclesiastical enclosures are recorded. However, there are twenty-one enclosures, of which many may also belong to the Early Medieval period. A possible inauguration site at Carrickanearla (KD017-028004-), known as the 'Chair of Kildare' also dates to this period. One holy well is recorded. In the Later Medieval period, one moated site (KD017-026----) attests to the early part of the Anglo-Norman period, while three deserted medieval settlements are known. There is one unclassified castle, and an unclassified religious house (KD022-054----) at Friarstown, although this may have been the location of a farm belonging to the Preceptory of the Knights Hospitallers at Tully (KD022-034----). It might therefore have been the site of a monastic grange. Three churches are also recorded. The post-medieval period is represented by monuments such as two designed landscape features (an ornamental lake and folly), as well as two churches. No definitive pattern can be discerned; however, if many of the enclosures date to the Early Medieval period, then a possible pattern of settlement and farming at this time can be suggested.

FIGURE 4-13 ARCHAEOLOGICAL HOTSPOT MAP OF THE SIX HILLS



Today, this LCA has a dispersed rural settlement pattern spread around the lower elevations of the hills with small villages present including Allen, Killeagh and Guidenstown. Farmhouses with outbuildings are well maintained with box



shaped hedging quite common around large to medium sized fields. Pasture is dominant but areas of tillage are present.

Mineral extraction via quarries is a feature of this LCA at Allen Hill and Boston Hill. The Alymer Folly on the Hill of Allen built (1859) includes inscriptions of the tenant's family names of that time, who carted the limestone from the canal at Robertstown up the hill. This tower has been illuminated as part of St Brigid's Festival in early February.

The Hill of Allen has further historical and folklore significance, being the site of the royal residence of Finn Mac Cumhail. A small mound called Suidh Fhionn (Finn's chair) is at the highest point. Extensive views are afforded from the top of the hill, south and east towards the Dublin, Wicklow Mountains and the Curragh. Views westwards towards Slieve Bloom.

4.7.6 LANDSCAPE VALUES

North of Kildare Town and east of Rathangan the six elevated hill-top areas form a distinctive landmark in the landscape. They provide panoramic views north across the Bog of Allen and southwards over the Curragh, Pollardstown Fen, Moud's Bog and beyond. Kildare County Council identify hilltop views at the following locations: Red Hill, Dunmurray Hill, Grange Hill, Boston Hill, Allen Hill and Crosspatrick Hill. The KCC Green Infrastructure Plan shows a green corridor linking these hills, with the individual hilltops identified as stepping stones.

The following scenic routes are located within this LCA; Scenic Route 06 (Views of Robertstown Countryside and views across the Canal), Scenic Route 08 (Views of Bogland Plains; the L3002 from Kilmoney crossroads to Feighcullen crossroads at Boston Hill), Scenic Route 14 (Views to and from Dunmurry Hill and Red Hill and views of the Central Kildare Plains and Boglands), Scenic Route 16 (Views of the Chair of Kildare and views of the Central Kildare Plains and Boglands), Scenic Route 17 (Views of the Chair of Kildare and views of the Central Kildare Plains and Boglands along the R415), Scenic Route 25 (Views to the south of the open countryside from the L7081 Kilmeague crossroad to the junction of the L7081/L7078).

Consultees identified the hills and views around this area plus folklore associated with same as of particular value. Redhill Hill views, Boston Hill views, and the significance of the Hill of Allen were all cited by consultees as being of particular value.

"Hill of Allen, The mythology, the profile on the landscape, the (untapped) archaeology"



PHOTO 4-14 HILL OF ALLEN FROM ALLEN NATIONAL SCHOOL



4.7.7 LANDSCAPE CONDITION AND DRIVERS OF LANDSCAPE CHANGE

This LCA is in good condition. The integrity of the landscape is in part due to its distinctive landform. Coniferous plantations on the sides of the hills reinforce this coherence. There is some urban encroachment on the southern border adjacent to Kildare town and extensive quarrying on the Hill of Allen, although screened well has substantially reduced the hill itself.

Drivers of change identified include:

- Changing agricultural practice as the sector adjusts to national and European Policy changes and geopolitical events.
- Telecoms and associated infrastructure on elevated sites.
- Afforestation and changing forestry policies.
- Quarrying and mineral extraction.
- Pressure for rural housing due to scenic views and proximity to fast growing settlement, i.e. Kildare (Self-Sustaining Town).
- Increased recreational and sports activities propelled by population growth.



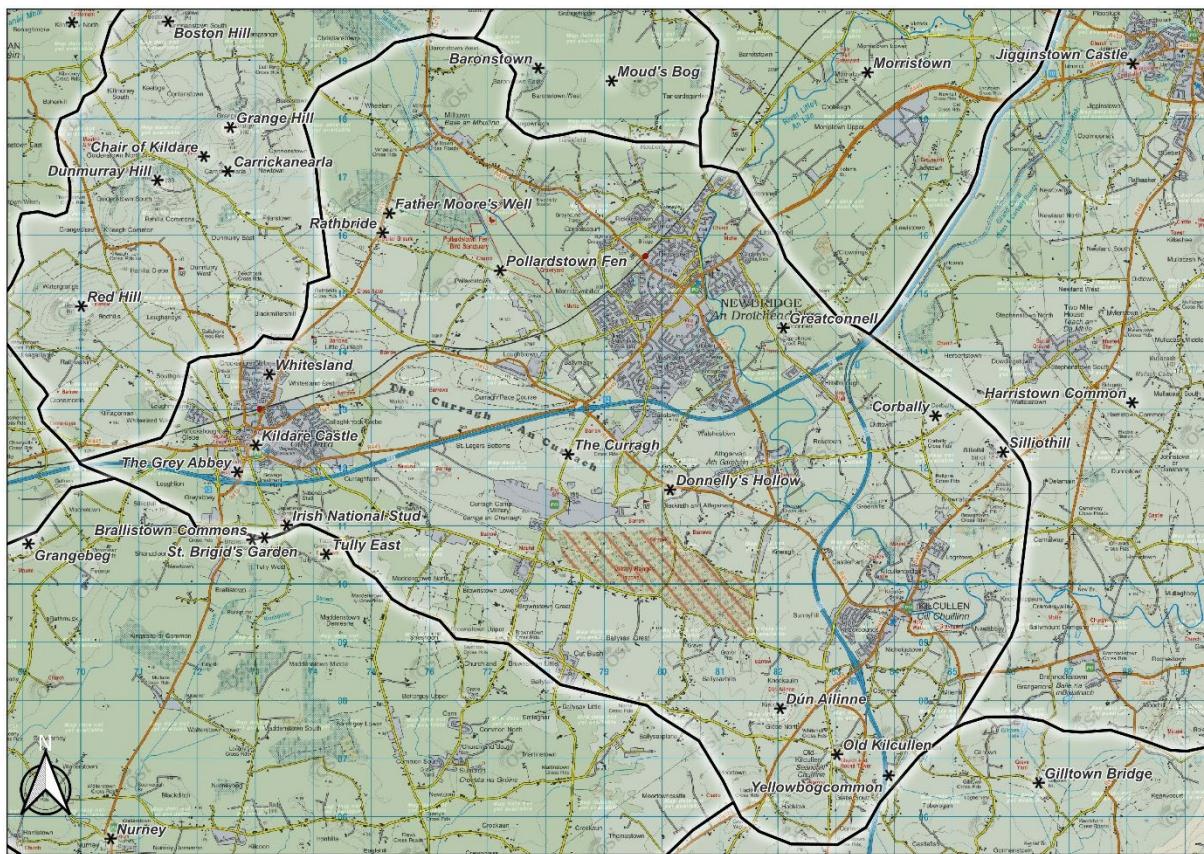
PHOTO 4-15 BOSTON HILL VIEWED FROM CONLANSTOWN





4.8 LCA 7 CURRAGH PLAINS

FIGURE 4-14 THE CURRAGH PLAINS BOUNDARY



4.8.1 EXTENT

This character area comprises the extensive open plains located in the centre of County Kildare and includes the settlements of Newbridge, Athgarvan, Kilcullen and Kildare, in addition to the royal site of Dún Aillinne.



PHOTO 4-16 ALONG R413, MELLITA ROAD



4.8.2 KEY CHARACTERISTICS

- This is a diverse and contrasting LCA. The Curragh Plains have an expansive, open scale with extensive commonage, grazed by sheep. This confers a naturalised character for much of the plains of the Curragh
- This contrasts with the busy towns of Kildare and Newbridge, connected via communications corridors that comprise the former N7, railway line and the M7 motorway, the busiest road in Ireland.
- The smooth and gently undulating topography creates very long views and large expanses of open sky is a distinctive character.
- The motorway infrastructure is a key influence whilst also opening up views on occasion across to the Dublin and Wicklow mountains and occasional long views across the plains themselves.
- Away from the motorway, and busy towns, a more rural character dominates with high banked hedgerows a notable feature combined with stone walls of estates outside the commonage.
- Military and equestrian uses have long associations with the LCA and is a distinctive influence on the character of this area. Paddock fencing is notably associated with some equestrian training or farms.
- This LCA has strong connections to St Brigid with the town of Kildare and the cloak of Brigid in folklore defining the extent of the Curragh plains.



- Dún Ailinne is located at the southern fringe of the Curragh plain and is listed on the tentative list of Royal Sites for UNESCO World heritage site nomination.

4.8.3 GEOLOGY AND LANDFORM

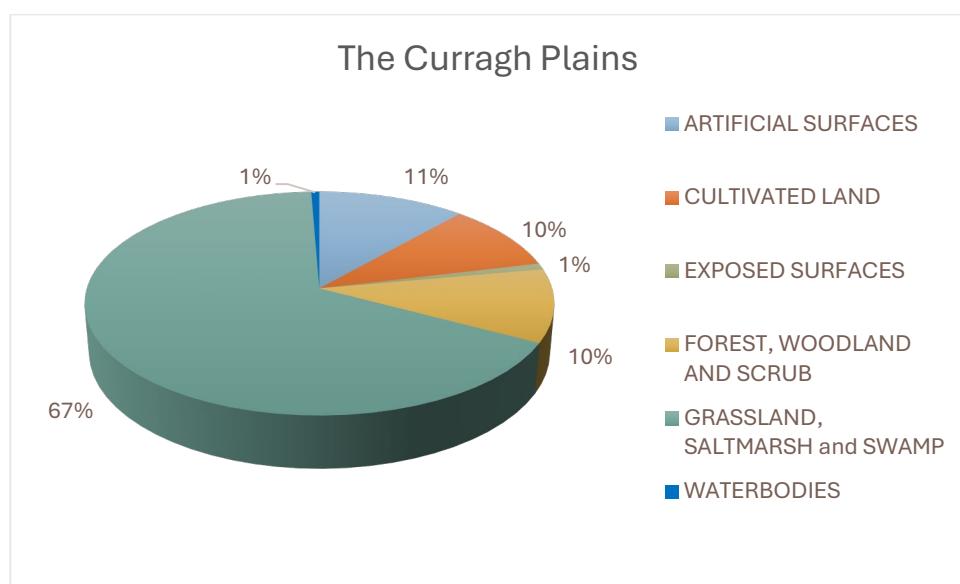
Elevation of the Curragh Plains LCA ranges from 90 m to 120 m, with some hills in eastern parts rising to over 160 m. The elevated terrain separates the low-lying landscape of the Cill Dara lowlands LCA to the south from River Liffey Valley and Plains to the north. The Curragh Plains LCA lies roughly NW-SE, forming a high ground junction between the Six Hills LCA and the Naas & Liffey Foothills LCA. Geology in the LCA is almost entirely Carboniferous limestone and shale. The higher terrain in the southeastern part of the LCA area (Kilcullen vicinity) is formed of Silurian greywacke and shale. Surface cover comprises almost entirely limestone gravel across the centre of the LCA, and limestone till elsewhere. Fen peat, cut over peat, and sandstone till occupy northwestern parts in the LCA. Alluvial sediment cover occurs along the course of the River Liffey. The River Liffey enters the LCA near Kilcullen and flows northwards to Newbridge. The eastern part of the LCA is within the Liffey and Dublin Bay Catchments. The boundary between the Liffey and Dublin Bay Catchment and the Barrow Catchment lies around 2 km to 3 km west of the course of the River Liffey. The Cloncumber Stream is the main waterway that drains the Curragh Plains LCA to the Barrow. Pollardstown Fen (in LCA 4 Bog of Allen), drains to the Cloncumber Stream.

4.8.4 LAND COVER AND ECOLOGY

The LCA (115 km²) comprises 77 km² grassland, 12 km² forest/woodland/scrub and 11 km² cultivated land (National Land cover Map data). Chart 4.7 below presents the broad land use categories in terms of hectares under different land use in this LCA. Of note, this LCA has by far the highest level of artificial surfaces (built land) cover in the county reflecting both the large settlements, built surfaces on the Curragh and the road network.



CHART 4-7 NATIONAL LAND COVER PERCENTAGE LAND COVER

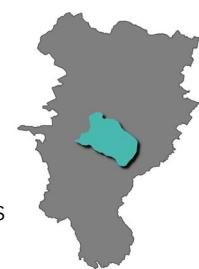


Much of the Curragh Plains are designated as a proposed Natural Heritage Area. A small pNHA is identified at the Liffey Bank above Athgarvan (001396). The recently published Conservation Management Plan for the Curragh has undertaken more detailed scale habitat mapping.

4.8.5 HISTORIC AND HUMAN INFLUENCE

There is a total of 374 archaeological monuments in this LCA and contains some of the most important monuments in the county. Dún Ailinne (PO No. 200/1954), has revealed activity from the Neolithic onwards. Neolithic activity has been uncovered in excavations at Corbally near Kilcullen. Six Neolithic houses are known from this LCA. Bronze Age activity is represented by burials found during excavations, and by two *fulachta fiadh*/burnt mounds and pits. A total of 107 barrows of various type, as well as eight ring ditches are recorded. Iron Age activity has been uncovered in two separate excavations. In the Early Medieval period, ten ringforts are known. However, forty-nine enclosures are also recorded, many of which may relate to farmsteads of the Early Medieval period. Two ecclesiastical enclosures, as well as two ecclesiastical sites. These are the important ecclesiastical sites of Old Kilcullen (KD028-049014-), and Kildare (KD022-029058-). Both sites contain high crosses and a round tower. Five holy wells are also recorded.

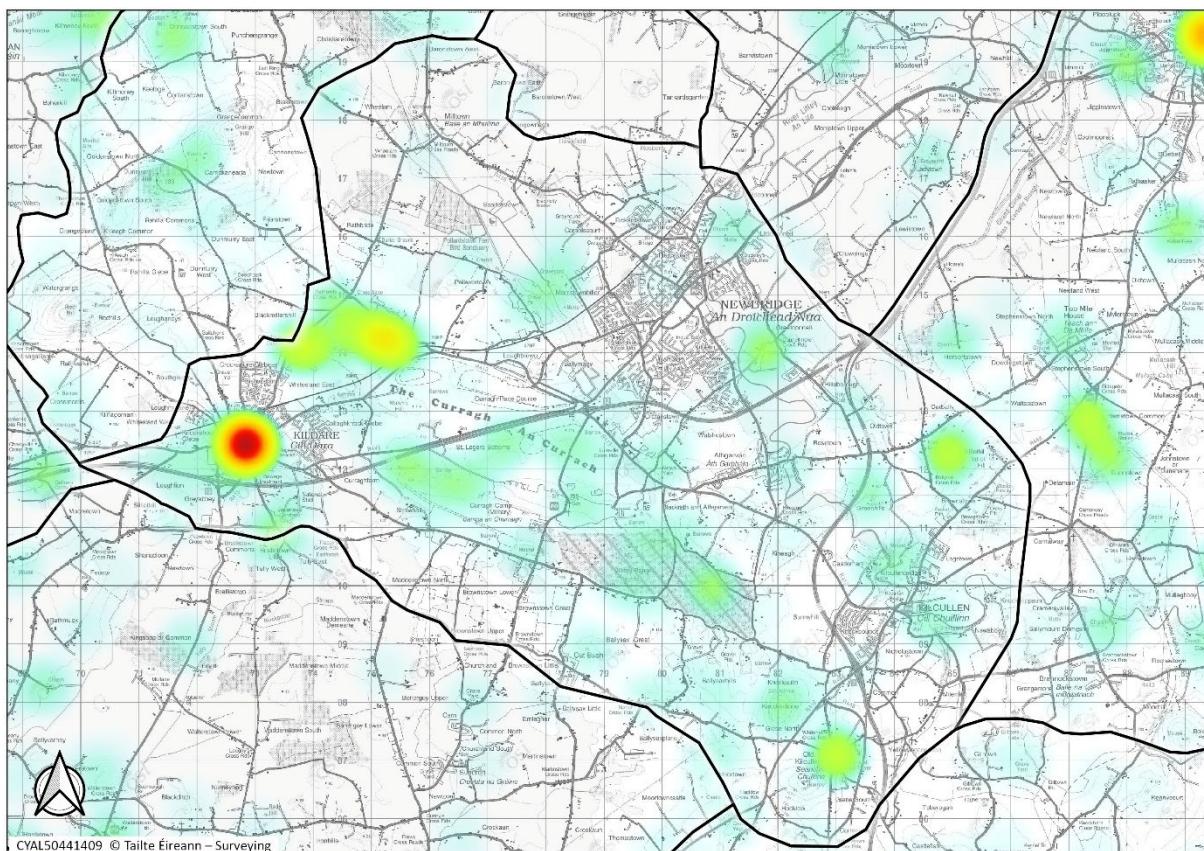
The Later Medieval period is represented by a single motte and two motte and baileys, as well as two moated sites. An Anglo-Norman castle is recorded at Kildare (KD022-029004-). There is one tower house and four unclassified castles in the study area, as well as two deserted medieval settlements and five churches. Four religious houses area also recorded: the Knight's Hospitaller's at Tully East (KD022-034----), Augustinians as Greatconnell (KD023-016----), and Franciscans (KD022-029006-) and Carmelites (KD022-029007-) at Kildare. there are few monuments from the Post-Medieval period and include three churches and two seventeenth-century houses. The battlefield at Old Kilcullen (KD028-049015-) dates to the time of the 1798 rebellion. By far the most common monument in



this LCA is the barrow of various types, of which there are 115 (including ring-ditches). This represents nearly one third of all the monuments recorded

The Anglo Normans protected the commonage from enclosure and over the centuries the Curragh became the primary sporting venue for the administration based in Dublin; horse racing appears to have taken place on the Curragh from at least the Middle Ages. With the establishment of the Turf Club in 1784 this continued and by the early nineteenth century, houses and lodges for breeders were established at the edges of the Curragh. The establishment of military camps used the Curragh to exercise and train horses. The Irish Derby in 1866 consolidated the equestrian function of this area. Special trains were put on to serve passengers to and from the racecourse in the nineteenth century onwards.

FIGURE 4-15 ARCHAEOLOGICAL HOTSPOT MAP OF THE CURRAGH PLAINS



Today, the Curragh Plains fulfil a number of roles with the busy towns of Kildare and Newbridge, military associations and services associated with the Curragh Camp. The equestrian influence is particularly strong with the Curragh Racecourse, the National Stud and several studs, stables and pasture for horses associated with the Curragh. The wide paddock railings associated with the equestrian use are particularly present within the Curragh itself.

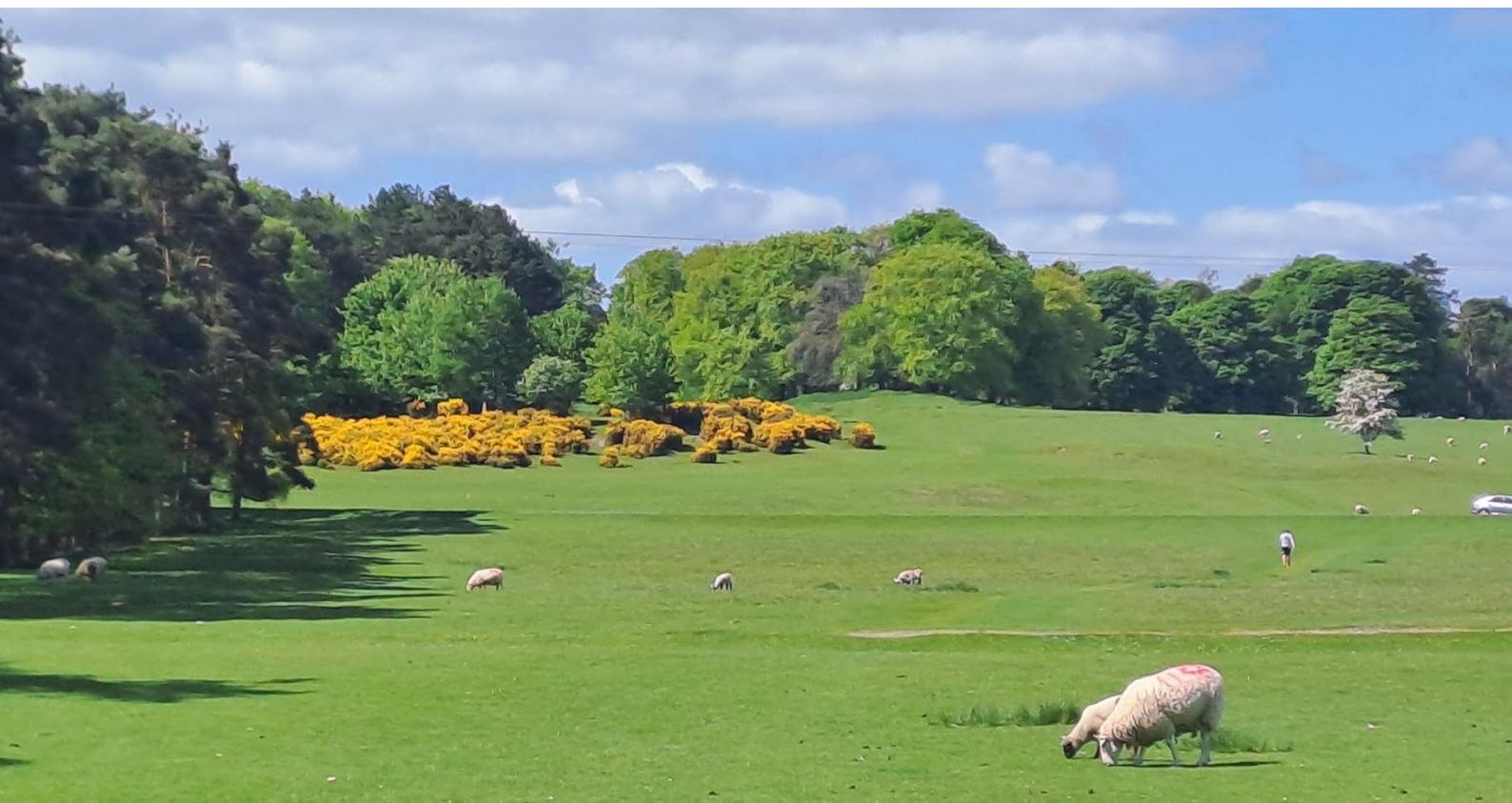
Settlement is concentrated in the main towns with significant recent and ongoing residential construction within the settlement boundaries. Outside the towns, a more dispersed settlement pattern is present, there are large houses present on the fringes of the Curragh frequently bounded with high hedges and long driveways.



Large agricultural buildings and sheds reflect the agricultural traditions in this area on the well-draining limestone soils. Recreational activities on the Curragh include walking, running and horse racing. The National Stud, Japanese Gardens and St. Brigid's Garden and Festival are all popular sites and events.

Transportation routes are generally long and straight. Some stone bridges present are associated with the railway. The long views allow for some significant views and landmarks notably the church spire of Kildare town when approached from the west. At the little Curragh, a dramatic opening up of the landscape at edge of Kildare town onto the commonage is notable.

PHOTO 4-17 THE CURRAGH COMMONAGE NEAR DONNELLY'S HOLLOW



4.8.6 LANDSCAPE VALUES

This renowned Kildare landscape also includes the ancient ceremonial site of Dún Ailinne.

Kildare County Council (KCC) Green Infrastructure Strategy shows a green corridor linking the Curragh northwards towards LCA Bog of Allen, and southwards towards Kilberry Bogland and the Grand canal Barrow Branch. The same strategy identifies the Irish National Stud as a stepping stone. KCC identify Scenic Route 1 (Views of Old Kilcullen to the east and Dún Aillinne to the west , from the R418 Motorway Interchange to South of Moortown House); Scenic Route 2 (Views to the East of Yellowbogcommon, from the junction of R418/R448 to Halverstown Cross Roads); Scenic Route 03 (Views across Curragh Plains, north and south, along



R445); Scenic Route 04 (Views of the Curragh Plain and Little Curragh from the Kildare Town boundary to Donnelly's Hollow); Scenic Route 17 (Views of the Chair of Kildare and Views of Central Kildare Plains and Boglands on the R415, north 1.5Km from the junction of R415/Mill lane); Scenic Route 33 (Views of Pollardstown Fen along L7032 from Fr. Moore's Well to Pollardstown Fen Carpark) and part of Scenic Route 14 (Views to and from Dunmurry Hill and Red Hill and Views of the Central Kildare Plains and Boglands on the R401 and adjoining Roads, from Thomastown Cross Roads to Kildare Town Boundary) within this LCA with a Hilltop View at Dún Aillinne.

Consultees identified the Curragh as a unique landscape and the views towards Wicklow Mountains, Dún Aillinne, and the Hill of Allen.

The Curragh. A unique landscape with rich archaeology, history, geology, biodiversity etc. The Curragh as a whole is spectacular."

4.8.7 LANDSCAPE CONDITION AND DRIVERS OF LANDSCAPE CHANGE:

This iconic LCA experiences a myriad of competing demands. The Curragh Plains Conservation Management Plan⁵³ identifies a long list of potential threats to the landscape condition and biodiversity of this LCA, including such key factors as intensive sheep grazing, excessive or uncontrolled use by horses and potential building encroachment. The comprehensive implementation of the management plan will help mitigate these detrimental impacts.

Drivers of change identified include:

- Population growth (fast growing urban centres) and increased residential settlement.
- Growth of religious tourism associated with Brigid 1500.
- Growth in equine tourism associated with Fáilte Ireland's Thoroughbred Country Experience Plan (Kildare and Tipperary).
- Changing agricultural practice as the sector adjusts to national and European Policy changes and geopolitical events.
- Increased recreational and sports activities propelled by population growth.
- Increased ancillary tourism activities.

⁵³ The Curragh Plains Conservation Management Plan (2024) prepared on behalf of Kildare County Council and the Department of Defence.



PHOTO 4-18 LUMVILLE CROSS, THE CURRAGH





4.9 LCA 8 NAAS AND LIFFEY FOOTHILLS

FIGURE 4-16 NAAS AND LIFFEY FOOTHILLS BOUNDARY



4.9.1 EXTENT

This character area comprises the town of Naas, extending eastwards to the Wicklow border. The River Liffey running between Ballymore Eustace and Kilcullen forms its southern boundary; the Curragh Plains form its western boundary with the M7 motorway.



PHOTO 4-19 FARMED FOOTHILLS AT LUGADOWDEN



4.9.2 KEY CHARACTERISTICS

- The LCA is largely over 100m and rises to form part of the Wicklow Mountain complex at the eastern boundary. The limestone lands around Naas are the lowest lands in this LCA.
- This transition is reflected partly in character between the lower lands and the more upland foothill areas. The land slopes strongly to the east into the foothills of the Wicklow Mountains.
- The River Liffey meanders through the southern part of the LCA with extensive areas of riparian and demesne woodland. This has been a key natural and historical boundary
- Deciduous woodland along the sides of the meandering River Liffey, many associated with former estates and include beech avenues and cut-stone walls. Combined with dense hedgerows enclosing fields particularly to the south creates a distinctive wooded character in parts.
- In contrast, the northern and eastern part of the LCA is busy and active, with urban development and the motorway corridor influence is noted with traffic, development off junctions and a commuting corridor.



- Frequent views and visual importance of the Wicklow Mountains to the east.
- Farming is mostly pasture with sheep most common, closer to Naas and the Curragh equestrian influence more prevalent with stud farms, stables and larger historic estates.

4.9.3 GEOLOGY AND LANDFORM:

Elevation in the Naas & Liffey Foothills LCA varies from 90 m along western fringes to 140m in central areas and rises to hill summits above 300 m along the eastern margin.

Cupidstown Hill (379 m) is the highest point in County Kildare. The geology across most of the terrain above 100 m elevation is Silurian greywacke (sandstone), siltstone, and shale.

The lower terrain is primarily Carboniferous limestone and shale. A narrow strip of Devonian Old Red Sandstone occurs between Kill and Johnstown. Surficial sediment cover is mainly limestone till and limestone gravels. The prevalence of limestone till and gravel covering areas of greywacke bedrock is a result of NW to SE ice movement during the last glacial episode, such that sediments from the limestone midlands now blanket the hills of east Kildare. Terrain above 150 m along the eastern margin has sandstone till cover. Lesser cover of cut over peat, marl, alluvium, and lacustrine sediments also features in the LCA.

Drainage from the high hilly terrain is north-westward to the Liffey (Liffey and Dublin Bay Catchment). The River Liffey flows Poulaphouca Reservoir as it meanders across the southern part of the LCA. The Grand Canal Corbally Branch crosses through the LCA.



PHOTO 4-20 VIEW NORTHEAST FROM OLD KILCULLEN OVER TO THE NAAS AND LIFFEY FOOTHILLS



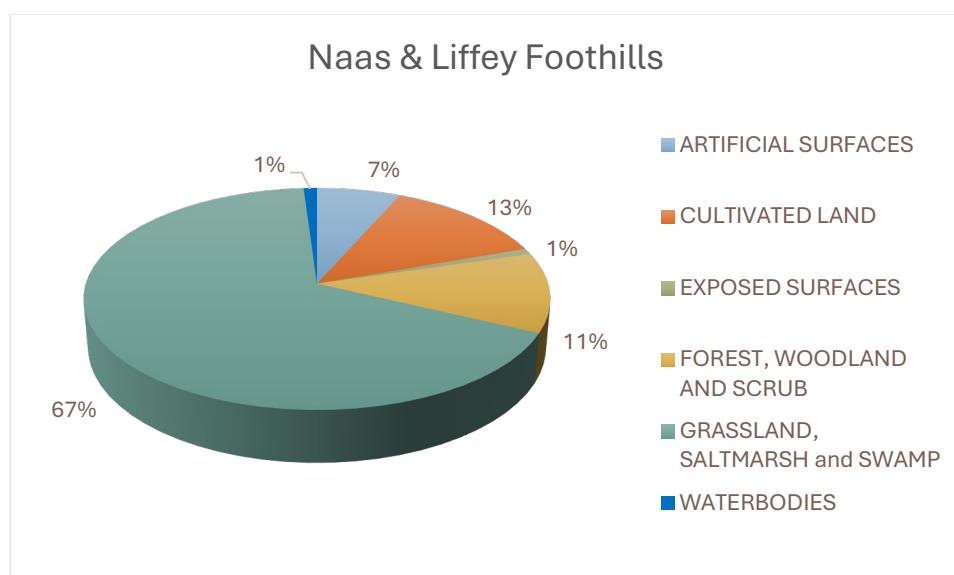
4.9.4 LAND COVER AND ECOLOGY:

The LCA (196 km^2) comprises 131 km^2 grassland, 25 km^2 cultivated land, and 23 km^2 forest/woodland/scrub (National Land Cover Map data).

Chart 4.8 below presents the broad land use categories in terms of hectares under different land use in this LCA. The three eastern LCAs -Naas and Liffey Foothills, Liffey Valley and Plains and Slí Mhór corridor all supported the highest hedgerow cover at county scale.



CHART 4-8 NATIONAL LAND COVER PERCENTAGE LAND COVER



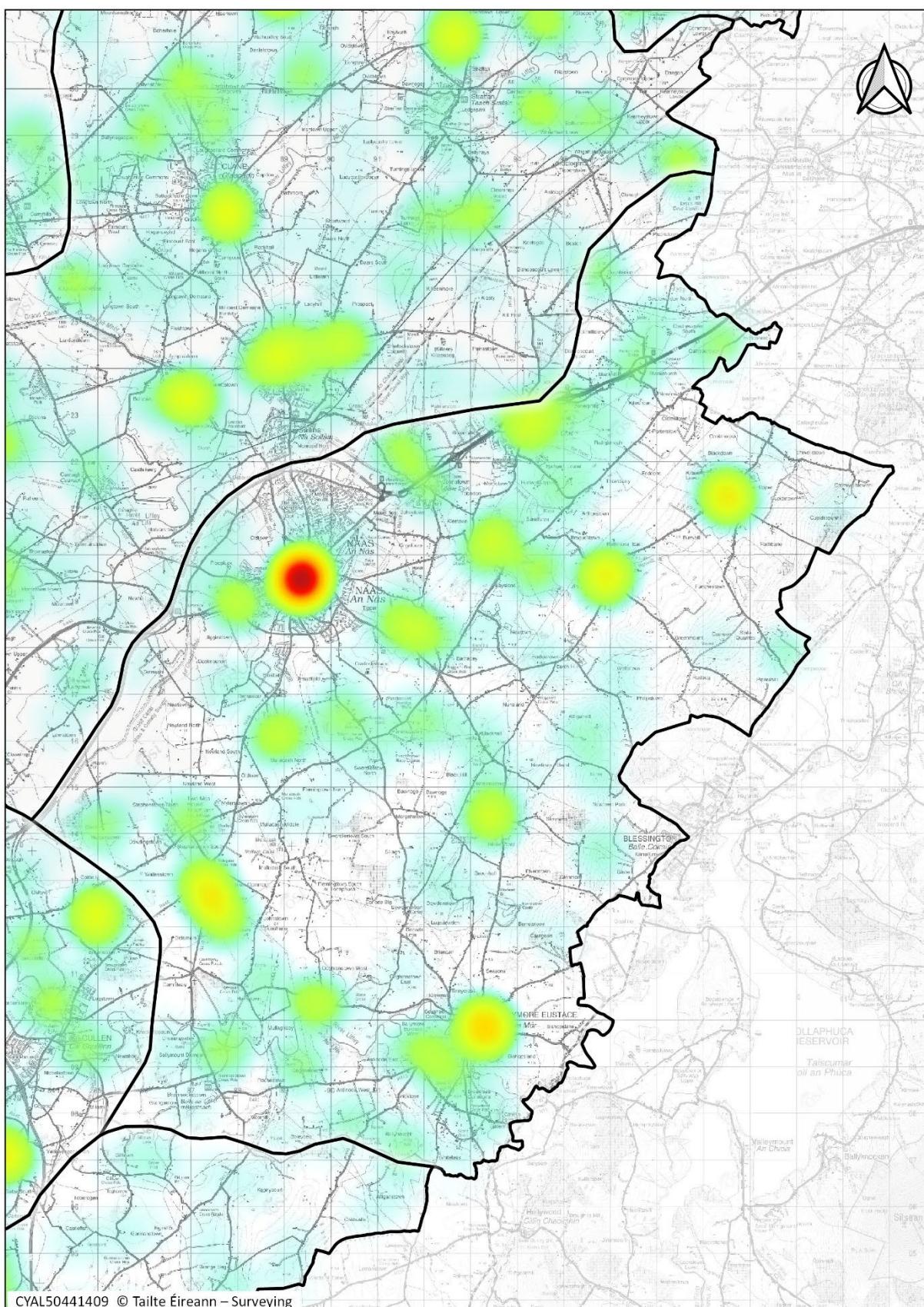
Sites designated for Natural Heritage in this LCA include Redbog pNHA (00397), Kilteel Wood pNHA (001394) both close to the County Wicklow border, and the Liffey Valley Meander belt pNHA (000393) located at the River Liffey boundary with LCA 9 Southeastern Kildare Hills. The Naas and Corbally branch of the Grand Canal pNHA (002106) is also found in this LCA.

4.9.5 HISTORIC AND HUMAN INFLUENCE:

There is a total of 385 archaeological monuments in this LCA. The Bronze Age is represented by burials, both single burials and in cemeteries, ten *fulachta fiadh* and three examples of rock art (a rare occurrence). The example at Kilwarden, near Kill may have been part of a larger cairn, while the decorated stone from Hempstown was uncovered by ploughing in 1949 and was part of a cist burial (KD020-015002-). Fifteen barrows of various types are recorded, as well as seven ring-ditches. The Iron Age is represented by a hillfort at Killhill (KD020-001----), a hilltop enclosure at Tipperkevin, and a rare burial at Rathmore West (KD020-009015-). The Piper's Stone are the most well-known stone circles in the county, potentially late Neolithic but predominantly date from the Bronze Age.

In the Early Medieval period, eight ringforts are recorded, However, seventy-one enclosures are also recorded, many of which may relate to farmsteads of the Early Medieval period. Four ecclesiastical enclosures and two ecclesiastical sites are also known. High crosses are recorded at Kilteel Upper (National Monument No. 275), and two at Ballymore Eustace. Nine holy wells are recorded. In the later Medieval period, three mottes and four motte and baileys are known, four moated sites, nine tower houses, twelve unclassified castles and seventeen churches. Four religious houses are recorded: Augustinian canons, Dominican Friars (early and later houses) at Naas, and Knights Hospitallers at Kilteel Upper.

FIGURE 4-17 ARCHAEOLOGICAL HOTSPOT MAP OF NAAS AND LIFFEY FOOTHILLS





The Post-Medieval period is represented by monuments such as five churches, two formal gardens, a lime kiln, bridges and two houses of sixteenth/seventeenth-century date, as well as three houses of seventeenth century date. The most significant of these houses is Jigginstown House (KD019-033001-), a National Monument (No. 528). There is a strong representation of monuments from the Early Medieval period. However, the presence of religious houses and monuments dating to the Anglo-Norman period give this LCA a Late Medieval character.

Both Naas and Kilcullen are busy, growing towns influenced by the Dublin region in terms of commuting and housing demands. The lower lands in this LCA more generally are busy, active and influenced via the M7 corridor. Equestrian industry is well represented in this part of the LCA with stud farms, and racecourses at Naas and Punchestown.

Outside the towns, a strong rural character particularly to the south towards the Liffey and eastwards as the hills rise and connect to County Wicklow is present. The field sizes generally decrease in size as the landform rises, and a strong hill character is notable particularly with the visual connections to the Wicklow Mountains. Long views across the plains of the county are possible when driving westwards.

4.9.6 LANDSCAPE VALUES

The Kildare County Council (KCC) Green Infrastructure Strategy includes the River Liffey and its tributaries as green corridors linking the Plain of Kildare with County Wicklow and the Poulaphouca reservoir. The Grand Canal on the LCA's northern boundary forms a Blueway. Stepping stones in this plan, include Naas Racecourse, Punchestown Racecourse, Gowran Grange Demesne and Harristown Common. There are several NIAH Historic Gardens and Designed landscapes within the LCA, with concentrations within the river valley and on the slopes of the Wicklow foothills.

KCC identifies the following scenic routes in this LCA: Scenic Route 07 (Views of Blessington Lake), Scenic Route 9 (Views of the River Liffey; R411 Liffey Bridge at Ballymore Eustace to junction of R411/L5043); part of Scenic Route 10 (Views of the West Plains on the Oughterard Road), Scenic Route 11 (Views of the Upland Areas on the Oughterard Road), Scenic Route 12 (Views west of the Kildare Plains from the), Scenic Route 13 (Views to the River Liffey on the R413 from Brannockstown Cross Roads to Ballymore Eustace), Scenic Route 20 (Views to the north-west of the open countryside, from Kilteel Village to Rathmore Village.), Scenic Route 27 (Views of the countryside and the East Kildare Uplands), Scenic Route 30 (Views to and from the Ridgeline of the East Kildare Uplands and views of the Central Plains along the L6030).

Kildare County Council identify the following hilltop views in the LCA: Kilteel Hill, Caureen Hill, Slieveroe Hill and Carrigeen Hill.

Consultees have identified the River Liffey and canals as key landscape features of value and the influence of well managed farmland around Ballymore Eustace. Views from Cupidstown Hill and Horsepasstown are also identified.

"Canals and rivers water spaces calm the mind"

PHOTO 4-21 RAGUSA STUD FARM NEAR BALLYMORE EUSTACE



4.9.7 LANDSCAPE CONDITION AND DRIVERS OF LANDSCAPE CHANGE:

This LCA is in generally in good condition. On its eastern side its undulating and elevated topography with dominant ridgelines help enhance its cohesion. There is a rural quality on its eastern boundary where it abuts the boundary of South Dublin County Council (Athgoe and Saggart Hills) and County Wicklow. Outside the main towns, it remains predominantly agriculture with well-maintained field boundaries. On lower lands where limestone is present, high-quality farmland with mature parkland trees is notable. Mineral extraction is both historical and ongoing today. On the eastern edge of this LCA there is a transitional quality to the landscape character, influenced by proximity to the motorway and the presence of office parks and industrial estates. In certain locations this results in a fragmented urban fringe character (for example around Oldmilltown).

Naas, as one of the fastest growing settlements in the county, will impact areas around its periphery. Drivers of change identified include:

- Population growth (fast growing urban centres) and increased residential settlement.
- Increased urbanisation and growth associated with fast growing settlements: Naas (Key town), Kill (Town).
- Changing agriculture practice as the sector adapts to climate change.
- Renewables/afforestation on upper lands.
- Global demand for aggregate and stone and the potential growth of the existing extractive industries in the area
- Increased development pressure along motorway corridor and their junctions.
- Solar farm applications



- Telecoms and associated infrastructure on elevated sites.
- Industrial estates close to motorway and county border.
- Motorways such as M7 often transform rural areas through the provision of new infrastructure, increased traffic, noise pollution, road lighting, signage, gantries, drainage, and earthworks, embankments and roadside planting, though effects are dependent of views and screening.

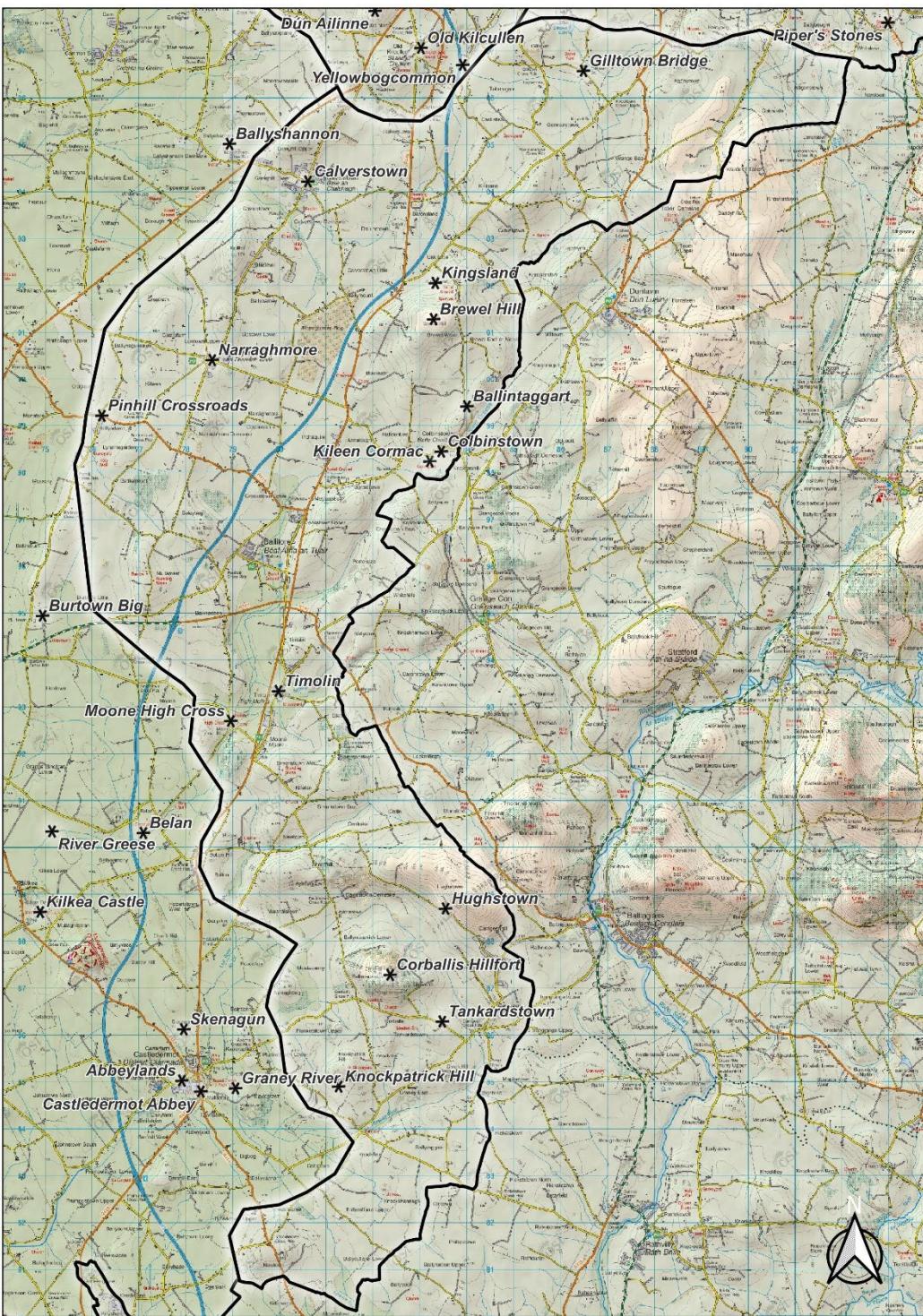
PHOTO 4-22 NEW HOUSING BESIDE THE RIVER LIFFEY AT BALLYMORE EUSTACE



4.10 LCA 9 SOUTH EASTERN KILDARE HILLS



FIGURE 4-18 SOUTHEASTERN KILDARE HILLS BOUNDARY



4.10.1 EXTENT

This long character area extends along the eastern edge of the county sharing an extensive border with County Wicklow, the northern boundary is provided by Ballymore Eustace, the River Liffey and Kilcullen. It extends as far south to the Carlow County border.



PHOTO 4-23 RIVER GREESE SOUTH OF MOONE



4.10.2 KEY CHARACTERISTICS

- In comparison with much of the County, topography is almost entirely above 100m creating a hilly character to this area.
- The undulating landform gradually rises and forms part of the Wicklow Mountain complex at the eastern boundary.
- The upland character results in surviving prehistoric archaeological sites plus significant historical sites at Moone, Timolin and 1798 battlefields.
- Open sweeping views from elevated lands are a feature providing expansive views west over the lowlands of LCA Cill Dara Lowlands, south into County Carlow and particularly east over to County Wicklow
- Rural dispersed settlement pattern with farm buildings. Ballitore is the largest town with associations to the Shackleton family of Quakers and 1798 Rebellion. Ballitore itself has a strong hill town character nestled within the hilly landform. Calverstown and Narraghmore are the other two villages within this character area.



- A strong rural character predominantly under pasture with sheep and cattle grazing; lower lands support smaller pockets of arable production. Large to medium fields decreasing in size with elevation. These combine to create a wooded character along the narrower road network. A largely tranquil, rural character to much of this LCA.
- Deciduous and coniferous plantations are visible on hills in the distance.
- Limited network of minor roads that follow the landform around the hills, linking the lowlands into Wicklow hills whilst the M8 traverse the lower lands at the western part of the LCA.
- Rising on Corballis Hill, the Graney River flows south westerly and is a locally significant landscape feature with historical influence on the LCA.
- Corballis Hill and Hughstown Hill both pronounced landmarks from the west; and the ridgeline of Corballis Hill frame western views when travelling along the M9.

PHOTO 4-24 ON L6094 LOOKING EAST



4.10.3 GEOLOGY AND LANDFORM

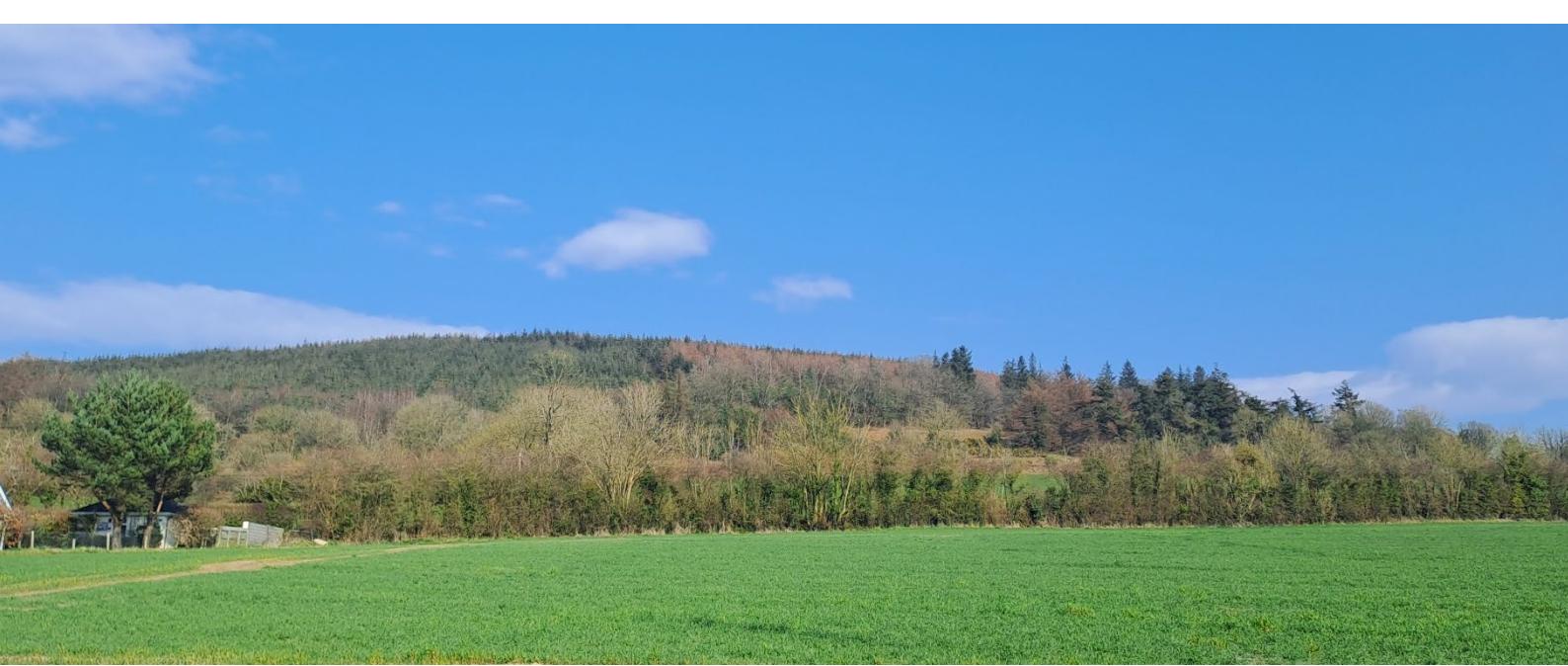
Topographic elevation in Southeast Kildare Hills LCA is almost consistently between 100 m and 200m. Hill summits of almost 300 m are situated in the south and north of the LCA. The lowest ground (80 m) is along the River Greese valley. Geology across most of the LCA is



Silurian greywacke, siltstone, and shale. The hard, resistance nature of these sedimentary rocks is reflected in hilly terrain throughout the LCA that contrasts with the low-lying limestone landscape of the Cill Dara Lowlands LCA and Barrow-Grand Canal Corridor LCA to the west. The southern portion of the Southeast Kildare Hills LCA is a granite landscape, comprising a hard, crystalline granite. The upper slopes of Corballis Hill (258 m) comprise Silurian greywacke rocks underlain and surrounded by granite.

Like the Naas & Liffey Foothills LCA, surficial sediments significantly comprise limestone till and limestone gravels. The upmost slopes of the hills along the Kildare-Wicklow border have sandstone till cover. The southern granite landscape comprises granite tills, as well as sandstone till and limestone gravel. Alluvium occurs along the River Greese valley. Cut over peats are predominant around Narraghmore Bog with lesser cover of limestone gravels, cut-over raised peat, and alluvium. The main rivers draining the LCA include the River Greese (Griese), Lerr River, Finnery (Boherbaun) River, both draining to the River Barrow. The LCA lies almost entirely within the Boyne Catchment except for the very northeastern portion where small streams drain to the River Liffey (Liffey and Dublin Bay Catchment). Narraghmore Bog (c. 150 Ha) is situated in the north of the LCA.

PHOTO 4-25 CORBALLIS HILL NEAR CORBALLIS CROSSROADS



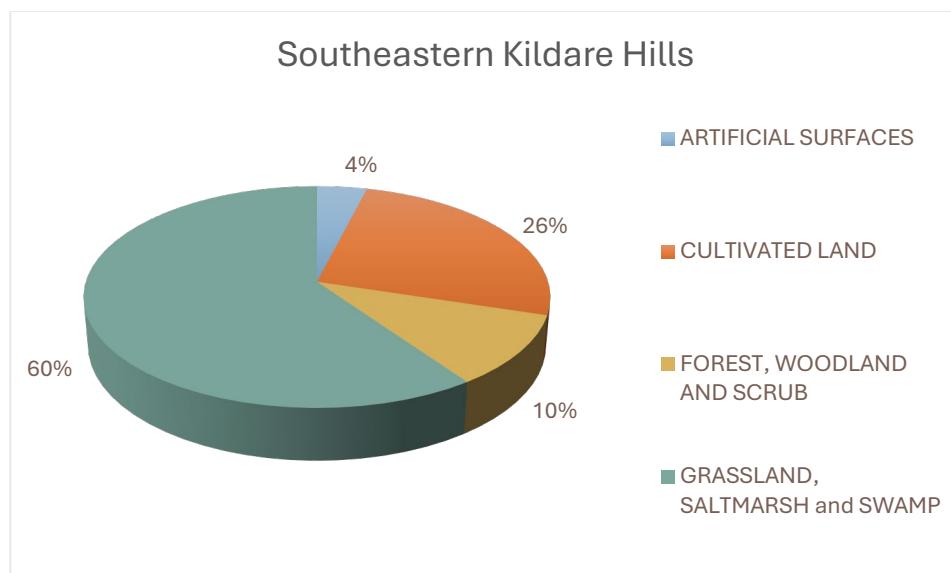
4.10.4 LAND COVER AND ECOLOGY

The LCA (163 km²) comprises 97 km² grassland, 41 km² cultivated land, and 17 km² forest/woodland/scrub (National Land cover Map data). Chart 4.9 below presents the broad land use categories in terms of hectares under different land use in this LCA.



Grassland accounts for 60% of land cover, one of the highest percentages of grassland land cover at county scale. The hedgerow network in this LCA is relatively dense and intact with mature trees in hedgerows occasionally creating 'green tunnels'. Whilst woodland cover is not particularly high, the hedgerow network confers a wooded character to this area.

CHART 4-9 NATIONAL LAND COVER PERCENTAGE LAND COVER



Sites designated for Natural Heritage are Corballis Hill pNHA (001389) and the Dunlavin Marshes pNHA (001772) on its northern edge bordering LCA 8 Naas and Liffey Foothills.

4.10.5 HISTORIC AND HUMAN INFLUENCE:

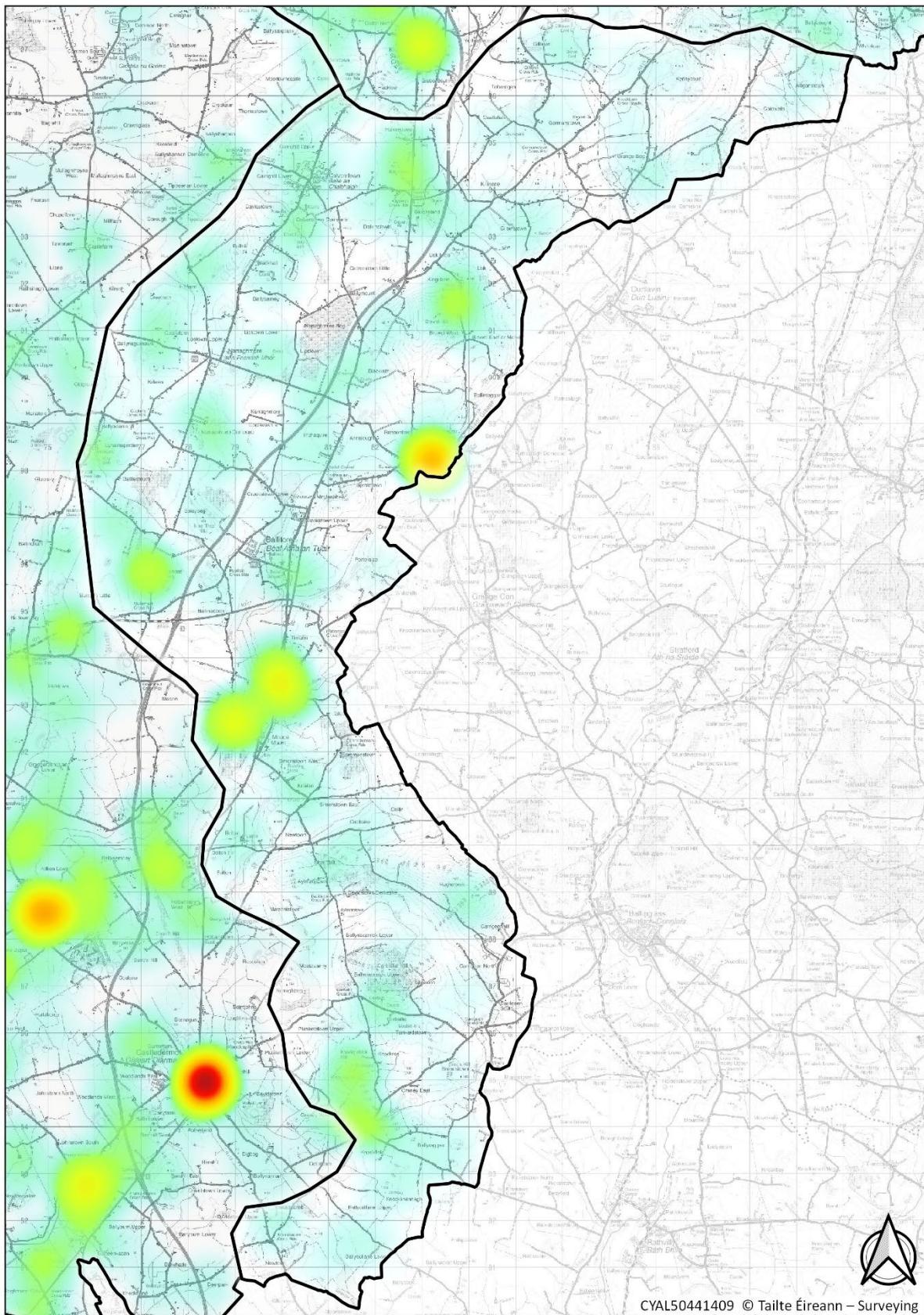
There is a total of 281 monuments in this LCA. The Neolithic is represented by a ritual monument known as a cursus, close to the stone circle and ritual enclosure (KD032-026001-) on Brewel Hill (Preservation Order 32/1976). Bronze Age monuments such as cists are recorded, with five of the totals located at Timolin. A Bronze Age cemetery of three graves, and nine cist burials are also recorded. Three *fulachta fiadh* are recorded. Other prehistoric monuments include six standing stones, and twenty-seven barrows of varying type, as well as six ring ditches. The Iron Age is represented by the hillfort at Hughstown (KD038-025001-), near Baltinglass, as well as the recently discovered hillfort on Corballis Hill (KD038-081).

From the Early Medieval period, twenty-seven ringforts are known. However, forty-nine enclosures are also recorded, many of which may relate to farmsteads of the Early Medieval period. Three ecclesiastical enclosures, and one ecclesiastical site at Timolin (KD036-025001-), a seventh century foundation of St Moling, Bishop of Ferns are known. Of the total of seven ogham stones recorded, five ogham stones are located at Colbinstown. One of the most important Early Medieval sites is at Moone, where five high crosses are located, one of which (KD036-031004-) is a National Monument No. 674. The ruins of a possible oratory are located at Colbinstown (KD032-044019-). In the Later medieval period, the Anglo-Norman advance is poorly represented in the archaeological record. One ringwork is recorded, along with nine moated sites, all with a widespread distribution. Four tower

houses and six unclassified castles are known, as well as one deserted medieval settlement. Nine churches are recorded. Timolin is the location of an Augustinian nunnery (KD036-025002-). There is also an important religious house (KD040-015----) of Augustinian nuns (Arrowesian) at Graney East.



FIGURE 4-19 ARCHAEOLOGICAL HOTSPOT MAP OF SOUTHEASTERN KILDARE HILLS





The Post-Medieval period is represented by monuments such as four seventeenth-century houses, three churches and the 1798 battlefield at Narraghmore (KD032-062---). Because of the upland nature of this LCA, the prehistoric period is strongly represented.

Today, the area retains a strong rural character with winding roads traversing the hills, long views particularly east and south to the Wicklow Mountains confers a hilly, remote character. The Greese River Valley flows between the hills and supports industrial and architectural features as well as the significant archaeological cluster by the river at Moone.

Knockpatrick Hill, continues to fulfil a ritual role as the annual pattern takes place; and the holy well close by includes stones believed to carry imprints of the saint. Folklore recorded for the holy wells of this LCA at Corballis and Knockpatrick relate to bad luck associated with desecration of an associated sacred tree (at Corballis). At Knockpatrick, the landowner grew a tail following his blocking of access to the well with boulders⁵⁴.

A transition in agricultural land use is notable, with field size generally changing from the large tillage fields at lower lands to medium, modest sized fields with wide hedgerows common. With the changing agricultural practices, supporting buildings associated with sheep and cattle increase, such as slatted sheds. As with much of the county, the haybarn is increasingly rare reflecting historical changes in grass production.

Designed landscapes and estates are not a strong feature of this LCA but two storey farmhouses are present, combined with more modern bungalows or two storey houses. More recent housing style includes individual houses with views into the valleys.

4.10.6 LANDSCAPE VALUES

The Kildare County Council (KCC) Green Infrastructure Strategy includes a green corridor along the River Greese linking the foothills with the Barrow. Part of the proposed route of the Naas to Baltinglass greenway runs along the old railway line that passes through the north of this LCA. Further south another greenway is identified along the Lerr River. Several stepping stones are identified – Narraghmore Nature Reserve, Keatley Concrete, Commonstown Quarry, Corballis Hill, Portersize Quarry, Battlemount Woods and Brewel Hill.

The following scenic routes have been identified in this LCA: Scenic Route 19 (Views to and from the Corballis Hills: Along county roads), Scenic Route 21 (Views east at Brewel, along the L6096 from Kingsland Castle Ruins to Ballintaggart), Scenic Route 23 (Views to the north-west of the Kildare Plains along the R418), and Scenic route 24 (Views to and from Huestown Hill). Hilltop views are recorded at Brewel Hill, Corballis Hill and Huestown Hill.

Consultees have identified the rolling hills and landform with specific mention of The Rath of Mullaghmast, Corballis Hills views and the historical and cultural influence of the River Greese.

⁵⁴ Holy Wells of County Kildare by Antoine Giacometti and Gillian Boazman Edited by Caroline O'Donnell, Kildare County Council 2023.

"East Kildare uplands and West Wicklow hills have the best views in Kildare."



4.10.7 LANDSCAPE CONDITION AND DRIVERS OF LANDSCAPE CHANGE:

This LCA is in good condition. The elevated landform and ridge lines in the northeastern part enforce its character. It has a strong rural quality, with Ballitore and Moone the main urban centres. Both retain quite a hilly character, and the sense of remoteness is an important character particularly in the upper slopes and foothills.

Agriculture is primarily grass-based with tillage on the lower lands. There are historic and contemporary signs of mineral extraction. Drivers of change include:

- Changing agriculture practice as the sector adapts to climate change.
- Global demand for aggregate and stone and the potential growth of the existing established extractive industries in the area (Current prospecting licenses in area).
- Renewables/afforestation on upper lands.
- Telecoms and associated infrastructure on elevated sites.

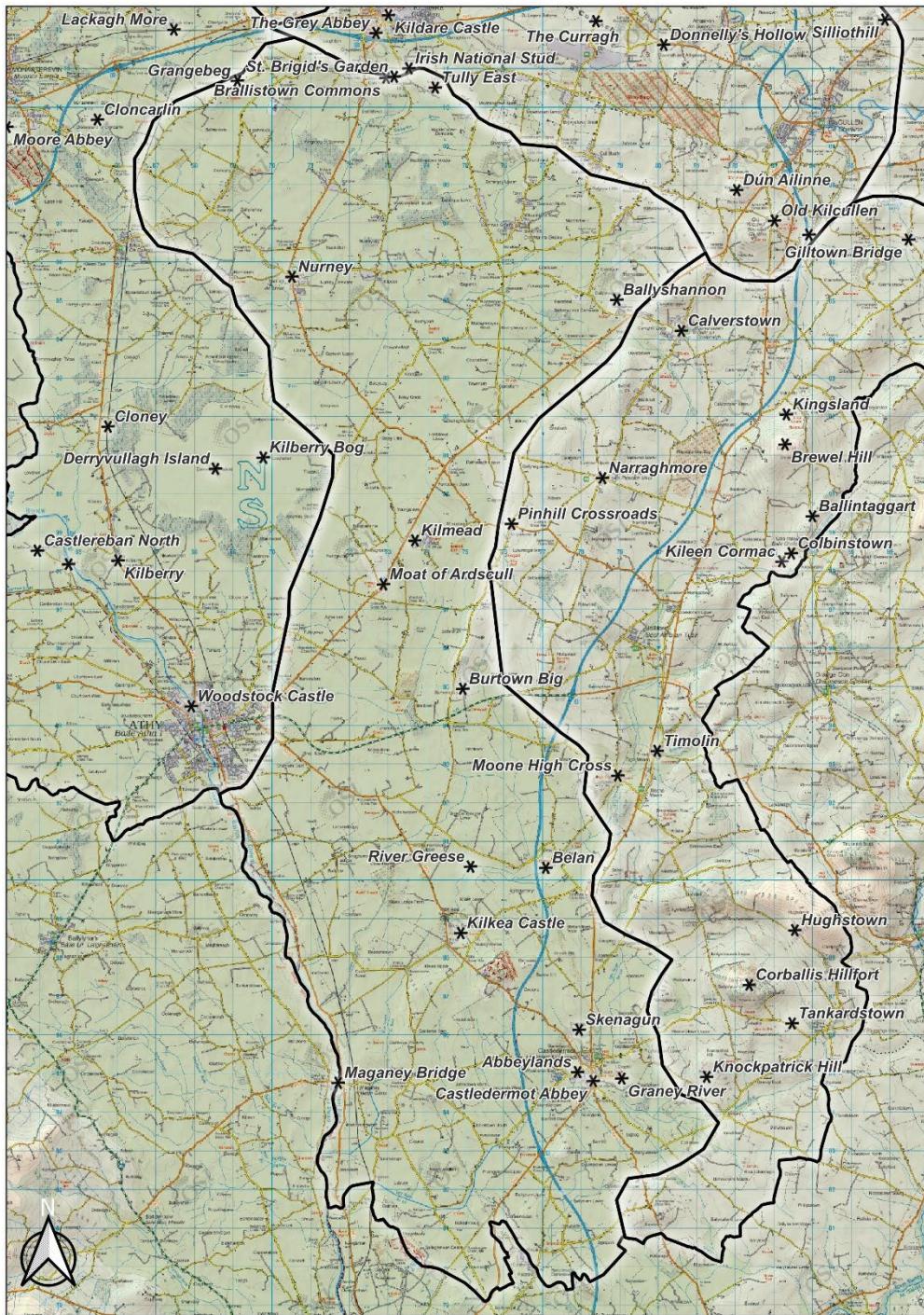
PHOTO 4-26 BALLITORE WOOLEN MILL



4.11 LCA 10 CILL DARA LOWLANDS



FIGURE 4-20 CILL DARA LOWLANDS BOUNDARY



4.11.1 EXTENT

This large and long character area lies south of the LCA 7 Curragh Plains and is bordered by LCA 9 South Eastern Kildare Hills to the east. County Laois shares its southern boundary and LCA 5 Barrow and Canal corridor frames the northwest of this LCA. Castledermot and Nurney are the main settlements.

PHOTO 4-27 VIEWS WEST TOWARDS INCH WOODS AT BURTON BIG



4.11.2 KEY CHARACTERISTICS

- Characterised by flat terrain and open views reflecting the low-lying landform consistently between 60 to 80m.
- The LCA includes substantial peatland areas notably Kilberry Bog with a long history of peat production.
- Outside peatlands, mixed farming of pasture and tillage with sheep and cattle grazing in medium and less frequently small field sizes. Field size increased with more tillage on the lands closer to Castledermot to the south.
- The topography combined with big, open fields create a large, expansive character for much of the area, and broad, open sky views are a feature through much of this LCA
- Scattered rural settlement pattern with Castledermot and Nurney principal nucleated settlements
- Large houses with large farm buildings and sheds present and notable limestone stone walls with capstones at crossroads.



- Extensive views east and southwest to Kildare Southeastern Hills and the Wicklow mountains beyond, views westwards are over to neighbouring County Laois

4.11.3 GEOLOGY AND LANDFORM:

Covering 256 km², the Cill Dara Lowlands LCA has the largest LCA in Kildare. Topography is largely low-lying, ranging 60 m to 100m. Some isolated hills rise to 110 m, and the highest, Mullaghreelan, rises to 140 m. Geology across the LCA north of the River Greese is almost entirely Carboniferous limestone and shale. The southern portion of the LCA comprises granite. A band of Silurian greywacke lies south of the River Greese, and north of the granite landscape. Surficial sediments comprise almost entirely limestone till and limestone gravels. Alluvium occurs along the course of the River Lerr, River Greese, Tully Stream, and other streams, all of which drain westwards to the River Barrow (Barrow catchment). The largest area of peat cover occurs to the south of Kildare. Isolated eskers occur in the north half of the LCA.

PHOTO 4-28 TILLAGE FARMING NEAR BURTOWN BIG



4.11.4 LAND COVER AND ECOLOGY:

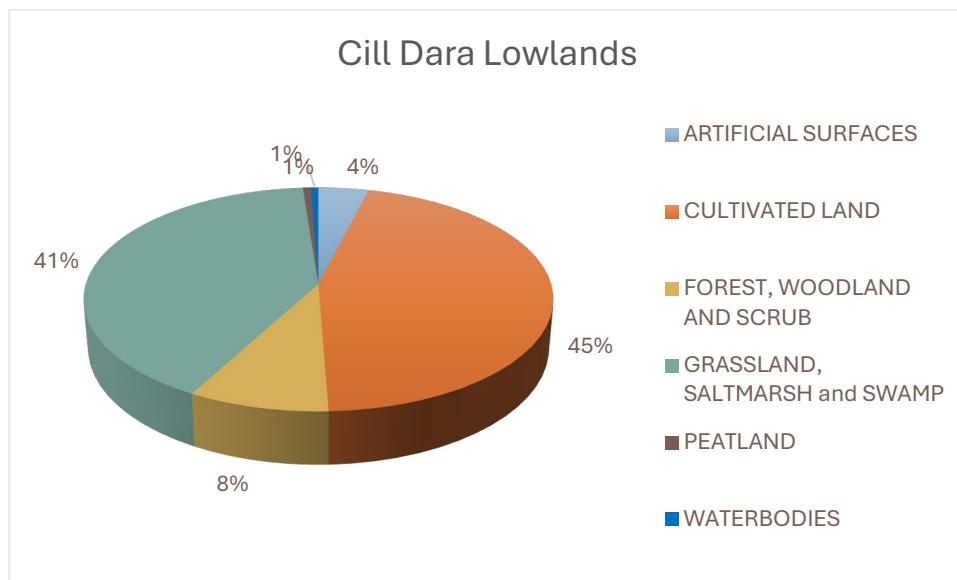
The LCA (256 km²) comprises 116 km² cultivated land, 105 km² grassland, 22 km² forest/woodland/scrub, and 13 km² peatland (National Land cover Map data).

Chart 4.9 below presents the broad land use categories in terms of hectares under different land use in this LCA. Grassland remains the dominant land cover but in well drained soils, cultivated lands at 27% is quite high relative to northern LCAs in the County.

Sites designated for Natural Heritage are the River Barrow and Nore SAC. The Barrow Valley at Tankardstown Bridge (000858) is a pNHA.



CHART 4-9 NATIONAL LAND COVER PERCENTAGE LAND COVER



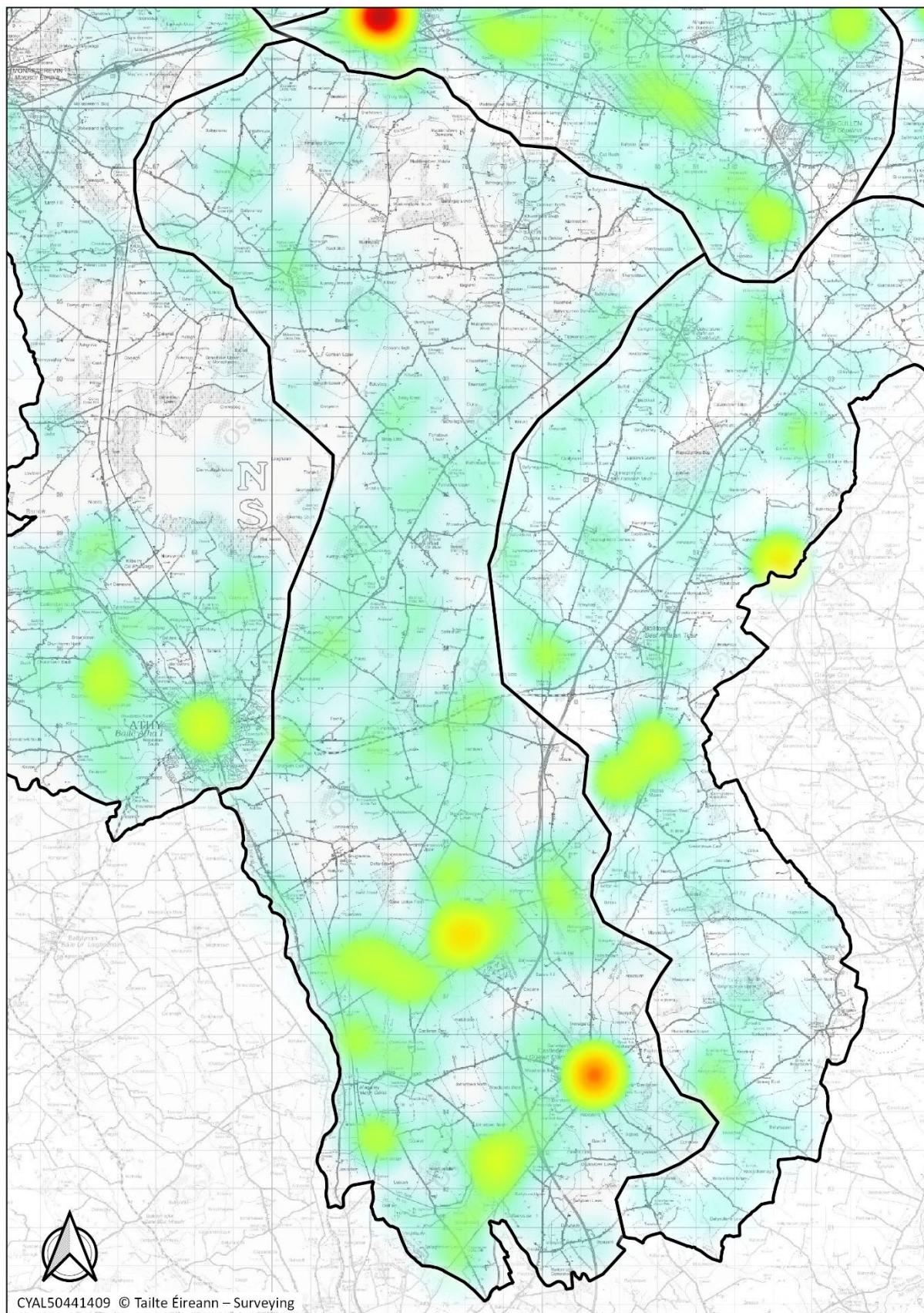
4.11.5 HISTORIC AND HUMAN INFLUENCE:

There is a total of 586 monuments in this LCA. Only four *fulachta fiadh* are known, as well as fourteen barrows of various type. However, there are seventy-two ring ditches. Two cists (burial monuments) are recorded. Two concentric enclosures, visible only on aerial photographs may be of Iron Age date. In the Early Medieval period, thirty-seven ringforts are recorded, and five holy wells. A togher, known as 'The Dane's Road' (KD027-001001- was partially excavated in the bog at Cloncarlin, and dated to the end of the Early Medieval period. However, 185 enclosures are recorded. While these may date to any period, there is a likelihood that many of them relate to farmsteads of the Early Medieval period. Four ecclesiastical enclosures are recorded.

The high crosses and cross-inscribed stones at Castledermot are an important part of the Early Medieval ecclesiastical archaeology of this LCA. Three mottes are known from the Later Medieval period, a ringwork, as well as twenty-two moated sites. Four tower houses and eleven unclassified castles are also known. Three deserted medieval settlements are recorded, such as at Silliot Hill (Kildare ED) (KD022-032----). Twenty-five churches are known, most of the which date to this period. Three religious houses are known. Two of these are upstanding and are associated with Castledermot. These are the Franciscan religious house (a National Monument No. 200), and the Fratres Cruciferi foundation (No. 503), in Skenagun townland. The round tower at Castledermot is a National Monument (No. 503) and the historic town of Castledermot is also a recorded monument (KD040-002---).



FIGURE 4-21 ARCHAEOLOGICAL HOTSPOT MAP OF CILL DARA LOWLANDS





The Post-Medieval Period is represented by monuments such as designed landscape features and the bastioned fort, dating to Cromwellian times at Ballyshannon (KD032-003001-). It is no longer visible. This LCA has a high representation of monuments in the Later Medieval Period, particularly moated sites. However, if one considers that the enclosures may primarily date to the Early Medieval period, then, this shows a very strong presence of farming activity across this LCA in the Early Medieval period.

Today, this LCA supports improved grassland on drained peat soils that generally enclose medium sized fields with hedgerows, occasional treelines and drainage ditches. The larger better draining fields are enclosed by box shaped hedgerows likely cut frequently. The overall LCA is diverse in terms of more remote, quieter peatland areas and the more active, agricultural tillage lands. Where bog is present, and not drained, scrub and bog woodland are established at the edges.

The road network is strongly influenced by the expanses of peatlands that result in roads skirting the peatland areas, these roads are often embanked and drained. Castledermot to the southeast is a former walled town and a significant historical and ecclesiastical settlement. The other settlement is at Nursey, a small town with attractive features including stone walls and an old graveyard with yew trees. References to St Brigid are included in the wrought iron and mural on a school wall.

Kilkea is an attractive and well conserved estate village, located adjacent to the former estate, now the Kilkea Castle hotel and golf course. The castle dates from 1180AD and was the birthplace of St Laurance O'Toole. The woods at Mullaghreelan, managed by Coillte formed part of the Kilkea woodland estate and includes a hilltop rath with views westwards to County Laois.

Settlement is dispersed with single storey houses and farms. Recent housing tends to be larger in scale than vernacular styles.



PHOTO 4-9 NEAR KINGSBOG, NORTHERN PART OF THIS LCA



PHOTO 4-30 MATURE TREE-LINED ROAD ADJACENT TO KILKEA CASTLE HOTEL





4.11.6 LANDSCAPE CONDITION AND DRIVERS OF LANDSCAPE CHANGE:

This predominantly rural LCA is in good condition. It comprises tillage and grass-based agriculture with coniferous planting on former peatlands. It has a short boundary with the River Barrow. The cessation of peat production on areas of bogs will result in subsequent rehabilitation and restoration measures. The settlements although scattered are generally well maintained, tidy and well managed.

- Changing agriculture practice as the sector adapts to climate change.
- Flooding risk associated with climate change.
- Landscape condition and drivers of landscape change
- Changing agricultural practice as the sector adjusts to national and European Policy changes and geopolitical events.
- Increased ancillary tourism activities and facilities the River Barrow corridor.

PHOTO 4-31 VIEW FROM NURNEY GRAVEYARD SHOWING MURAL ON SCHOOL



5 CONSULTATION

5.1 INTRODUCTION

In keeping with the principles of the European Landscape Convention (ELC)⁵⁵, public consultation and participation formed an important element of the Landscape Character Assessment (LCA) process. Collaborating and engaging with communities helps us understand what landscape means to people and the values they attach to it. Assistance with the naming, perceptions, and associations of Landscape Character Areas is particularly important in the process. The process had three main stages.

TABLE 5-1: STAGES OF PUBLIC PARTICIPATION/CONSULTATION DURING LCA

Phase One: Initial Consultation and Stakeholder Mapping		
Method	Stakeholders	Dates
Inception Meeting	Kildare County Council Senior Planners	September 13, 2024
Preliminary Stakeholder Mapping	Communities of interest and place	October 2024
On-line stakeholder perception survey	Expert stakeholders (56) (Heritage, Local Government, Environmental, Community, and Rural Development groups)	October 14 - October 31, 2024
Phase Two: Communication and pre-draft Consultation		
Method	Stakeholders	Dates
Informational Letter and request for input and consultation on boundary areas.	Neighboring planning authorities	October- November 2024
Consultations/ structured interviews	Expert stakeholders	January- March, 2025
Phase Three: Draft LCA Stage		
Presentation of the Draft Landscape Character Assessment.	Elected officials/councilors	February 2024
Written submissions	General stakeholders and elected officials (4)	January-March 2025
2 in-person workshops (morning & afternoon sessions)	1. Communities of interest 2. Communities of place	March 4, 2025

5.1.1 INITIAL STAKEHOLDER MAPPING

Stakeholder mapping was conducted to identify resources and the affiliations, areas of interest, and expertise of relevant stakeholders. Targeted emails were sent to stakeholders

⁵⁵ Council of Europe (2000), European Landscape Convention, Council of Europe, Florence, October 2000

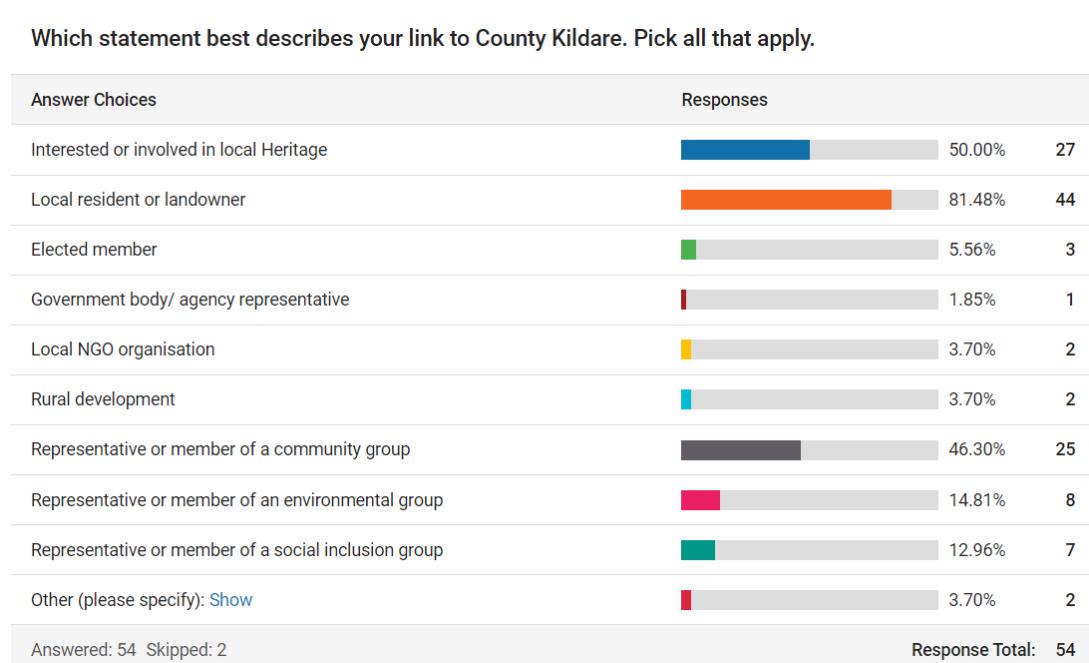
through the Kildare Planning Department to councils and groups with an interest in and/or expertise in the Kildare landscape.

5.1.2 ON-LINE STAKEHOLDER PERCEPTION SURVEY

A pre-draft consultation was carried out with a targeted group of specialist stakeholders, identified through initial stakeholder mapping, using a qualitative online survey administered via Google Forms. Surveys are useful at the start of the engagement process to help identify underlying issues and priorities.⁵⁶ The questionnaire was hosted online through SmartSurvey. Invitations to participate were sent out through Kildare County Council and the PPN. Participants were invited to share their knowledge and provide important insights into the overall character of the Kildare landscape. There were 56 fully completed responses with a further 48 partial responses to the Questionnaire.

Stakeholders ranged from various areas, including Heritage, Local Government, Environmental, Community, and Rural Development groups. The survey results guided the team to identify the most significant landscape factors, places of particular interest, and the community's perceptions of the landscape. Key categories included collecting views and opinions on the overall character of the Kildare landscape. The diverse range of expert participants was sourced from the areas of heritage, local government, the environment, non-profit groups, community and rural development.

FIGURE 5-1 EXPERT STAKEHOLDERS' ASSOCIATION WITH COUNTY KILDARE



⁵⁶ Department of Rural and Community Development (2023) A Guide for Inclusive Community Engagement in Local Planning and Decision Making, The Irish Government.

FIGURE 5-2 WORD CLOUD: KEYWORDS ASSOCIATED WITH COUNTY KILDARE FROM EXPERT STAKEHOLDER PERCEPTION SURVEY



Results from the survey were used to guide the team to the most significant landscape factors, features, associations and views. This feedback was subsequently used to source points of interest and enhance our understanding of perceptions of place for Landscape Character Areas.

1. LANDFORM AND LANDUSE IMPACT

This section assessed perceptions of natural and human-influenced landscape features in County Kildare. Rivers, wetlands, and floodplains were rated as the most influential, with over 65% of participants identifying them as extremely impactful. Deciduous woodlands, mature trees, and pasture grazing (sheep and cattle) were also seen as influential, though responses varied between high and moderate impact. Landforms such as plateaus, plains, foothills, valleys, and prominent hills were rated moderately to highly influential. In contrast, coniferous forestry plantations were considered the least influential. However, all categories received a notable level of influence, ranging from 27% to 65%.

2. LANDSCAPE FEATURES IMPACTING CHARACTER

This section examined how specific cultural and infrastructural features influence Kildare's landscape character. Canal corridors emerged as the most influential, with 75% of respondents rating them highly. Over half also identified historical towns, villages, and archaeological monuments—such as tombs, raths, castles, and mass paths—as major contributors to landscape identity. Church buildings and stone bridges were similarly valued. In contrast, vernacular and modern farm buildings received mixed responses, with about half rating them as less

influential. Transport infrastructure, especially motorways, was generally viewed as moderately influential but varied across responses. Participants also raised concerns about landscape pressures, including the loss of hedgerows, rural land encroachment from urban spread, and the visual impact of new farm complexes. Several highlighted peatlands—such as Ballynafagh Bog and Pollardstown Fen—and the River Liffey as vital natural features that shape the county's character and deserve greater recognition in planning and conservation efforts.

3. SPECIAL PLACES IN KILDARE

This section asked respondents to identify special places within County Kildare. The Curragh Plains, Hill of Allen, canals, and Blueways were the most frequently mentioned, valued for their biodiversity, peacefulness, heritage, and recreational use. Respondents highlighted bogs, fens, and nature reserves like Pollardstown Fen, Ummeras Bog, and Lodge Bog for their ecological significance and peatland restoration potential. Many also cited historic and cultural landmarks, including castles, ancient sites, stone bridges, and old graveyards, as deeply connected to Kildare's identity. Quotes collected reflect strong emotional ties to the landscape, its beauty and its role in personal and community memory. Features such as the River Liffey, the Barrow Blueway, and the canal banks were praised for promoting biodiversity and offering natural escapes within built environments. These insights were integrated into the descriptive development of Kildare's Landscape Character Areas.

4. POPULAR VIEWPOINTS

Respondents identified several locations in County Kildare offering exceptional views of the landscape. The Hill of Allen, Curragh Plains, and various hilltops, such as Cupidstown Hill, Dunmurray Hill, and the summit of Dún Ailinne, were frequently mentioned for their panoramic vistas. The Curragh Plains stood out for their unobstructed, far-reaching views across the Wicklow Mountains, Dún Ailinne, and the Hill of Allen. Other popular viewpoints included Lullymore Bog, Boston Hill, and Redhills, as well as canal corridors and riverbanks, which offered tranquil and scenic perspectives. Quotes emphasised the emotional and visual impact of these views, highlighting the region's rolling hills, boglands, waterways, and heritage sites as visually striking and deeply connected to the local identity.

5.2 PHASE TWO

5.2.1 TRANSBOUNDARY COMMUNICATION

Emails were sent from Kildare County Council to each of the adjacent County Councils informing the Planning Departments about the LCA and requesting transboundary consultation. We received two submissions in response advising of any updates to their LCA and relevant areas of common interest.

5.2.2 ONE-ON-ONE EXPERT INTERVIEWS

Interviews: A small selection of structured interviews were conducted with a handful of key stakeholders with expert knowledge of the local landscape to guide the team in their field surveys and intangible landscape. Interviews were held between mid-January and mid-February.

TABLE 5-2 EXPERT INTERVIEWS

- Teagasc: The influence of forestry and agriculture on land use in Kildare.
- Kildare Arts Officer: Discussion on the intangible qualities of the Kildare landscape through artists, folklorists, musicians, writers, heritage groups etc.
- Irish Peatland Conservation Council (IPCC): Peatlands in Kildare are hugely influential and an important cultural landscape feature. Discussion centred on drivers for change, boundaries, and the cultural history of the peatlands, particularly the complex known as the "Bog of Allen".
- Local Artist: Discussion on the influence of the Kildare landscape on the artist's work, changes in the landscape over time, and cultural history.
- Kildare Just Transition Tourism Activator: Descriptions of Kildare landscape from a tourism perspective. Discussion on public perception surveys regarding landscape and just transition.

Some of the key discussions from expert interviews:

1. Forestry and Land Use

Kildare has low forestry coverage due to its high-quality agricultural land. Historically conifer plantations were established on former peatlands, while deciduous species were planted on better mineral soils in the south. Tree planting often failed in areas with high pH soils. Hills over 200 metres tend to be planted with conifers. Mature estate trees and boundary ditches are common landscape features.

2. Tourism, Settlement, and Socio-Economic Patterns

Peatland areas can correlate with socio-economic disadvantages, particularly in post-industrial communities. Industrial heritage from canals is still visible. Athy exhibits a shift from prosperous farming to industrial decline to a thriving cultural town. South Kildare features a dense pattern of villages and surviving built heritage fitting with the "Ancient East" brand. Central Kildare is marketed as "Thoroughbred Country" for its equestrian landscape, while eastern towns offer luxury tourism linked to historic estates.

3. Peatland Pressures and Opportunities

The Bog of Allen includes a mosaic of bogs with varied names from local and industrial histories. Intact and restored bogs coexist with some ongoing turf cutting. Key pressures include peat extraction, renewable energy development, forestry, and amenity expansion. There is growing interest in peatland restoration, biodiversity conservation, and the creation of a National Peatland Park.

4. Cultural Identity and Heritage

Kildare's cultural identity is also shaped by its musical, literary, and artistic heritage. Traditional music and amateur theatre thrive in the south. The arts community draws on the peatland landscape and local history. Some geographic divides persist, with the north generally associated with luxury estates and stud farms and the south with rural and heritage-based identity.

5.3 PHASE THREE

5.3.1 DRAFT KILDARE LCA PRESENTATION TO ELECTED OFFICIALS 24TH FEBRUARY 2025

A presentation of the draft LCA was included in the general presentation to elected officials at the Council Chambers. Councilors gave positive feedback with a couple following up with written submissions.

5.3.2 LCA WORKSHOPS 4TH MARCH 2025 AND CONFIRMED BOUNDARY AND NAME CHANGES

Two in-person workshops were conducted at the Kildare Council Chamber on the 4th of March.

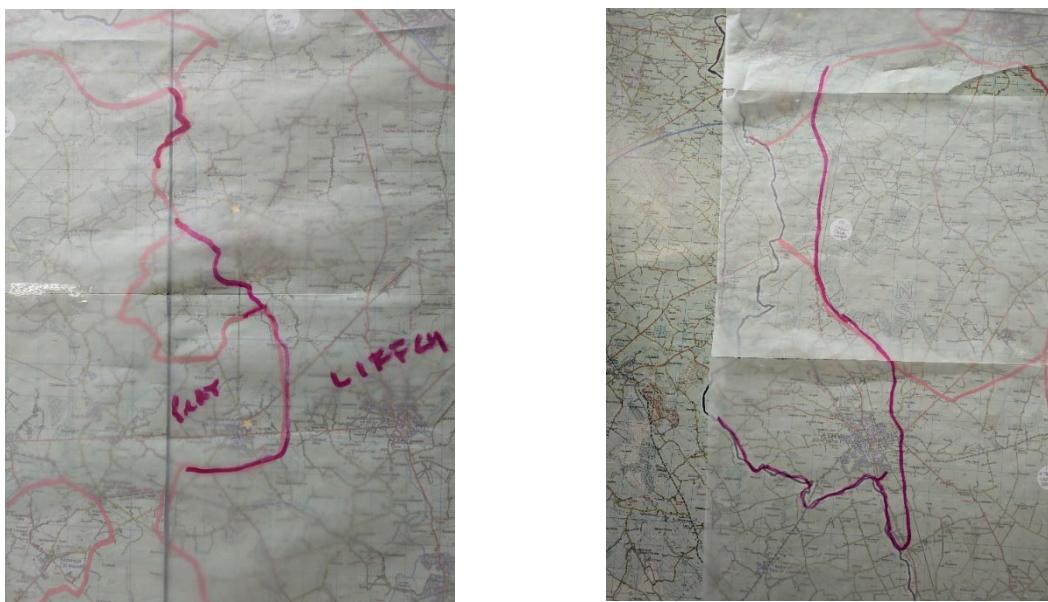
- Communities of interest (e.g. statutory bodies including Kildare County Council Planners, Parks and Open Space, Bord na Mona, Heritage Officer, LAWPRO, Climate Action Officer, Failte Ireland, local councilors)
- Communities of place, including the Irish Farmers Association, Kildare Archeological Society, River Liffey Trust, Cill Dara le Gaeilge, ICA, Blueway Arts Studio, Women's Group)

The workshops focused on LCA boundaries, naming of Landscape Character Areas, associations of place, land use and emerging or historical issues. Active engagement was encouraged by marking and drawing on large maps and responding to landscape images through an interactive survey tool Mentimeter⁵⁷ for the morning session.

PHOTO 5-1 STAKEHOLDER WORKSHOPS



PHOTO 5-2 EXAMPLES OF SUGGESTED BOUNDARY CHANGES: LEFT IMAGE: BOG OF ALLEN AND LIFFEY LCA INCLUDING PEATLAND AREAS, RIGHT IMAGE- EXTENSION OF THE RATHANGAN- BARROW- GRAND CANAL TO ATHY.



Suggestions for new Landscape Character Area boundaries and names were discussed, compared, and tested, and changes were then made to the draft LCA boundaries and names. This resulted in a reduction from 12 to 10 final LCAs.

⁵⁷ <https://www.mentimeter.com/> Mentimeter gives live and instant polling from cellphones. Participants respond to landscape images with text and can see in real time the rest of the group's responses. Word clouds change based on the most popular words and phrases.

5.3.2.1 MENTIMETER LIVE SURVEY:

Mentimeter was used as a Landscape descriptor and associations exercise group activity to hone the group's landscape perception skills. It is important to note that only some of the characteristics of the landscape are described because of the limitations of a single image, however, each image represented a key aspect of each LCA.

PHOTO 5-3 MENTIMETER WORD ASSOCIATIONS FROM THE CURRAGH LCA AND THE SIX HILLS LCA



6 DRIVERS OF LANDSCAPE CHANGE

6.1 INTRODUCTION

Our landscape is dynamic and constantly changing. Over time the landscape of Kildare has been shaped and reshaped by both natural processes and human activity. Chapter 2 of this report *“Evolution of the Kildare Landscape”* outlines its transformation until recent times. This current chapter considers the potential drivers of future landscape change in Kildare.

There are many factors shaping the landscape. Globally, the processes of urbanisation, agricultural intensification, and the expansion of renewable energy have precipitated a significant landscape change. The underlying drivers of such change arise from social and natural processes and can be classified as follows: Political/institutional, Economic, Cultural, Technological, and Natural/Spatial⁵⁸ These drivers of landscape change will have different intensities of relevance in the context of County Kildare.

6.2 POPULATION

Population growth is acknowledged as a major driver of landscape change. Kildare is one of the fastest growing counties in the state, with a population growth of over 11% in the last census period (2016-2022). The national level of population growth was 8.1% in the same period. Between 1991 and 2022, County Kildare’s population doubled while the population of the State increased by 45%. The north-east of the county has experienced the highest levels of growth.

Population growth results in significant landscape changes as natural habitats are modified and transformed into built environments including buildings and roads.

In Ireland, between 2016 and 2022 the housing stock increased by 5% while in Kildare the increase was 11%. Kildare County Council’s Socio-Economic profile (2023) indicates “that of the housing completions in 2022, over three quarters (78.9%) were scheme houses (detached and semi-detached houses on estates and developments), and a further fifteen percent were apartments. The remainder were single houses built across the county”.⁵⁹ These figures indicate a high level of growth in and around existing settlements, and a relatively modest balance of approx. 6% of one-off rural housing.

6.3 AGRICULTURE

Agriculture is the main land use in County Kildare with farming shaping 67% (113,765 ha) of the county. Agricultural activity is influenced by soil type, and, in Kildare, this results in pastureland dominating in the north and east of the county, while tillage farming is more prevalent in the south. From an agricultural perspective, the land is varied i.e. the county is renowned for its rich pastureland, while, at the same time, 32% of the land in the county is considered marginal. This has resulted in diverse farming practices, each modifying the landscape in different ways. The county has one of the largest concentrations of stud farms in the State with much of this activity centred around the Curragh. Intensive specialist tillage farming is very much concentrated on larger farms in the south and parts of the northeast, while sheep rearing dominates in the upland eastern areas adjoining County

58 Plieninger et al (2016) The driving forces of landscape change in Europe: A systematic review of the evidence. Land Use Policy, Volume 57.

59 Kildare County Council Local Economic & Community Plan (LECP) Socio-Economic Profile 2023

Wicklow, and also in the Curragh. Overall, the resulting impression is of an intensely used landscape, with large fields occurring where crops predominate.

Hedges form the typical field boundary in County Kildare. A 2006 survey of Kildare hedgerows indicated that the total length of hedgerow in County Kildare was approximately 10,305km, indicating that 1.2% of the county was covered in hedgerows. These hedgerows showed a high degree of fragmentation, probably due to agricultural practice and the extent of development. Field rationalisation, or enlargement, generally result in hedgerow loss, while residential development along rural roads, with the associated change or modification to the road boundary, can impact on the landscape character. Ash dieback, first recorded in Ireland in 2012 and which is now prevalent, is continuing to impact the health, function and appearance of Kildare's hedges. Other invasive species also represent various risks and threats to the landscape and wildlife corridors such as rivers.

Forestry in Kildare accounts for only a small proportion of the land use. In 2017, 10,396ha of the county was in forest cover (approx. 6.1%).

The European agri-environmental policy has a profound impact on the landscape. The CAP, along with the EU's climate policy initiatives associated with the European Green Deal, will act as drivers of landscape change. Agriculture in Ireland is responding to ever increasing demands on sustainability and adapting to climate change.

6.4 CLIMATE CHANGE

Ireland's climate is changing in line with global trends, and this will impact on the landscape of Kildare. The anticipated average increase in annual temperatures is between 1-1.2° and 1.3-1.6°C and there is an expected increase in the frequency and duration of extreme climate and weather events. Precipitation is predicted to show an increase in heavy rainfall events in autumn and winter, with a reduction in the average levels of spring and summer rainfall. It is anticipated that such changes in temperature and precipitation patterns will alter soil composition and result in changes in vegetation and vegetation growth. While it is believed that climate change will not eliminate the dominance of grass in the Irish landscape in this century, it will, however, begin to threaten productivity of grasses, i.e. prolonged periods of wetter weather and reduced grass growth.

It is anticipated that:

- Warming in Kildare will continue especially in the summer and winter.
- The county will experience more extreme weather conditions including rainfall events and storms.
- There will be an increased likelihood of fluvial flooding.
- Winters will be wetter, and summers will be drier (which could lead to water shortages).
- These climate changes will impact the type, distribution and lifecycles of species.⁶⁰

⁶⁰ Kildare County Council Climate Change Adaptation Strategy 2019 - 2024

All the above changes in weather patterns may alter the flow of waters in rivers leading to localised flooding. In addition to agricultural practice, the built environment will be also influenced by climate change. The predicted changes i.e. hotter and drier summers, and warmer and wetter winters may result in structural damage to historic structures and buildings. Erosion and flooding events may damage historic buildings, bridges and archaeological sites. Built structures associated with the Grand and Royal Canals in County Kildare could be vulnerable.

Measures designed to reduce carbon emissions and adapt to climate risks will change the landscape e.g. by further renewable energy development, peatland restoration, woodland expansion, the implementation of flood defence measures and further development of green infrastructure. Bord na Mona's move away from peat extraction in 2021, in response to the growing concerns over the burning of fossil fuels and its contribution to climate change, has precipitated, nationally, a substantial land use change whereby 125,000 acres of bogland that are now being used to provide energy peat to three power stations will transition to new uses by 2030.

6.5 ENERGY

Aligned with adaption to climate change, there are legally binding targets nationally to meet the 2030 targets. The Council has recently adopted its Climate Action Plan for the period 2024 to 2029 which aims at creating a low carbon and climate resilient County, by delivering and promoting best practice in climate action. The implementation of this Plan will impact on land use and potentially change landscape character.

While County Kildare currently has no wind farms, there are several in the planning process. There are also several planned and operational solar farms.

6.6 TOURISM

Kildare's County Development Plan 2023-29 notes that "the county's close proximity to Dublin provide opportunities to attract spin-off tourism from the city region and neighbouring counties". Many of Kildare's tourism assets are based around its landscape resource, e.g. golf, equine including horse racing, adventure activities, walking, canal greenways, cycling and peatlands based eco-tourism. There is a planned long distance pilgrimage route, the Turas Columbanus in development⁶¹. Marketing has promoted a religious tourism associated with Brigid 1500, and additionally a growth in equine tourism associated with Fáilte Ireland's Thoroughbred Country Experience Plan (Kildare and Tipperary). Chapter 12 "Biodiversity and Green Infrastructure" in Kildare County Council's County Development Plan 2023-29, promotes a comprehensive green infrastructure plan for the county. This will create an interconnected network of natural, semi-natural and artificial habitats, green spaces and ecological areas, extending across the county and linking urban and rural areas.

It is therefore anticipated that tourism footfall will increase. The associated development of recreational trails, scenic routes, and tourism infrastructure has the potential to alter landscape character. The overuse of sensitive landscapes by tourists can lead to erosion, disturbance of habitats, and pressure on local infrastructure.

⁶¹ <https://thecolumbanway.org/en/the-itinerary/ireland/stages-in-ireland/>

6.6.1 POTENTIAL EFFECTS ON LANDSCAPE CHARACTER – GENERAL DRIVERS OF CHANGE

TABLE 6-1 GENERAL DRIVERS OF CHANGE AND EXAMPLES OF CHANGE TO THE KILDARE LANDSCAPE

Driver of change	Change	Examples of potential change to landscape character in Kildare
Political/institutional	<p>International</p> <ul style="list-style-type: none"> • Agenda 2030 SDGs. • the Paris Agreement. • the EU Green Deal. • the EU Common Agricultural Policy. <p>National:</p> <ul style="list-style-type: none"> • The National Development Plan 2021 - 2030 (NDP). • Climate Action and Low Carbon Development (Amendment) Act 2021. • Government policy to enable the 'twin transitions' of digitalisation and decarbonisation of our economy and society. • Bord na Mona (2021) and the cessation of industrial peat extraction across all its landbank. • Peatlands & Climate Change Action Plan 2030. 	<ul style="list-style-type: none"> • Increase in renewable energy to meet the demand of achieving at least 70% of electricity demand from renewable sources. • Increase in number and scale of wind farms and solar farms. • The re-wetting, restoring and/or re-wilding of former cutaway bogs and peatlands. • The development of up to approximately 30% of cutaway boglands for economic purposes, including renewable energy (wind and solar). • Diversification and re-use of buildings previously associated with peat extraction.
Economic factors	<ul style="list-style-type: none"> • Demand for sand and gravel and expansion of existing extractive industries. • Government support for data centres. 	<ul style="list-style-type: none"> • New and enlarged quarries. • New development.
Cultural processes	<ul style="list-style-type: none"> • Population change. • Tourism. • Failte Ireland's "Ireland's Ancient East" branding Kildare and Tipperary as "Thoroughbred Country". 	<ul style="list-style-type: none"> • Population growth driving new housing, new urban development and new infrastructure. • New tourism infrastructure. • New tourism accommodation • New tourism activities.
Technological	<ul style="list-style-type: none"> • Increasingly high-tech agriculture Robotics, advanced telematics systems, drone technology and AI-guided decision support systems. 	<ul style="list-style-type: none"> • Changing agricultural practice
Natural/Spatial processes	<p>Climate change:</p> <ul style="list-style-type: none"> • Increase in temperature. 	<ul style="list-style-type: none"> • Wetter soils and changes in agricultural practice.

Driver of change	Change	Examples of potential change to landscape character in Kildare
	<ul style="list-style-type: none"> • change in annual pattern of precipitation. • Increased frequency of extreme weather. • Interactions between climate change and plant pathogens. • Water shortages due to imbalance between the places where water availability is greatest (the west of Ireland) and where water is most needed (the east of Ireland). 	<ul style="list-style-type: none"> • Drier soils and changes in agricultural practice. • Fluvial and pluvial flooding. • Ash dieback caused by the spread of plant pathogen (<i>Hymenoscyphus fraxineus</i>) leading to significant tree species decline. • Alien and invasive species. • New Infrastructure, e.g. Uisce Éireann's Water Supply Project Eastern and Midland Region, crosses northern Kildare.

Translating the above drivers of change to land use sectors, Table 6.2 below presents more information on land use and landscape implications. This is adapted from the EPA's Good practice guidance on Strategic Environmental Assessment (SEA) and Landscape (2023).

TABLE 6-2 LAND USE AND LANDSCAPE IMPLICATIONS⁶²

Topic	Type of development	Landscape implications
Issues common to many types of development	<ul style="list-style-type: none"> • Introduction of new structures or buildings and linear features affecting the landscape character. • Impacts on scale, diversity, colour, sound, movement, naturalness, sense of place and sense of history. • Visual impact of development and effects on key characteristics, historic urban plans, formally planned streetscapes, squares and terraces; development impacting on views of landmark buildings, other views and vistas, and loss of setting or planned cultural landscape. 	
Issues common to many types of land use change	<ul style="list-style-type: none"> • Impacts on landform, land cover and land use. • Introduction of new features. • Impacts on scale, diversity, colour, sound, movement, naturalness, sense of place and sense of history. 	
Agriculture	<ul style="list-style-type: none"> • Agricultural buildings and one-off housing. • Changes in the type of methods of farming. • Changes in the extent of agriculture. • Changes in the intensification of agriculture practices, size of farms and field sizes. 	<ul style="list-style-type: none"> • Loss of traditional rural buildings or features. • Cumulative impacts associated with density of one-off housing on the landscape. • Loss of vegetation and field boundaries Impacts on perceptual qualities (e.g. remoteness).

⁶² Good practice guidance on Strategic Environmental Assessment (SEA) and Landscape. EPA 2023.

Topic	Type of development	Landscape implications
Climate change adaptation and mitigation	<ul style="list-style-type: none"> Renewable and low-carbon energy development and infrastructure and energy efficiency measures. Peatland conservation and restoration. Woodland expansion Riparian and pluvial flood management schemes. Urban greening. 	<ul style="list-style-type: none"> Impacts on building design. Impacts of modification/adaptation on historic infrastructure, bridges and canals. Changes to peatland landscapes including revegetation and wetland creation. Views and enclosure from new woodland. Impacts on character, naturalness and accessibility of riparian landscapes. Impacts on urban character and views.
Energy	<ul style="list-style-type: none"> Domestic and residential renewable energy development including solar, air source heat pumps and district heating. Renewable energy development (onshore and offshore wind, solar, hydro, biomass/biofuel, wave, tidal). Conventional energy generation (peat, coal, gas- and oil-fired power stations). Fossil fuel extraction, processing, storage and transport (peat cutting, coal mining, oil and gas extraction). Hydrogen production, storage and transport infrastructure. New or upgraded energy distribution infrastructure (power lines, pipelines). Management of waste from energy generation. 	<ul style="list-style-type: none"> Changes to landscape character. Effects on visual amenity Creation of 'energy' or 'wind farm' landscapes. Cumulative effects on landscape and visual receptors from multiple developments. Introduction of man-made structures. Perceptual changes from noise and movement or glint and glare. Changes to experience of view.
Flood risk management	<ul style="list-style-type: none"> Riparian flood management infrastructure including engineered flood defences, flood storage, sustainable flood management measures and sustainable drainage infrastructure. 	<ul style="list-style-type: none"> Changes to accessibility and experience of areas following works. Introduction of new structures (e.g. flood walls). Impacts on amenity and access.
Forestry	<ul style="list-style-type: none"> New forestry planting. Forestry harvesting. 	<ul style="list-style-type: none"> Introduction of new structures or buildings (associated with energy crops).

Topic	Type of development	Landscape implications
	<ul style="list-style-type: none"> Changes in forest design (e.g. balance of forest and open ground, diversity of species and age class). Changes in the management of woodland and forests (e.g. continuous cover forestry techniques). Expansion of energy crops (e.g. short rotation coppice). Forestry infrastructure (tracks, haul roads, stacking yards, borrow pits) and development (e.g. sawmills, buildings and dwellings). 	<ul style="list-style-type: none"> Changes in the character of the landscape. Introduction/alteration of colours and textures in the landscape. Reduction/increase in the sense of openness.
Green and Blue infrastructure	<ul style="list-style-type: none"> New or enhanced greenspace resources Habitat creation or enhancement. Sustainable flood management measures. Active travel and sustainable transport. 	<ul style="list-style-type: none"> Changes to the character of towns and villages including views, naturalness. Reconnection to natural and built heritage opportunities. Changes to the experience of the landscape through new active travel links.
Habitat creation and restoration	<ul style="list-style-type: none"> Conservation of existing habitats. Restoration of degraded habitats. Creation of new habitats and habitat network. 	<ul style="list-style-type: none"> Changes in the character of the landscape due to changes in habitat. Changes to the colours, textures and perceived naturalness of the area.
Industry	<ul style="list-style-type: none"> New, extended or redeveloped industrial installations. Decommissioning of industrial installations. Industrial transport infrastructure (e.g. depots, railway yards, ports). Restoration and remediation of derelict, contaminated land or quarries. 	<ul style="list-style-type: none"> Introduction of new structures or buildings. Changes to the composition of the landscape. Changes to the perceived naturalness of the area.
Telecommunications	<ul style="list-style-type: none"> New, expanded or upgraded telecommunications infrastructure including masts and dishes. 	<ul style="list-style-type: none"> Introduction of new linear structures (e.g. masts) in the landscape.
Tourism	<ul style="list-style-type: none"> New, expanded or upgraded tourism, recreation, leisure and sporting facilities and buildings, car parks, 	<ul style="list-style-type: none"> Increased sound and movement in the landscape. Introduction of new structures or buildings.

Topic	Type of development	Landscape implications
Transport	<p>interpretation infrastructure and access provision.</p> <ul style="list-style-type: none"> • New or upgraded road infrastructure, including dual carriageways and motorways, junctions, bridges and tunnels. • New or upgraded rail infrastructure, including stations, freight facilities, bridges and tunnels. • New or upgraded canal or river navigation infrastructure, including canals, locks, reservoirs and tunnels. 	<ul style="list-style-type: none"> • Changes in the character of the landscape. • Introduction of linear features. • Changes to land use pattern. • Increased sound and movement in the landscape, reducing the perceived sense of naturalness.
Urban development	<ul style="list-style-type: none"> • New or expanded urban development including settlement expansion, the redevelopment of brownfield land and creation of new settlements, including associated transport infrastructure. 	<ul style="list-style-type: none"> • Introduction of buildings and structures into the landscape. • Introduction of linear features.
Waste	<ul style="list-style-type: none"> • New, expanded or upgraded waste infrastructure including waste transfer stations, recycling facilities, incineration, composting, energy from waste plants, land filling and land raising site. 	<ul style="list-style-type: none"> • Introduction of buildings and structures into the landscape. • Increased new sound and movement. • Impact of odour and its effects on landscape perception.

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ANNEX A: FURTHER INFORMATION ON METHODOLOGY OF EPA REFRAME LCA TOOLKIT

Step one: Planning

The project team commenced with an initial meeting with Kildare County Council staff including forward planners, heritage officer. Following confirmation of scope, the team workshopped key stakeholders, sources of information and data as well as exploring key challenges and opportunities associated with the landscape character of the county.

Step Two: Desk Study

Following the initial meeting, the project team undertook a Scoping visit over 1 to 2 days that provided a rapid overview of the landscape at County Scale (September 2024).

The desktop study is a core element in any LCA as it allows for the gathering, analysis and synthesising of landscape information across the range of topics. Desktop research was undertaken across several interrelated topics including ecology, water, geology, human activity and historical influences.

Given the location of County Kildare adjoined by other counties, reviews of neighbouring Landscape Character Assessment reports and outputs was also undertaken.

A full list of resources and bibliography are provided at the end of this Report.

During this stage, a stakeholder mapping exercise was prepared and an overall consultation strategy submitted and agreed with Kildare County Council.

Geographical Information System

The role of spatial data and GIS is essential in the development of a comprehensive understanding of the multifaceted character of the landscape. A spatial database was compiled using QGIS Desktop and QGIS Cloud, with data sourced from Kildare County Council, national Open Data repositories (e.g. data.gov.ie), state bodies (see Annex B for data sources), and European data providers (e.g. ESA Copernicus Programme). An initial Landscape Character Type (LCT) dataset was generated for the county using baseline elements that reflect the physiographic character of the landscape. These elements included topography, landforms, bedrock geology, land cover, and soil type.

A series of LCT boundaries were identified and subsequently mapped onto Tailte Éireann (OSI) Discovery Series basemaps for use with the field study exercise described below. Following completion of the field study, modifications of LCT boundaries based on field observations were completion and the results compiled to create a final assemblage of LCTs and LCAs. In addition to the role of GIS, spatial data, and field study exercises, a series of thematic maps were generated to present the various natural and cultural aspects of the county. The capacity to serve spatial data reflecting baseline elements, LCTs and LCAs using web-based mapping services (QGIS Cloud) proved to be a valuable means of sharing interactive maps among project partners.

Approach to historic and human influences

The aim of this section was to provide a distinctive archaeological and historical dimension of the present-day landscape of County Kildare and of the human processes that have formed and created the landscape character today.

The classification was completed using professional archaeologist guidance (Aegis Archaeology) guidelines and the notes attached to the SMR record if available. Some but not all have dating information. An excel file shows the feature counts and archaeologist notes

The baseline data used in the human influences section of this project has been outlined below in Table C.1.

Table 0-1Table: Data sources used in the Historic and Human Influences section.

Existing Land use Information (as part of LCA)	
Study Area Outline	Predefined study limits (County Kildare)
OS Mapping	Current edition
Digital Aerial Photography	OS Discovery mapping series (1:50,000)
Digital Elevation Model	
Google Earth and Bing	Visual Inspection for supplementation of digital APs and OS mapping
Relict Land use Information	
RMP for County Kildare	Archaeological Survey of Ireland www.archaeology.ie and paper RMP constraint map and list ²
OS Mapping	1 edition six-inch scale (1837-1843) Subsequent editions of six-inch maps 25-inch map (c. 1900)
Historical Mapping	Down Survey 1654 ³
Licenced Archaeological Work in Study Area	Excavation database www.excavations.ie ⁴
Historical and archaeological overviews of the county	Various

Identification of landscape character types -

Through a process of GIS analysis, the draft LCTs were identified. These were then ground-truthed and verified in the field by the project field. This allows for revisions and updates particularly around landscape character that may not be captured through desktop alone. Following the GIS and fieldwork, the team refined and workshopped the LCTS for the county.

Step Three: Fieldwork

The fieldwork took place over the months of September to November 2024 with additional focused visits undertaken in January, April and May of 2025. Fieldwork identified an itinerary each day to allow a robust analysis across all the landscapes of the county. This was augmented by field surveys (see Annex A) and field notes, accompanied by photographs and sketches. The team discussed the emerging LCAs through the course of the fieldwork.

Step Four: Classification and Description of Landscape Character of County Kildare

This step allowed for the confirmation of the Draft LCAS in particular and the writing up of the report with a multi-disciplinary approach and input. The Evolution of the Kildare landscape was written by a range of professionals including archaeologists, ecologist, geologists, landscape architects and landscape character specialists, accompanying by GIS online mapping through QGIS.

Stakeholder engagement and consultation-

This has formed a core part of the LCA process and included stakeholder mapping, online surveys, interviews and workshop have been used and applied to help inform and guide the LCA process. See Chapter 5.

Preparation of advice in line with the project brief.

A workshop was held with development management planners in Kildare County Council to understand their use and applications of Chapter 13 of the Kildare CDP 2023 -2029. The team undertook specific surveys and walkovers of the Local Area Plan areas and boundary edges to help refine and suggest guidance relating to views.

The revisions to the Chapter 13 policies and objectives were prepared by Dr Conor Norton. The LCAs were evaluated for overall landscape character sensitivity and this informed both broad LCA guidance for each LCA and more specific bespoke guidance for each of the 10 LCAs identified.

ANNEX B GIS DATA SOURCES

6.6.1.1 *OPEN DATA*

Bedrock Geology 1:500,000 Data - Geological Survey Ireland

Copernicus DEM 30m - European Space Agency

National Soil Map of Ireland (Irish Soil Information System 1:250,000) - Environmental Protection Agency/Teagasc

Water Catchments (Water Framework Directive) - Environmental Protection Agency

River Network Routes (Water Framework Directive) - Environmental Protection Agency

Settlements Ungeneralised - National Statistical Boundaries (2015) - Tailte Éireann

Counties - National Statutory Boundaries (2019) - Tailte Éireann

SAC, NHA and pNHA data - National Peatlands Parks and Wildlife Service (2025)

6.6.1.2 *LICENCED DATA:*

KCC Licence CYAL50441409 © Tailte Éireann - Surveying

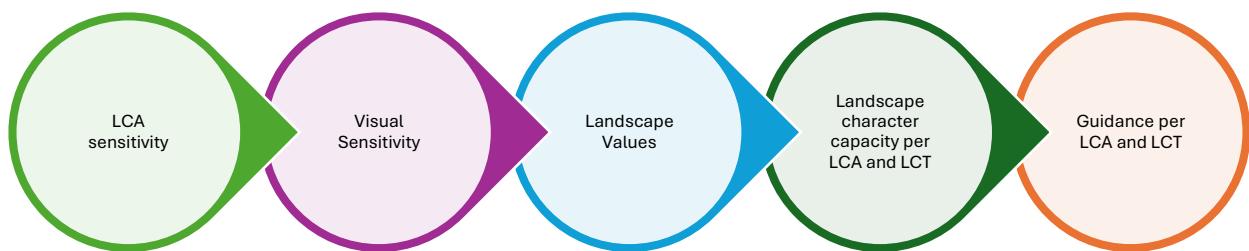
ANNEX C TECHNICAL PAPER: LANDSCAPE CHARACTER SENSITIVITY ASSESSMENT TABLES

TECHNICAL PAPER: LANDSCAPE CHARACTER SENSITIVITY ASSESSMENT TABLES

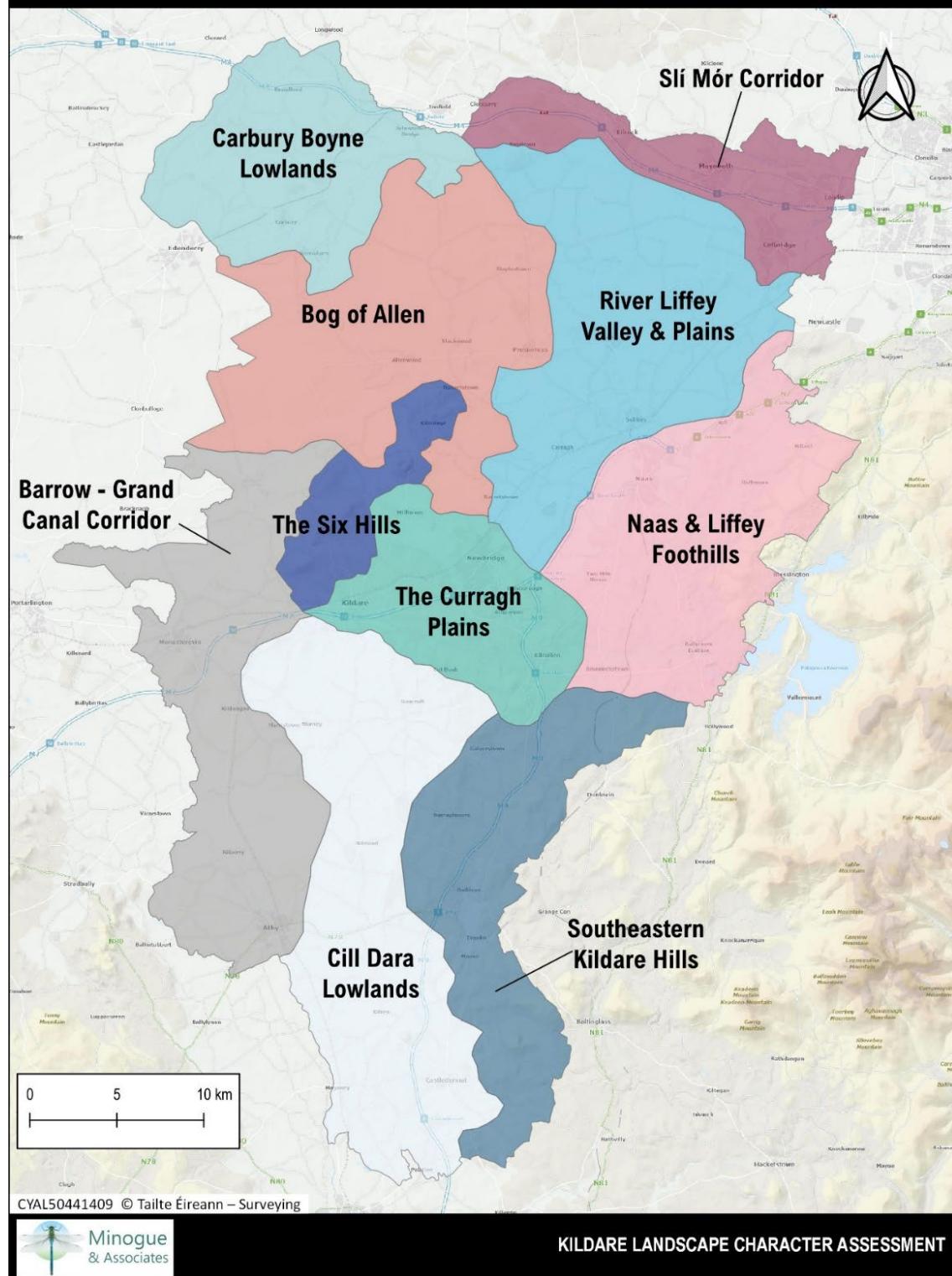
INTRODUCTION

This assessment aims to be transparent and to demonstrate clearly how the recommendations for landscape management for each LCA and LCT have been arrived at. Following desktop research, GIS mapping and analysis and fieldwork, the descriptions for each LCA have been written. This section now uses a range of established parameters that create an overall evaluation of landscape sensitivity and value to confer overall Landscape Character Sensitivity. This informs a broad evaluation of landscape character capacity at strategic level. Thereafter principles for landscape character are proposed for each LCA and LCT. Figure 1 below summarises this process and definitions of LCA sensitivity, visual sensitivity, landscape values are presented below.

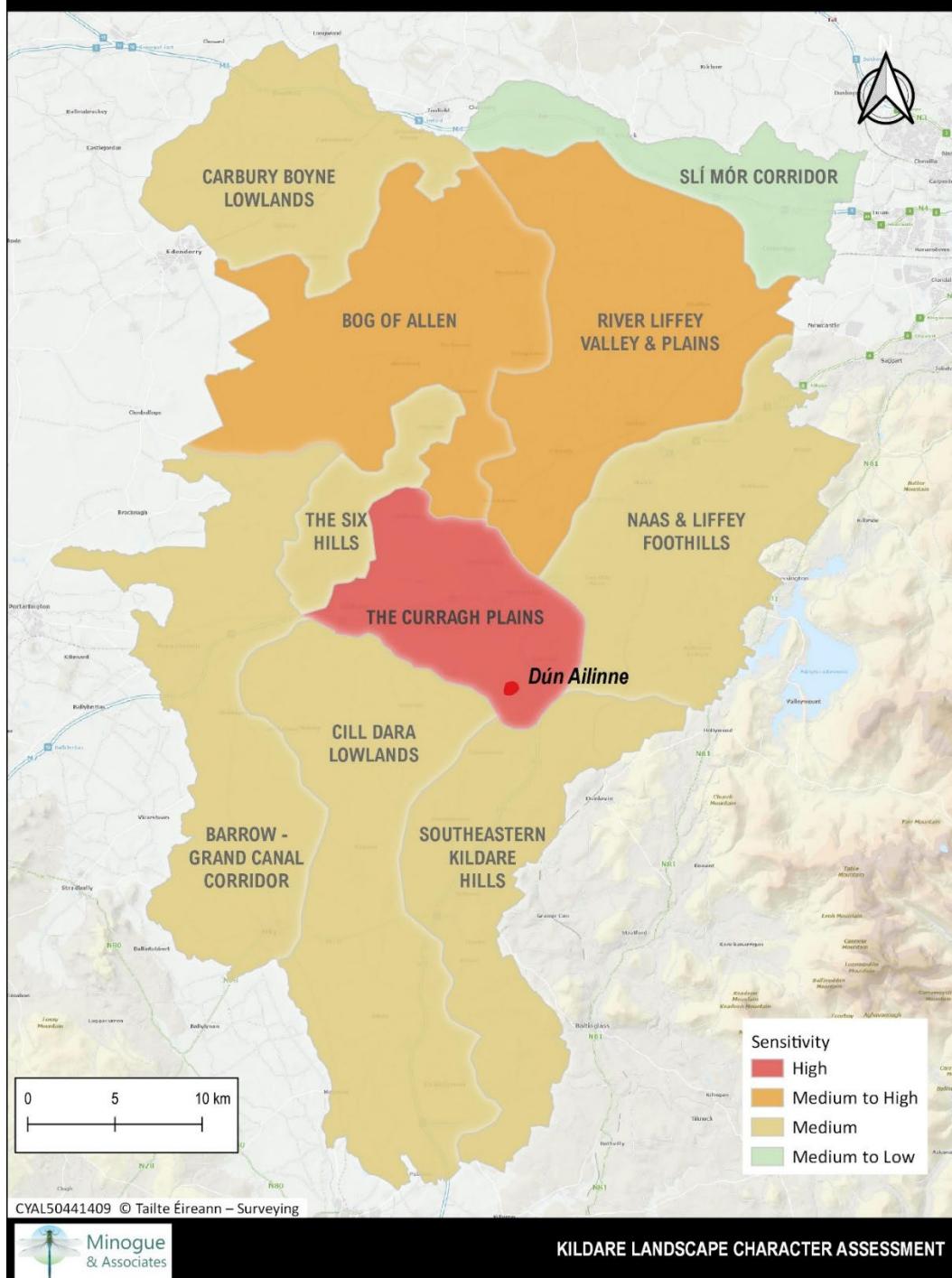
FIGURE 1 PROCESS OF EVALUATION AND GUIDANCE DEVELOPMENT



Landscape Character Areas



Landscape Character Sensitivity



LCA 1 CARBURY BOYNE LOWLANDS

CARBURY BOYNE LOWLANDS: LANDSCAPE CHARACTER SENSITIVITY

Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	High
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
<p>The generally flat or gently undulating terrain raises to a maximum elevation of 142 m OD at Carbury Hill. In places broad, open views across agricultural fields occur.</p> <p>The M4 motorway and the Royal Canal form the northern edge and boundary with County Meath</p>					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance, a degree of consistency in pattern of land use and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic land use pattern	varied pattern, undisturbed consistent pattern of land cover and historic layout.
<p>Landscape patterns vary somewhat within the LCA with a range of landscape types evident. While predominantly grassland, tree-lined hedgerows, occasional mixed woodland, and sparse coniferous forestry confer, in places a wooded feel to the landscape.</p>					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in settlement pattern	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g. recreation grounds, cemetery. Settlement has a historic core surrounded by more recent development	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into surrounding countryside. Settlement has some modern development.	Landscape preeminent. Surrounding countryside has some historic pattern. Few modern intrusions on landscape	Dispersed settlement, characterised by small scale vernacular or historic buildings.
<p>While the M4 Transport Corridor has influenced settlement within this Landscape Character Area, it has experienced less development than other northern parts of the County. There are some important</p>					

<p>historical settlements, for example the Anglo-Norman castle (Carbury castle KD008-001002-) which is part of a complex of monuments on Carbury Hill, including a motte, church and fortified house.</p>					
Quality of settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
<p>Small scale settlements of Carbury and Derrinturn are clearly defined, well maintained, with some variety at settlement edge associated with more modern architectural styles</p>					
Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including medieval or designed landscapes.
<p>The historic landscape evident in this LCA is Anglo-Norman in character with several tower houses, moated sites and a deserted medieval settlement evident. The Early Medieval period is represented by fourteen ringforts and enclosures. There are several NIAH Historic Gardens and Designed Landscapes within this LCA</p>					
Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
<p>The LCA is strongly shaped by its agricultural activities, with extensive pasturelands and some tillage farming. Tree-lined hedgerows, small, forested areas, occasional mixed woodland, and sparse coniferous forestry confer a more wooded feel to the landscape</p>					
<p>Overall Landscape Character Sensitivity: Medium/High</p>					
<p>CARBURY BOYNE LOWLANDS LCA SENSITIVITY</p>					
Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing features (trees, topography etc.)	Occasional views into landscape where gaps in existing features allow	Some intervisibility with surrounding landscape. Landscape forms part of view structure	Strong visual links with surrounding landscape. Forms part of wider landscape views.	Extensive views into area. Major component of wider landscape views
<p>The low-lying topography provides broad, open views across agricultural fields.</p>					

<p>Two scenic routes are identified in Kildare Co Council's County Development Plan identified as no 26 "Views from the county roads (L1005, L5019, L5018, L1006, L5017 and L5011) of Carbury Castle and Hill"</p>					
Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility	Location on elevated ground or surrounding higher ground creates significant intervisibility	Landscape forms part of a visible ridgeline, or surrounding higher ground offers extensive visibility over areas as part of landscape views
<p>Long distant views of the Newtown Hill to the east and Allen Hill to the south-east. The panoramic views from Carbury Hill are significant and present visual connections to the wider landscape including County Meath. Carbury Hill principle elevated feature but views afforded to the Six Hills and in clear weather further south and west.</p>					
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
<p>Carbury Hill identified in Kildare Co Council's County Development Plan as Hill Top view</p>					
Visual receptors	Low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and rights of way	Some visibility for local residents and visitors. Some views from rights of way. Some visibility from transport routes.	Frequent views from residential properties, visitors enjoying the landscape and from rights of way	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of local residents.
<p>Views from M4 motorway and Royal Canal greenway routes</p>					
<p>Overall Visual Sensitivity: Medium</p>					
<p>Overall landscape sensitivity of this LCA (landscape character sensitivity + visual sensitivity i.e. Medium/High Medium</p>					

CARBURY BOYNE LOWLANDS LCA LANDSCAPE VALUES

Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/high	High
Perceptual aspects (scenic beauty, tranquillity, intactness)	Not tranquil, much human activity, limited	Limited tranquillity, significant human	Some human activity, affecting tranquillity,	Relatively tranquil with strong sense of	Tranquil and remote in character,

	natural beauty	detractors from natural beauty and rural qualities	some sense of remoteness	remoteness. Distant human activity.	natural beauty with limited human influences
While the M4 corridor detracts towards the northern part from a remote or tranquil perception, this area in general has a robust rural quality. Despite agricultural activity and urban influence, the region maintains a relatively tranquil atmosphere.					
Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
Numerous historic features are present this LCA including cut-stone bridges along the rivers and canal. Mythological and folklore associations with the River Boyne are notable.					
Ecological/geodiversity designation	No designations within vicinity	Limited local designations	Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
Carbury Bog NHA. 001388					
Ballina Bog 000390 (Proposed NHA)					
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area
Golf course on former demesne (Balyna Estate, now Moyvalley golf course)					
Contribution to local landscape character	No contribution to local landscape character	Limited local landscape character contribution	Some contribution to local landscape character	Significant contribution to local landscape character	Key local characteristics forms integral part of the landscape and its setting
Particularly around Carbury Hill, with relatively strong network of hedgerows.					

Overall landscape value: Medium

Combination of overall landscape sensitivity (Medium/High) with overall landscape value (Medium).

Medium landscape sensitivity.

LCA GUIDANCE

Landscape Capacity: Medium

Landscape character guidance

This small but diverse LCA contains significant historical and ecological landscapes, enhancing and recognising these whilst supporting the rural, and often tranquil character of this LCA is important.

- Applicants should demonstrate how new development will provide ecological linkages within the LCA, and integrate new developments via tree planting into the wider landscape
- Give recognition to the demesnes associated with country houses as important contributors to the historic landscape character and ecology of the area. Support the landscape of demesne parkland through continued replacement tree planting and woodland management
- Support community groups in local landscape initiatives and landscape scale proposals to improve water quality in the LCA.
- This LCA functions as the rural and largely tranquil landscape in contrast with the LCAs to the east and parts of the M4 to the northeast. Retaining separation distances to support the LCA strong rural, agricultural character is important.
- Potential linkages via former peatlands and the Royal Canal offer potential recreational uses and should also seek co benefits in terms of improving and enhancing ecological linkages and landscape quality.

LCA 2 SLÍ MHÓR

SLÍ MHÓR: LANDSCAPE CHARACTER SENSITIVITY

Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
Elevation is predominantly in the range of 50 m to 100 m. Terrain in the western part of the LCA reaches a height of 145 m around Cappagh Hill.					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance, a degree of consistency in pattern of land use and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic land use pattern	Intricate, varied pattern, undisturbed consistent pattern of land cover and historic layout.
A complex LCA comprising 5 LCT (Lowland plains, farmed rolling hills, Transport corridor, Canal corridor and Settlement)					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in settlement pattern	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g.: recreation grounds, cemetery. Settlement has a historic core surrounded by more recent development	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into surrounding countryside. Settlement has some modern development.	Landscape preeminent. Surrounding countryside has some historic pattern. Few modern intrusions on landscape	Dispersed settlement, characterised by small scale vernacular or historic buildings.
The historical influence of the Slí Mhór combined with the Royal Canal, River Liffey and Rye confer a distinctive character that is present via the necklace of settlements along the northern part of this LCA, in particular.					

Quality of settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
This LCA contains some of the fastest growing settlements in Kildare					
Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including medieval or designed landscapes.
In general, all periods from the prehistoric to Post Medieval periods are represented in this LCA, with a notable clustering of monuments at the eastern side of the LCA, and a smaller dense cluster at the extreme western edge of the LCA. Significant historical associations of the Viking settlement at Leixlip. The Slí Mhór itself was an ancient route running in an east-west direction bisecting the ancient territories of Ireland					
Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
Agriculture is predominantly grassland with some areas of older woodland associated with the many former estates flanking the Liffey, and the Rye					
Overall Landscape Character Sensitivity: Low /Medium					

SLÍ MHÓR: VISUAL SENSITIVITY

Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing features (trees, topography etc)	Occasional views into landscape where gaps in existing features allow	Some intervisibility with surrounding landscape. Landscape forms part of view structure	Strong visual links with surrounding landscape. Forms part of wider landscape views.	Extensive views into area. Major component of wider landscape views

Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility.	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility.	Location on elevated ground or surrounding higher ground creates significant intervisibility.	Landscape forms part of a visible ridgeline or surrounding higher ground offers extensive visibility over areas as part of landscape views.
Views from Transport corridor (M4 motorway)					
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
Scenic Route 29 (Views of the River Liffey from the Main Avenue of Castletown House)					
Visual receptors	Low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and walking routes	Some visibility for local residents and visitors. Some visibility from transport routes and walking routes.	Frequent views from residential properties, visitors enjoying the landscape and from walking routes.	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of local residents.
Densely populated LCA, many recreational users					
Overall Visual Sensitivity: Low/Medium					
Overall landscape sensitivity of this LCA: Low/Medium					

SLÍ MHÓR: LANDSCAPE VALUES

Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/high	High
Perceptual aspects (scenic beauty,	Not tranquil, much human activity,	Limited tranquillity, significant human	Some human activity, affecting	Relatively tranquil with strong sense of	Tranquil and remote in character, natural

tranquillity, intactness)	limited natural beauty	detractors from natural beauty and rural qualities	tranquillity some sense of remoteness	remoteness. Distant human activity.	beauty with limited human influences
Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
Ecological/ geodiversity designation	No designations within vicinity	Limited local designations	Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
<ul style="list-style-type: none"> • Royal Canal 002103 (Proposed NHA) • Rye Water Valley 001398 (Proposed NHA) 					
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area
The Royal Canal creates a significant recreational resource within the area. Several golf courses are also present.					
Contribution to local landscape character	No contribution to local landscape character	Limited local landscape character contribution	Some contribution to local landscape character	Significant contribution to local landscape character	Key local characteristics forms integral part of the landscape and its setting
Overall landscape value: Medium					
Combination of overall landscape sensitivity (Low/Medium) with overall landscape value Medium = Medium - Low					

Combination of overall landscape sensitivity (Low/Medium) with overall landscape value (Medium) = a capacity assessment of Medium/high

LCA GUIDANCE

Capacity of LCA: medium to high

The communications character of this LCA provides a necklace of settlements and historical transport routes, maintaining the distinctive character of the rural landscape between the towns is important. Shared and co-ordinated landscape responses with County Meath particularly around the waterbodies is recommended.

- Integrate any new development into the landscape setting through the appropriate use of native tree and hedge planting. This is particularly important for development at the edge or boundaries of the existing settlements of Leixlip, Maynooth and Kilcock that form the edge between the built settlement, and the wider rural landscapes present in the LCA.

A presumption against hedgerow removal particularly those identified in 1st and 2nd Edition Ordnance Survey maps should apply. Older trees and hedgerows are of significant cultural and environmental value and merit protection and appropriate management. Applicants should demonstrate how these features will be managed over time particularly in larger development proposals in the above towns.

LCA 3 RIVER LIFFEY VALLEY AND PLAINS

LCA 3 RIVER LIFFEY VALLEY AND PLAINS LANDSCAPE CHARACTER SENSITIVITY

6.6.1.1.3

Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
Topography throughout the LCA ranges in elevation from 60 m to 90 m with the exception high ground (135 m) in the northwest of the LCA, near Newtown					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance, a degree of consistency in pattern of land use and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic land use pattern	Intricate, varied pattern, undisturbed consistent pattern of land cover and historic layout.
This complex LCA comprises a variety landscape type. There is predominantly grass based agriculture with well-maintained hedgerows and small areas of woodland.					
Mature vegetation along the River Liffey is often evidence of current and former designed demesne landscapes.					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in settlement pattern	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g.: recreation grounds, cemetery. Settlement has a historic core surrounded by more recent development	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into surrounding countryside. Settlement has some modern development.	Landscape preeminent. Surrounding countryside has some historic pattern. Few modern intrusions on landscape	Dispersed settlement, characterised by small scale vernacular or historic buildings.
The River Liffey itself would have attracted activity and settlement from the earliest period as indicated by its rich archaeological history					

Quality of settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including prehistoric landscapes.
The prevalence of ringforts and enclosures gives this LCA a notable early medieval settlement character.					
Historical associations and surviving built heritage associated with the river indicated by the number of 18th century estates located overlooking or adjacent to the River Liffey as it meanders from Wicklow towards Leixlip at county boundary with South Dublin. There are a number of NIAH Historic Gardens and Designed landscapes within the LCA, with concentrations within the river valley and on the slopes close to the Wicklow border.					
Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
Areas of older woodland associated with the many former estates flanking the Liffey.					
Overall Landscape Character Sensitivity: Medium/High					

LCA 3 RIVER LIFFEY VALLEY AND PLAINS: VISUAL SENSITIVITY

Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing features (trees,	Occasional views into landscape where gaps in existing features allow	Some inter-visibility with surrounding landscape. Landscape forms part of view structure	Strong visual links with surrounding landscape. Forms part of wider	Extensive views into area. Major component of wider landscape views

Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
	topography etc)			landscape views.	
This landscape is shaped by River Liffey and its valley and the generally western slope providing wide views across central plans					
Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility	Location on elevated ground or surrounding higher ground creates significant inter-visibility	Landscape forms part of a visible ridgeline, or surrounding higher ground offers extensive visibility over areas as part of landscape views
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
• Scenic Route No 31 (St Patrick's Hill and Holy Well north of Straffan),					
Visual receptors	Low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and walking routes	Some visibility for local residents and visitors. Some visibility from transport routes and walking routes.	Frequent views from residential properties, visitors enjoying the landscape and from walking routes.	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of local residents.
Equine industry					
Overall Visual Sensitivity: Medium					
Overall landscape sensitivity of this LCA: Medium to Medium High					

LCA 3 RIVER LIFFEY VALLEY AND PLAINS: LANDSCAPE VALUES

Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/high	High
Perceptual aspects (scenic beauty, tranquillity, intactness)	Not tranquil, much human activity, limited natural beauty	Limited tranquillity, significant human detractors from natural beauty and rural qualities	Some human activity, affecting tranquillity some sense of remoteness	Relatively tranquil with strong sense of remoteness. Distant human activity.	Tranquil and remote in character, natural beauty with limited human influences
Rural area under urban influence, i.e. away from the main settlements the area still maintains a rural character.					
Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
18 th century designed landscape					
Ecological/ geodiversity designation	No designations within vicinity	Limited local designations	Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area
Many of these former estates now serve a recreation					
KCC Greenway Plan promotes green corridors along the River Liffey and Morell valley and a Blueway along the Grand Canal					
Contribution to local landscape character	No contribution to local landscape character	Limited local landscape character contribution	Some contribution to local landscape character	Significant contribution to local landscape character	Key local characteristics forms integral part of the

					landscape and its setting
The Heart of Kildare?					
Overall landscape value: Medium/High					
Combination of overall landscape sensitivity (Medium/to Medium High) with overall landscape value (Medium/High) - Medium /High					
Combination of overall landscape sensitivity (Medium/High) with overall landscape value (Medium/high) = a capacity assessment of Low to Medium					

LCA GUIDANCE

Landscape character capacity: Low to median.

Landscape Character Guidance

Retaining the strong, rural character of this LCA where present is important; contain urban expansion and pressures

- Integrate any new development into the landscape setting through the appropriate use of native tree and hedge planting, this is particularly important for development at the edge or boundaries of the existing settlements of Celbridge, Leixlip, Maynooth and Kilcock that form the edge between the built settlement, and the wider rural landscapes present in the LCA.
- Support the recommendations contained in the Liffey Valley Park Strategy (OPW) and any superseding strategies.
- All development proposals along or adjacent to the River Liffey and Grand Canal shall be accompanied by a detailed landscaping plan, prepared by a suitably qualified landscape architect. The landscape plan shall address the varying topography of the site and shall have regard to the ecological designations, protected species and built heritage where present. The plan shall also include details of hard and soft landscaping, proposed species and sensitive lighting. Where new canal crossings or interventions (footbridges/cycle bridges) are proposed, they shall be designed to avoid fragmentation of linear habitats associated with the River Liffey and Grand Canal Corridor.
- The main settlements of Celbridge, Leixlip, Maynooth and Kilcock include significant built heritage and vernacular features including stone walls, cut- stone bridges and estate avenues. New development should demonstrate the use of vernacular materials and styles to extend and advance the townscape character of these settlements

LCA 4: BOG OF ALLEN

LCA 4: BOG OF ALLEN: LANDSCAPE CHARACTER SENSITIVITY

Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
Overall, the LCA has level, uniform topography, much of which is characterised by the expansive cut over peatlands. Topographic elevation is consistent within a 20 m range (70 m to 90 m). A few isolated hills in the east of the LCA reach heights of 100 m to 110 m.					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance, a degree of consistency in pattern of land use and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic land use pattern	Intricate, varied pattern, undisturbed consistent pattern of land cover and historic layout.
While topography is uniform there is a mosaic of land use, with pasture and woodland along with significant areas of bog. The Grand Canal crosses this area in an east west direction					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in settlement pattern	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g.: recreation grounds, cemetery. Settlement has a historic core surrounded by more recent development	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into surrounding countryside. Settlement has some modern development.	Landscape is preeminent. Surrounding countryside has some historic pattern. Few modern intrusions on landscape	Dispersed settlement, characterised by small scale vernacular or historic buildings.

<p>Most of this area is categorised as 'Rural" and under moderate to high urban influence. Settlements are sparse, with a few small villages or farmsteads on the periphery of the peatlands, low population density with scattered settlements such as Prosperous</p>					
Quality of Settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including prehistoric landscapes.
<p>Previous major land use in the area has been peat extraction. Relics of this activity abound</p>					
Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
<p>Significant areas of pastureland and coniferous planting, often located on cutaway bog.</p> <p>Naturally regenerating vegetation is evident in areas.</p> <p>Drainage channels, streams and large ditches are strongly characteristic in the landscape commonly draining east to west.</p>					
<p>Overall Landscape Character Sensitivity: Medium/High</p>					

LCA 4: BOG OF ALLEN: VISUAL SENSITIVITY

Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing features (trees,	Occasional views into landscape where gaps in existing features allow	Some intervisibility with surrounding landscape. Landscape	Strong visual links with surrounding landscape. Forms part of wider	Extensive views into area. Major component of wider landscape views

	topography etc.)		forms part of view structure	landscape views.	
Fringe vegetation around bogs and former industrial peatland often obscures view, once with the curtilage vegetation expansive vista occur					
Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility	Location on elevated ground or surrounding higher ground creates significant inter-visibility	Landscape forms part of a visible ridgeline, or surrounding higher ground offers extensive visibility over areas as part of landscape views
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
Numerous views and prospects designated in current County Development Plan and views feature strongly within the landscape context.					
Visual receptors	low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and walking routes	Some visibility for local residents and visitors. Some visibility from transport routes and walking routes.	Frequent views from residential properties, visitors enjoying the landscape and from walking routes.	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of local residents.
Recreational use primarily associated with walking					
Overall Visual Sensitivity: Medium					
Overall landscape sensitivity of this LCA: Medium to Medium/High					

LCA 4: BOG OF ALLEN: LANDSCAPE VALUES

Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/high	High
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Perceptual aspects (scenic beauty, tranquillity, intactness)	Not tranquil, much human activity, limited natural beauty	Limited tranquillity, significant human detractors from natural beauty and rural qualities	Some human activity, affecting tranquillity, some sense of remoteness	Relatively tranquil with strong sense of remoteness. Distant human activity.	Tranquil and remote in character, natural beauty with limited human influences
In places a strong quality of remoteness					
Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
Ecological/geodiversity designation	No designations within vicinity	Limited local designations	Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
<ul style="list-style-type: none"> Hodgestown Bog 001393 NHA Ballynafagh Bog 000391 (Proposed NHA) Mouds Bog 000395 (Proposed NHA) Ballynafagh Lakes 001387 (SAC and SPA) Mouds Bog, 002331(SAC and SPA) Hodgestown Bog 001393 (SAC and SPA) Ballynafagh Lakes 001387 (SAC and SPA) 					
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area
Contribution to local landscape character	No contribution to local landscape character	Limited local landscape character contribution	Some contribution to local landscape character	Significant contribution to local landscape character	Key local characteristics forms integral part of the landscape

					and its setting.
<p>Overall landscape value: High</p> <p>Combination of overall landscape sensitivity (Medium to Medium High) with overall landscape value (High) – Medium/high</p>					

LCA GUIDANCE

Overall landscape character capacity: medium to low

The LCA includes important areas of bog that are of great historical, cultural and ecological importance. Recognising and retaining these values whilst supporting climate change adaptation and mitigation measures, including Just Transition initiatives is key to retaining the character of this LCA.

- The dominant open character and large skies are important features of this LCA; new development proposals should be sensitivity sited and designed to reflect and enhance the local character. Large bulky developments would require a landscape and tree plan to offer screening of large-scale buildings.
- Integrate any new development into the landscape setting through the appropriate use of native tree and hedge planting.
- The establishment of bog woodland at the fringes of bogs offers a potential link to wider ecological network and similar species should be promoted in nearby developments (i.e. Downy Birch (*Betula pubescens*); Silver Birch (*Betula pendula*), Willow (*Salix species*) and Scots Pine (*Pinus sylvestris*)). Shrub species may include ling heather and bilberry depending on hydrological conditions.
- The industrial heritage associated with peat extraction such as industrial buildings and narrow-gauge railways are important cultural and landscape features, restoration and awareness about this industry should be supported and enhanced, reflecting the strong community associated with the peatlands.
- Support community groups in local landscape initiatives and landscape scale proposals to improve water quality and landscape scale restoration in the LCA.
- Support actions including in the Just Transition programme.

LCA 5 BARROW CANAL CORRIDOR

LCA 5 BARROW CANAL CORRIDOR: LANDSCAPE CHARACTER SENSITIVITY

Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
<p>The Barrow-Grand Canal Corridor LCA comprises lowland topography, with elevation ranging from 50 m to 90 m throughout. A solitary hill (Moore Abbey) south of Monasterevin rises to 122 m.</p> <p>Its western edge is formed by the Barrow Line, which links the main line of the Grand Canal with the River Barrow at Athy.</p>					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance a degree of consistency in pattern of land use and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic land use pattern	Intricate, varied pattern, undisturbed consistent pattern of land cover and historic layout.
<p>A complex LCA comprising 5 LCTs (Lowland plains, River corridor, Canal corridor, Peatland and seminatural vegetation, and Settlement). This LCA is dominated in the west, by the river/canal corridor. Land use is predominantly pasture to the north, with a higher percentage of tillage towards the south.</p> <p>Peatbog, wetlands to the west. There are extensive coniferous plantations on former cutaway bogs</p>					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in settlement pattern	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g.: recreation grounds, cemetery. Settlement has a historic core surrounded by	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into surrounding countryside. Settlement has some modern development.	Landscape preeminent. Surrounding countryside has some historic pattern. Few modern intrusions on landscape	Dispersed settlement, characterised by small scale vernacular or historic buildings.

		more recent development			
While this LCA is predominantly rural in character, it contains the fast-growing settlements of Monasterevin and Athy					
Quality of Settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including prehistoric landscapes.
The character of this LCA would seem to have an Early-Late Medieval signature. The strong influence of historical transportation routes, through Monasterevin is evident associated with the railway line and canal-barrow route. There is the historical legacy associated of settlement and industry associated with the canal. This cultural heritage extends into the landscape with related infrastructure such as bridges, stone walls, mills etc.					
There are a number of NIAH Historic Gardens and Designed landscapes within the LCA, mainly located along the River Barrow or west of Athy.					
Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
Strong influence of the River Barrow water table in the wetlands, floodplains etc.					
Overall Landscape Character Sensitivity: Medium					

LCA 5 BARROW CANAL CORRIDOR: VISUAL SENSITIVITY

Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing	Occasional views into landscape where gaps in	Some intervisibility with surrounding landscape.	Strong visual links with surrounding landscape.	Extensive views into area. Major component of wider

	features (trees, topography etc.)	existing features allow	Landscape forms part of view structure	Forms part of wider landscape views.	landscape views
Visibility varies within this LCA. In places the flat landscape restricts views, while on the canal, the views from most of the arched canal bridges allows for long linear views that are highly attractive in places.					
Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility	Location on elevated ground or surrounding higher ground creates significant inter-visibility	Landscape forms part of a visible ridgeline, or surrounding higher ground offers extensive visibility over areas as part of landscape views
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
In a flat landscape significant views are often those of historic settlement.					
Visual receptors	low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and walking routes	Some visibility for local residents and visitors. Some visibility from transport routes and walking routes.	Frequent views from residential properties, visitors enjoying the landscape and from walking routes.	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of local residents
Recreational use primarily associated with walking and using the canal.					
Overall Visual Sensitivity: Low/Medium					
Overall landscape sensitivity of this LCA: (Low/Medium and Medium) Medium					

LCA 5 BARROW CANAL CORRIDOR: LANDSCAPE VALUES

Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/high	High
Perceptual aspects (scenic beauty, tranquillity, intactness)	Not tranquil, much human activity, limited natural beauty	Limited tranquillity, significant human detractors from natural beauty and rural qualities	Some human activity, affecting tranquillity, some sense of remoteness	Relatively tranquil with strong sense of remoteness. Distant human activity.	Tranquil and remote in character, natural beauty with limited human influences
Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
Ecological/geodiversity designation	No designations within vicinity		Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
River Barrow and Nore 002162 SAC					
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area
Contribution to local landscape character	No contribution to local landscape character	Limited local landscape character contribution	Some contribution to local landscape character	Significant contribution to local landscape character	Key local characteristics forms integral part of the landscape

					and its setting
<p>Overall landscape value: Medium</p> <p>Combination of overall landscape sensitivity (Medium) with overall landscape value (Medium) = a capacity assessment of Medium</p>					

LCA GUIDANCE

Landscape Character Guidance

The LCA includes the River Barrow and Grand Canal Barrow line. Water bodies, riparian vegetation, cut-stone canal and river bridges, plus historical buildings associated with the canal all confer local character.

- All development proposals along or adjacent to the River Barrow and Grand Canal shall be accompanied by a detailed landscaping plan, prepared by a suitably qualified landscape architect. The landscape plan shall address the varying topography of the site and shall have regard to the ecological designations, protected species and built heritage where present.
- The plan shall also include details of hard and soft landscaping, proposed species and sensitive lighting. Where new canal crossings or upgrades (i.e. footbridges/cycle bridges) are proposed, they shall be designed to avoid fragmentation of linear habitats associated with the River Barrow and Grand Canal Corridor
- Integrate any new development into the landscape setting through the appropriate use of native tree and hedge planting, this is particularly important for development at the edge or boundaries of the existing settlements of Athy, Monasterevin, and Rathangan that form the edge between the built settlement, and the wider rural landscapes present in the LCA. This LCA has a relatively strong wooded character and the above supports enhancement of same.
- A presumption against hedgerow removal particularly those identified in 1st and 2nd Edition Ordnance Survey maps should apply. Older trees and hedgerows are of significant cultural and environmental value and merit protection and appropriate management. Applicants should demonstrate how these features will be managed over time particularly in larger development proposals.
- The main settlements of Monasterevin, Rathangan and Athy include significant built heritage, support for reuse/ renovation of derelict buildings should be prioritised.
- New development should demonstrate the use of vernacular materials and styles to extend and support the townscapes character of these settlements. ...

LCA 6 THE SIX HILLS

LCA 6 THE SIX HILLS: LANDSCAPE CHARACTER SENSITIVITY

Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
Rising from low-lying, often flat landscape of central Kildare the topographic landscape of the Six Hills LCA is a characteristic feature of the Kildare landscape., Topographic elevation is mainly above 90 m, with hill summits reaching above 200 m.					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance, a degree of consistency in pattern of land use and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic land use pattern	Intricate, varied pattern, undisturbed consistent pattern of land cover and historic layout.
This relatively simple LCA, comprises only 2 LCTs (Farmed rolling hills and Canal corridor). Land use is pasture with some mixed woodland and coniferous plantation. Forestry here is more visible because of the hilly terrain. The integrity of the landscape is in part due to its distinctive landform.					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in settlement pattern	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g.: recreation grounds, cemetery. Settlement has a historic core surrounded by more recent development	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into surrounding countryside. Settlement has some modern development.	Landscape preeminent. Surrounding countryside has some historic pattern. Few modern intrusions on landscape	Dispersed settlement, characterised by small scale vernacular or historic buildings.
There is some urban encroachment on southern border adjacent to Kildare town.					

Quality of Settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including prehistoric landscapes.
Possible pattern of Early Medieval settlement and farming at this time but no strong representation of any specific historic period. A possible inauguration site at Carrickanearla (KD017-028004-), dating from this period, is known as the 'Chair of Kildare'.					
Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
Predominantly grassland and forestry					
Overall Landscape Character Sensitivity: Medium					

LCA 6 THE SIX HILLS: VISUAL SENSITIVITY

Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing features (trees, topography etc.)	Occasional views into landscape where gaps in existing features allow	Some inter-visibility with surrounding landscape. Landscape forms part of view structure	Strong visual links with surrounding landscape. Forms part of wider landscape views.	Extensive views into area. Major component of wider landscape views
This is a highly visible LCA and a significant feature the generally flat surrounding countryside.					

Coniferous plantations on the sides of the hills reinforce this quality.					
Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility	Location on elevated ground or surrounding higher ground creates significant inter-visibility	Landscape forms part of a visible ridgeline, or surrounding higher ground offers extensive visibility over areas as part of landscape views
Extensive views from higher ground					
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
Numerous views and prospects are identified in the current County Development Plan and views feature strongly within the landscape context.					
Visual receptors	low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and walking routes	Some visibility for local residents and visitors. Some visibility from transport routes and walking routes.	Frequent views from residential properties, visitors enjoying the landscape and from walking routes.	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of local residents
Recreational use primarily associated with walking					
Overall Visual Sensitivity: Medium/High					
Overall landscape sensitivity of this LCA: Medium to Medium/High					

LCA 6 THE SIX HILLS: LANDSCAPE VALUE

Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/high	High
Perceptual aspects (scenic beauty, tranquillity, intactness)	Not tranquil, much human activity,	Limited tranquillity, significant human detractors	Some human activity, affecting tranquillity,	Relatively tranquil with strong sense of remoteness.	Tranquil and remote in character, natural beauty with

	limited natural beauty	from natural beauty and rural qualities	some sense of remoteness	Distant human activity.	limited human influences
Despite proximity to fast growing urban settlements and M7 transport corridor this LCA has a coherent rural character. These hills and their characteristic ridgelines are a significant feature in the surrounding landscape.					
Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
Possible pattern of Early Medieval settlement and farming at this time but no strong representation of any specific historic period					
Ecological/geodiversity designation	No designations within vicinity	Limited local designations	Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area
Walking The Grand Canal Midtown Feeder canal					
Contribution to local landscape character	No contribution to local landscape character	Limited local landscape character contribution	Some contribution to local landscape character	Significant contribution to local landscape character	Key local characteristics forms integral part of the landscape and its setting
This LCA is a significant					
Overall landscape value: Medium					

Combination of overall landscape sensitivity (Medium to Medium/High) with overall landscape value (Medium) = Medium

Combination of overall landscape sensitivity (Medium to high) with overall landscape value (Medium) = a capacity assessment of Medium/Low

6.6.2 LCA GUIDANCE

Form an important backdrop to the surrounding plains particularly for Kildare town and western Newbridge. The views are also important from the western LCAs of Carbury Boyne Lowlands and around Rathangan.

- The network of field boundaries on the lower lands between the six hills are important and link into some of the hills that are afforested.
- The six hills support a variety of different land use activities, notably Allen Hill Alymer folly, mineral extraction at Allen Hill and Boston Hill, telecoms and afforestation.
- Retaining the separation and distinctive character between this LCA with its landform and historical uses and the urban settlement of Kildare town is particularly important.
- Applicants should demonstrate how new development will provide ecological linkages within the LCA. A presumption against hedgerow removal particularly those identified in 1st and 2nd Edition Ordnance Survey maps should apply. Older trees and hedgerows are of significant cultural and environmental value and merit protection and appropriate management. Applicants should demonstrate how these features will be managed over time particularly in larger development proposals.

LCA 7 CURRAGH PLAINS

LCA 7 CURRAGH PLAINS: LANDSCAPE CHARACTER SENSITIVITY

Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
This LCA is a flat extensive open plain located in the centre of the county. Elevation ranges from 90 m to 120 m, with some hills in eastern parts rising to over 160 m.					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance, a degree of consistency in pattern of landaus and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic landaus pattern	Intricate, varied pattern, undisturbed consistent pattern of land cover and historic layout.
This is complex LCA containing a number of LCTs. The dominant land use is grassland allowing long uninterrupted vistas and views to higher ground to the east and beyond the county boundary					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in settlement pattern	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g.: recreation grounds, cemetery. Settlement has a historic core surrounded by more recent development	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into surrounding countryside. Settlement has some modern development	Landscape preeminent. Surrounding countryside has some historic pattern. Few modern intrusions on landscape	Dispersed settlement, characterised by small scale vernacular or historic buildings.
This LCA includes the settlements of Newbridge, Athgarvan, Kilcullen and Kildare which cultural connection to the history of the curragh.					
Many substantial properties on the fringes of the curragh with imposing entrances and boundary treatments. Large agricultural buildings and sheds are remnants of a wealthy agricultural history.					

Quality of Settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including prehistoric landscapes.
This LCA and contains some of the most important monuments in the county with records back to the Neolithic period, e.g. Dun Ailinne (PO No. 200/1954). In addition to the royal site of Dún Aillinne, there are several NIAH Historic Gardens and Designed landscapes within the LCA, around the edges of the curragh plain					
Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
Overall Landscape Character Sensitivity: Medium/High					

LCA 7 CURRAGH PLAINS: VISUAL SENSITIVITY

Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing features (trees, topography etc.)	Occasional views into landscape where gaps in existing features allow	Some intervisibility with surrounding landscape. Landscape forms part of view structure	Strong visual links with surrounding landscape. Forms part of wider landscape views.	Extensive views into area. Major component of wider landscape views
The unenclosed grassland landscape allows expansive views both across and out into adjacent LCAs and bordering counties					

Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility	Location on elevated ground or surrounding higher ground creates significant inter-visibility	Landscape forms part of a visible ridgeline, or surrounding higher ground offers extensive visibility over areas as part of landscape views
<hr/>					
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
A number of views and prospects across the Curragh Plain are identified in the current County Development Plan					
Views to Dun Ailinne.					
Visual receptors	low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and walking routes	Some visibility for local residents and visitors. Some visibility from transport routes and walking routes.	Frequent views from residential properties, visitors enjoying the landscape and from walking routes.	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of local residents
Significant existing recreational use. This LCA is crossed by the M7 Transport route					
Overall Visual Sensitivity: High					
Overall landscape sensitivity of this LCA: Medium/High to High					

LCA 7 CURRAGH PLAINS: LANDSCAPE VALUE

Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/high	High
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Perceptual aspects (scenic beauty, tranquillity, intactness)	Not tranquil, much human activity, limited natural beauty	Limited tranquillity, significant human detractors from natural beauty and rural qualities	Some human activity, affecting tranquillity, some sense of remoteness	Relatively tranquil with strong sense of remoteness. Distant human activity.	Tranquil and remote in character, natural beauty with limited human influences
Folk and mythological associations of St Brigid with Kildare town and the Curragh in particular.					
Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
A rich archaeological record. This renowned Kildare landscape also includes the ancient ceremonial site of Dún Ailinne.					
Ecological/geodiversity designation	No designation s within vicinity	Limited local designation s	Some local designation s on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
Curragh 000392 (Proposed NHA)					
Pollardstown Fen 000396 (Proposed NHA)					
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area
Significant					
Contribution to local landscape character	No contribution to local landscape character	Limited local landscape character contribution	Some contribution to local landscape character	Significant contribution to local landscape character	Key local characteristics forms integral part of the landscape and its setting

Overall landscape value: High

Combination of overall landscape sensitivity (Medium/high to high) with overall landscape value (high) = a capacity assessment of low

LCA GUIDANCE

Significant cultural and ecological landscape that includes Dún Ailinne, a Royal Site on tentative list for World Heritage site designation. The LCA also includes the towns of Kildare and Newbridge, both closely linked to the Curragh.

- The Curragh Plains Conservation Management Plan 2024 prepared by the Dept of Defence in conjunction with Kildare County Council provide key Conservation Policies and Actions that should guide the landscape management of the lands included within the plan. Curragh Conservation Management Plan.pdf
- The Curragh plains are open, and unwooded and tree planting is not appropriate on these lands. See also policy proposals in the Conservation Management Plan. P.6.6 - Disallow tree planting and investigate the possibility of removing certain existing plantations
- Integrate any new development at Kildare, Kilcullen and Newbridge into the landscape setting through the appropriate use of native tree and hedge planting. This is particularly important for development at the edge or boundaries of the existing settlements of these towns and smaller settlements such as Athgarvan and Milltown that form the edge between the built settlement and the wider rural landscapes present in the LCA.
- New development should demonstrate the use of vernacular materials and styles to extend and support the townscapes character of these towns and villages above.
- A presumption against hedgerow removal particularly those identified in 1st and 2nd Edition Ordnance Survey maps should apply. Older trees and hedgerows are of significant cultural and environmental value and merit protection and appropriate management. Applicants should demonstrate how these features will be managed over time particularly in larger development proposals
- Maintain the riparian corridors associated with the River Liffey and its tributaries. Support local initiatives to improve water quality and habitat quality.

LCA 8 NAAS AND LIFFEY FOOTHILLS

LCA 8 NAAS AND LIFFEY FOOTHILLS: LANDSCAPE CHARACTER SENSITIVITY

Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
Undulating topography, gradually rising from the lowland plains towards the Wicklow border. Elevation in from 90 m along western fringes to 140 m in central areas and rises to hill summits above 300 m along the eastern margin. Cupidstown Hill (379 m) is the highest mountain in Kildare					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance, a degree of consistency in pattern of land use and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic land use pattern	Intricate, varied pattern, undisturbed consistent pattern of land cover and historic layout.
Predominantly grassland land use with hedgerows and hedgerow trees complex and varied landscape pattern					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in settlement pattern	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g.: recreation grounds, cemetery. Settlement has a historic core surrounded by more recent development	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into surrounding countryside. Settlement has some modern development	Landscape preeminent. Surrounding countryside has some historic pattern. Few modern intrusions on landscape	Dispersed settlement, characterised by small scale vernacular or historic buildings.
While much of this LCA has a rural feel the town of Naas and its surrounding rural area exhibit a strong urban influence. The relationship to settlement pattern therefore varies between the large town of Naas and the wider LCA lands.					

Quality of Settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
There is dispersed settlement on the upper slopes close to the Wicklow border.					
Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including prehistoric landscapes.
An area with a rich archaeological history dating back to the Bronze age. The presence of a number of religious houses and monuments dating to the Anglo-Norman period give this LCA a Late Medieval character. There are a number of NIAH Historic Gardens and Designed landscapes within the LCA, with concentrations within the river valley and on the slopes of the Wicklow foothills					
Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
The River Liffey meanders through the southern part of the LCA with extensive areas of riparian and demesne woodland.					
Overall Landscape Character Sensitivity: Medium					

LCA 8 NAAS AND LIFFEY FOOTHILLS: VISUAL SENSITIVITY

Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing features (trees, topography etc.)	Occasional views into landscape where gaps in existing features allow	Some inter-visibility with surrounding landscape. Landscape forms part of view structure	Strong visual links with surrounding landscape. Forms part of wider landscape views.	Extensive views into area. Major component of wider landscape views
Frequent views and visual importance of the Wicklow Mountains to the east.					

Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility	Location on elevated ground or surrounding higher ground creates significant inter-visibility	Landscape forms part of a visible ridgeline, or surrounding higher ground offers extensive visibility over areas as part of landscape views
Frequent views and visual importance of the Wicklow Mountains to the east.					
Views from upper slopes back across the county					
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
There are a number of views and prospects identified in the County Development Plan					
Visual receptors	low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and walking routes	Some visibility for local residents and visitors. Some visibility from transport routes and walking routes.	Frequent views from residential properties, visitors enjoying the landscape and from walking routes.	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of local residents
Recreational use primarily associated with walking. The Kildare County Council's Greenway Strategy includes the River Liffey and its tributaries as green corridors linking the Plain of Kildare with Co. Wicklow and the Poulaphouca reservoir. The Grand Canal on the LCA's northern boundary forms a Blueway. Stepping stones in this plan include Naas Racecourse, Punchestown Racecourse, Gowran Grange Demesne and Harristown Common					
Overall Visual Sensitivity: Medium/High					
Overall landscape sensitivity of this LCA: Medium to Medium High					

LCA 8 NAAS AND LIFFEY FOOTHILLS: LANDSCAPE VALUE

Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/high	High
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Perceptual aspects (scenic beauty, tranquillity, intactness)	Not tranquil, much human activity, limited natural beauty	Limited tranquillity, significant human detractors from natural beauty and rural qualities	Some human activity, affecting tranquillity, some sense of remoteness	Relatively tranquil with strong sense of remoteness. Distant human activity.	Tranquil and remote in character, natural beauty with limited human influences
Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
Ecological/geodiversity designation	No designations within vicinity	Limited local designations	Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
<ul style="list-style-type: none"> • Redbog 00397 (Proposed NHA) Close to the Wicklow border) • Kilteel Wood 001394 (Proposed NHA) Close to the Wicklow border • Liffey Valley Meander Belt (Proposed NHA) 					
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area
Numerous views and prospects are identified in the current County Development Plan and views feature strongly within the landscape context.					
<p>The Grand Canal Corbally Branch crosses through the LCA.</p> <p>The County Greenway plan includes the River Liffey and its tributaries as green corridors linking the Plain of Kildare with Co. Wicklow and the Poulaphouca reservoir. The Grand Canal on the LCA's northern boundary forms a Blueway. Stepping stones in this plan include Naas Racecourse, Punchestown Racecourse, Gowran Grange Demesne and Harristown Common</p>					
Contribution to local landscape character	No contribution to local	Limited local landscape	Some contribution to local	Significant contribution to local	Key local characteristics forms integral part of the

	landscape character	character contribution	landscape character	landscape character	landscape and its setting
Overall landscape value: Medium					
Combination of overall landscape sensitivity (Medium to Medium High) with overall landscape value (Medium) = a capacity assessment of Low to Medium					

LCA GUIDANCE

- This LCA includes the River Liffey, Grand Canal Corbally Branch and a mix of habitats including woodland, bog and waterbodies. Both the Liffey and the Foothills to the larger adjacent Wicklow mountains are important features and frame the lower lands in this LCA and to the north and west across the Curragh Plains and Cill Dara lowlands.
- A presumption against hedgerow removal particularly those identified in 1st and 2nd Edition Ordnance Survey maps should apply. Older trees and hedgerows are of significant cultural and environmental value and merit protection and appropriate management. Applicants should demonstrate how these features will be managed over time particularly in larger development proposals.
- All large development proposals along or adjacent to the River Liffey and Grand Canal shall be accompanied by a detailed landscaping plan, prepared by a suitably qualified landscape architect. The landscape plan shall address the varying topography of the site and shall have regard to the ecological designations, protected species and built heritage where present.
- The plan shall also include details of hard and soft landscaping, proposed species and sensitive lighting. Where new canal crossings or upgrades (i.e. footbridges/cycle bridges) are proposed, they shall be designed to avoid fragmentation of linear habitats associated with the River Liffey and Grand Canal Corbally Branch.
- Integrate any new development into the landscape setting through the appropriate use of native tree and hedge planting, this is particularly important for development at the edge or boundaries of the existing settlement of Naas. Once established this will provide buffers from noise and light impacts associated with the M7 motorway in the northern part of this LCA.
- Support for ongoing diversity and mosaic of habitats and the variety of field sizes within this LCA.
- The foothills form a significant backdrop and add visual interest at county scale; large-scale proposals should demonstrate sensitive siting and design that enhances local landscape character, uses natural screening via siting with the landform and avails of planting of native species.
- Support community groups in local landscape initiatives and landscape scale proposals to improve water quality and landscape scale restoration in the LCA.

LCA 9 SOUTH EASTERN KILDARE HILLS

LCA 9 SOUTH EASTERN KILDARE HILLS: LANDSCAPE CHARACTER SENSITIVITY

Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
The topography is undulating and gradually rising from the lowland plains towards the Wicklow border with an elevation typically between 100 m and 200m. Hill summits of almost 300 m are situated in the south and north of the LCA. The lowest ground (80 m) is along the River Greese valley.					
The elevated landform and ridge lines in the northeastern part enforce its character.					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance, a degree of consistency in pattern of land use and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic land use pattern	Intricate, varied pattern, undisturbed consistent pattern of land cover and historic layout.
Primarily an agricultural LCA with a strong rural quality and no major settlements. The M9 transport corridor runs along its western edge					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in settlement pattern	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g.: recreation grounds, cemetery. Settlement has a historic core surrounded by more recent development	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into surrounding countryside. Settlement has some modern development.	Landscape preeminent. Surrounding countryside has some historic pattern. Few modern intrusions on landscape	Dispersed settlement, characterised by small scale vernacular or historic buildings.

Settlement pattern is dispersed					
Quality of Settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
Dispersed settlement generally well-integrated into landscape. Area of low population growth					
Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including prehistoric landscapes.
Due to its upland nature the prehistoric period is strongly represented in this LCA. It has an archaeological record dating back to neolithic times. The LCA contains an important Early Medieval site at Moone, where five high crosses are located, one of which (KD036-031004-) is a National Monument No. 674					
Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
While primarily dominated by grassland farming, this LCA has areas of coniferous woodland, most notably on the upper slopes and the flanks of some of the hill.					
Narraghmore Bog (c. 150 Ha) is situated in the north of the LCA.					
Overall Landscape Character Sensitivity: Medium					

LCA 9 SOUTH EASTERN KILDARE HILLS: VISUAL SENSITIVITY

Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing features (trees,	Occasional views into landscape where gaps in existing features allow	Some inter-visibility with surrounding landscape. Landscape	Strong visual links with surrounding landscape. Forms part of wider	Extensive views into area. Major component of wider landscape views

	topography etc.)		forms part of view structure	landscape views.	
The elevated land to the east of this LCA provide expansive views back across Cill Dara Agricultural Lowlands and further into County Carlow					
Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility	Location on elevated ground or surrounding higher ground creates significant inter-visibility	Landscape forms part of a visible ridgeline, or surrounding higher ground offers extensive visibility over areas as part of landscape views
There are extensive views from higher ground. The ridgelines of Corballis Hill and Hughstown Hill are visually significant in the wider landscape context. Corballis Hill, flanked with coniferous planting is a pronounced landmark when viewed from the west					
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
The numerous views and prospects in this elevated LCA are identified in the current County Development Plan.					
Visual receptors	low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and walking routes	Some visibility for local residents and visitors. Some visibility from transport routes and walking routes.	Frequent views from residential properties, visitors enjoying the landscape and from walking routes.	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of local residents
Recreational use primarily associated with walking					
Overall Visual Sensitivity: Medium					
Overall landscape sensitivity of this LCA: Medium					

LCA 9 SOUTH EASTERN KILDARE HILLS: LANDSCAPE VALUE

Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/high	High
Perceptual aspects (scenic beauty, tranquillity, intactness)	Not tranquil, much human activity, limited natural beauty	Limited tranquillity, significant human detractors from natural beauty and rural qualities	Some human activity, affecting tranquillity, some sense of remoteness	Relatively tranquil with strong sense of remoteness. Distant human activity.	Tranquil and remote in character, natural beauty with limited human influences
Generally, this is a highly rural, tranquil LCA. Human activity is associated with agricultural practices and the road network and rural housing. The coherence of the landscape is underpinned by areas distinctive landform, particularly in the south. The coniferous plantations on the sides of the hills reinforce the landscape character. Agriculture is predominantly grass based. There are some areas of broadleaved woodland					
Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
The prehistoric period is strongly represented in this LCA					
Ecological/geodiversity designation	No designations within vicinity	Limited local designations	Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
<ul style="list-style-type: none"> Dunlavin Marshes 001772 Proposed NHA) - on its northern edge bordering LCA 8 Naas and Liffey Foothills. Corballis Hill 001389 - (Proposed NHA). 					
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area
Hill walking					
Contribution to local landscape character	No contribution to local	Limited local landscape	Some contribution to local	Significant contribution to local	Key local characteristic forms

	landscape character	character contribution	landscape character	landscape character	integral part of the landscape and its setting
A rural and coherent agricultural landscape with characteristics including field patterns, hedgerows and dispersed settlement is integral part of the landscape. Significant views to and from the hills and upper slopes					
Overall landscape value: Medium					
Combination of overall landscape sensitivity (Medium) with overall landscape value (Medium) = a capacity assessment of Medium					

LCA GUIDANCE

The LCA extends along the Wicklow border and provides important ridgelines and hill and mountain views that provide visual and landscape interest from the neighbouring Cill Dara lowlands and Curragh Plains. Long views into Wicklow and west across the county, are afforded from these hills. This LCA includes the River Liffey, Grand Canal Corbally Branch and a mix of habitats including woodland, bog and waterbodies. Both the Liffey and the Foothills to the larger adjacent Wicklow mountains are important features and frame the lower lands in this LCA and to the north and west across the Curragh Plains and Cill Dara lowlands.

- A presumption against hedgerow removal particularly those identified in 1st and 2nd Edition Ordnance Survey maps should apply. Older trees and hedgerows are of significant cultural and environmental value and merit protection and appropriate management. Applicants should demonstrate how these features will be managed over time particularly in larger development proposals.
- Integrate any new development into the landscape setting through the appropriate use of native tree and hedge planting, this is particularly important for development at the edge or boundaries of the existing settlements such as Ballitore.
- Large scale proposals should demonstrate sensitive siting and design that enhances local landscape character, uses natural screening via siting within the landform and avails of planting of native species.
- Support for ongoing diversity and mosaic of habitats and the variety of field sizes within this LCA.
- Support community groups in local landscape initiatives and landscape scale proposals to improve water quality and landscape scale restoration in the LCA.
- The historical and landscape significance of the River Greese and valley should be recognised

LCA 10 CILL DARA AGRICULTURAL LOWLANDS

LCA 10 CILL DARA AGRICULTURAL LOWLANDS: LANDSCAPE CHARACTER SENSITIVITY

Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
Flat topography that is characterised by large field and a high prevalence of tillage land use, in particular towards its southern end. Topography is largely low-lying, ranging 60 m to 100m. Some isolated hills rise to 110 m, and the highest, Mullaghreelan, rises to 140 m.					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance, a degree of consistency in pattern of land use and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic land use pattern	Intricate, varied pattern, undisturbed consistent pattern of land cover and historic layout.
This LCA has a varied landscape pattern with arable, mixed grassland and some coniferous plantations on former peatland. Its western border is formed by the River Barrow and the Barrow Line abutting County Laois. It is characterised by flat terrain and open views. There are some sizeable peatland areas, notably Killberry Bog.					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in settlement pattern	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g.: recreation grounds, cemetery. Settlement has a historic core surrounded by more recent development	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into surrounding countryside. Settlement has some modern development.	Landscape preeminent. Surrounding countryside has some historic pattern. Few modern intrusions on landscape	Dispersed settlement, characterised by small scale vernacular or historic buildings.

<p>With the exception of Castledermot in the south there are no sizeable settlements in this LCA. Nurney is a village within the LCA.</p>					
Quality of Settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
<p>Generally well-integrated</p>					
Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including prehistoric landscapes.
<p>An LCA with a considerable number of archaeological records with all periods from the Iron Age onwards represented. The high crosses and cross-inscribed stones at Castledermot are an important part of the Early Medieval ecclesiastical archaeology of this LCA</p>					
Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
<p>Overall Landscape Character Sensitivity: Low/Medium</p>					

LCA 10 CILL DARA AGRICULTURAL LOWLANDS: VISUAL SENSITIVITY

Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing features (trees, topography etc.)	Occasional views into landscape where gaps in existing features allow	Some inter-visibility with surrounding landscape. Landscape forms part of view structure	Strong visual links with surrounding landscape. Forms part of wider landscape views.	Extensive views into area. Major component of wider landscape views
<p>Large expansive views in places, influenced in part by large fields</p>					

Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility	Location on elevated ground or surrounding higher ground creates significant inter-visibility	Landscape forms part of a visible ridgeline, or surrounding higher ground offers extensive visibility over areas as part of landscape views
<hr/>					
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
<hr/>					
Visual receptors	low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and walking routes	Some visibility for local residents and visitors. Some visibility from transport routes and walking routes.	Frequent views from residential properties, visitors enjoying the landscape and from walking routes.	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of local residents
Recreational use primarily associated with walking					
Overall Visual Sensitivity: Low /Medium					
Overall landscape sensitivity of this LCA: Low/Medium					

LCA 10 CILL DARA AGRICULTURAL LOWLANDS: LANDSCAPE VALUE

Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/high	High
Perceptual aspects (scenic beauty, tranquillity, intactness)	Not tranquil, much human activity, limited	Limited tranquillity, significant human detractors from natural	Some human activity, affecting tranquillity, some sense	Relatively tranquil with strong sense of remoteness. Distant	Tranquil and remote in character, natural beauty with limited

	natural beauty	beauty and rural qualities	of remoteness	human activity.	human influences
Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
Ecological/geodiversity designation	No designations within vicinity	Limited local designations	Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
<ul style="list-style-type: none"> • River Barrow and River Nore 002162 (SAC). • Derryvullagh Island 001390 - (Proposed NHA) 					
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area
Contribution to local landscape character	No contribution to local landscape character	Limited local landscape character contribution	Some contribution to local landscape character	Significant contribution to local landscape character	Key local characteristics forms integral part of the landscape and its setting
Overall landscape value: Medium					
Combination of overall landscape sensitivity (Low /Medium) with overall landscape value (Medium) = a capacity assessment of Medium/High					

LCA GUIDANCE

The LCA includes important tillage areas combined with raised bog habitats. Recognising and retaining the mosaic of land uses is important to keep the character of this LCA.

- The largely open character and large skies confer an expansive character to much of this LCA. New development proposals should be sensitivity sited and designed to reflect and enhance the local character. Large bulky developments would require a landscape and tree plan to offer screening of large-scale buildings.
- The establishment of bog woodland at the fringes of bogs offers a potential link to wider ecological network and similar species should be promoted in nearby developments (i.e. Downy Birch (*Betula pubescens*): Silver Birch (*Betula pendula*), Willow (*Salix* species) and Scots Pine (*Pinus sylvestris*). Shrub species may include ling heather and bilberry depending on hydrological conditions.
- Farm machinery requires larger access gates and field sizes; consideration to provide wider field buffers and extend existing hedgerows should be supported.
- Where cut-stone walls are a feature associated with country houses and small villages such as Kilkea these features should be retained, and new developments reflect stone type and construction.
- The Small Town Renewal Plan for Castledermot should be supported and implemented [Castledermot Small Town Renewal Master Plan](#)
- Support community groups in local landscape initiatives and landscape scale proposals to improve water quality and landscape scale restoration in the LCA.

KILDARE DETAILED LANDSCAPE CHARACTER SENSITIVITY.

LANDSCAPE CHARACTER TYPE:

LCT 1 FARMED FOOTHILLS LANDSCAPE CHARACTER SENSITIVITY

Farmed Foothills					
Conspicuous and visually significant components within the generally flat Kildare landscape where they often form the skyline.					
Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	High
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominately flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
Topography comprising elevation, ridgelines, plateaus and steep slopes. Elevations provide viewpoints and are visually significant from lower areas.					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance, a degree of consistency in pattern of land use and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic land use pattern	varied pattern, undisturbed consistent pattern of land cover and historic layout.
Farmed landscape with interlocking field patterns, often visible due to undulating landform.					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in settlement pattern	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g. recreation grounds, cemetery. Settlement has a historic core surrounded by more	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into surrounding countryside. Settlement has some modern development.	Landscape pre-eminent; settlement subordinate. Surrounding countryside has some historic pattern. Few modern intrusions on landscape	Dispersed settlement, characterised by small scale vernacular or historic buildings.

		recent development			
No major settlements in this LCT. Greater development pressure on the lower slopes and adjacent to LCT Transport Corridor. Typically, settlement comprises villages and dispersed rural houses in a range of architectural styles.					
Quality of settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
Varied					
Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including medieval or designed landscapes.
Some historical landscapes and artefacts within this predominantly rural LCT					
Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
Rural and upland location					
Overall Landscape Character Sensitivity: Medium					
Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing features (trees, topography etc.)	Occasional views into landscape where gaps in existing features allow	Some intervisibility with surrounding landscape. Landscape forms part of view structure	Strong visual links with surrounding landscape. Forms part of wider landscape views.	Extensive views into area. Major component of wider landscape views
This LCT is visually conspicuous in the typically flat Kildare countryside forming the elevated eastern edge to the county.					
Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground	Settlement is on elevated ground, or surrounding higher	Location on elevated ground or surrounding higher ground	Landscape forms part of a visible ridgeline, or surrounding higher ground offers

		offering some visibility	ground (<5km) offers some visibility	creates significant intervisibility	extensive visibility over areas as part of landscape views
Visually significant.					
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
Forming the eastern edge of the county.					
Visual receptors	Low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and rights of way	Some visibility for residents and visitors. Some views from rights of way. Some visibility from transport routes.	Frequent views from residential properties, visitors enjoying the landscape and from rights of way	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of residents
Bisected by transport corridors. From within this LCT valued views across the county are provided due to the elevated position.					
Overall Visual Sensitivity: Medium/High					
Overall landscape sensitivity of this LCT (landscape character sensitivity + visual sensitivity): (Medium + Medium/High) = Medium/High					
Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/ high	High
Perceptual aspects (scenic beauty, tranquillity, intactness)	Not tranquil, much human activity, limited natural beauty	Limited tranquillity, significant human detractors from natural beauty and rural qualities	Some human activity, affecting tranquillity, some sense of remoteness	Relatively tranquil with strong sense of remoteness. Distant human activity.	Tranquil and remote in character, natural beauty with limited human influences
The more elevated parts of this LCT appear the more tranquil and remote. Lower slopes are more influenced by higher levels of development Localised mineral extraction, proximity in places to transport corridors and to settlement impact quality of tranquillity					
Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape

Ecological/geodiversity designation	No designations within vicinity	Limited local designations	Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
001772 - Dunlavin Marshes (Proposed NHA), 00397 Redbog (Proposed NHA), 001394 Kilteel Wood (Proposed NHA), 000393- Liffey Valley Meander Belt (Proposed NHA).					
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area
Kildare County Council's Green Infrastructure Plan identifies a number of green corridors and stepping stones within this LCT.					
Contribution to local landscape character	No contribution to local landscape character	Limited local landscape character contribution	Some contribution to local landscape character	Significant contribution to local landscape character	Key local characteristics forms integral part of the landscape and its setting
The elevated eastern edge of the county is an important contributor to its landscape character.					
Overall landscape value: Medium					
Combination of overall landscape sensitivity (Medium/High) with overall landscape value (Medium)= Landscape character capacity to accommodate development as LOW					

LCT 2 LOWLAND PLAINS LANDSCAPE CHARACTER SENSITIVITY

The "Heart" of Kildare, i.e. the extensive plains of fertile land with elevation commonly around 100m. with expansive views. Land use both tillage and pasture, with pasture more prevalent in the north and tillage more prevalent in the south. This LCT is frequently bisected by linear LCTs, namely river, canal and transport corridors.

Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	High
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Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
Generally flat					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance, a degree of consistency in pattern of land use and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic land use pattern	varied pattern, undisturbed consistent pattern of land cover and historic layout.
Relatively simple landscape pattern					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in settlement pattern	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g. recreation grounds, cemetery. Settlement has a historic core surrounded by more recent development	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into surrounding countryside. Settlement has some modern development.	Landscape pre-eminent; settlement subordinate. Surrounding countryside has some historic pattern. Few modern intrusions on landscape	Dispersed settlement, characterised by small scale vernacular or historic buildings.
Many of Kildare's fastest growing settlements are within this LCT					
Quality of settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern	Mixture of medieval or designed landscape	Large proportion medieval or designed landscape interspersed with	Predominantly historic including medieval or designed landscapes.

		large-scale expansion	and early modern	more recent layout.	
Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
Agriculture, both tillage and pasture with some mixed forest and coniferous plantations					
Overall Landscape Character Sensitivity: Low-Medium					
Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing features (trees, topography etc.)	Occasional views into landscape where gaps in existing features allow	Some intervisibility with surrounding landscape. Landscape forms part of view structure	Strong visual links with surrounding landscape. Forms part of wider landscape views.	Extensive views into area. Major component of wider landscape views
Generally flat landform leads to open views.					
Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility	Location on elevated ground or surrounding higher ground creates significant intervisibility	Landscape forms part of a visible ridgeline, or surrounding higher ground offers extensive visibility over areas as part of landscape views
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
Landmarks tend to be in adjacent more elevated LCTs					
Visual receptors	Low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and rights of way	Some visibility for local residents and visitors. Some views from rights of way. Some	Frequent views from residential properties, visitors enjoying the landscape and	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high

			visibility from transport routes.	from rights of way	numbers of local residents
Views from the bisecting linear LCTs, namely river, canal and transport corridors.					
Overall Visual Sensitivity: Low/Medium					
Overall landscape sensitivity of this LCT (landscape character sensitivity + visual sensitivity): Low-Medium					
Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/high	High
Perceptual aspects (scenic beauty, tranquillity, intactness)	Not tranquil, much human activity, limited natural beauty	Limited tranquillity, significant human detractors from natural beauty and rural qualities	Some human activity, affecting tranquillity, some sense of remoteness	Relatively tranquil with strong sense of remoteness. Distant human activity.	Tranquil and remote in character, natural beauty with limited human influences
Varies between more tranquil agricultural quality to a more densely settled urban edge					
Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
Ecological/geodiversity designation	No designations within vicinity	Limited local designations	Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
Predominantly agriculture					
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area
Components of Kildare County Council's Green Infrastructure Plan traverse this LCT.					
Contribution to local landscape character	No contribution to local	Limited local landscape	Some contribution to	Significant contribution to local	Key local characteristics forms integral

	landscape character	character contribution	local landscape character	landscape character	part of the landscape and its setting
A valued agricultural landscape associated with the essence of the county.					
Overall landscape value: Medium					
Combination of overall landscape sensitivity (Low-Medium) with overall landscape value (Medium)= Landscape character capacity to accommodate development as Medium/High					

LCT 3 FARMED ROLLING HILLS LANDSCAPE CHARACTER SENSITIVITY

Discrete areas of elevated land within LCT 2 "Lowland plains" where prominent hills reaching 100 to 150m form important visual features in the landscape.					
Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	High
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
Topography comprising elevation, ridgelines, plateaus and steep slopes. Elevation ranges from 100m to 150m. Elevated locations providing opportunities for views across central Kildare.					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance, a degree of consistency in pattern of land use and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic land use pattern	Varied pattern, undisturbed consistent pattern of land cover and historic layout.
Mineral extraction evident in some locations.					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g. recreation	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into	Landscape pre-eminent; settlement subordinate. Surrounding countryside has some historic pattern. Few modern	Dispersed settlement, characterised by small scale vernacular or historic buildings.

	settlement pattern	grounds, cemetery. Settlement has a historic core surrounded by more recent development	surrounding countryside. Settlement has some modern development.	intrusions on landscape	
Settlement generally sympathetic to the landform.					
Quality of settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
This LCT is located close for some fast-growing urban settlements.					
Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including medieval or designed landscapes.
Historic elements, often associated with elevated position.					
Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
Hedgerow patterns, mature trees, areas of woodland. Occasional forestry plantations on higher elevations.					
Overall Landscape Character Sensitivity: Medium					
Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing features (trees, topography etc.)	Occasional views into landscape where gaps in existing features allow	Some intervisibility with surrounding landscape. Landscape forms part of view structure	Strong visual links with surrounding landscape. Forms part of wider landscape views.	Extensive views into area. Major component of wider landscape views
This LCT is highly visible - and frequently forms a landmark in a generally flat landscape.					

Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility	Location on elevated ground or surrounding higher ground creates significant intervisibility	Landscape forms part of a visible ridgeline, or surrounding higher ground offers extensive visibility over areas as part of landscape views
Kildare County Council identify hilltop views at the following locations: Red Hill, Dunmurray Hill, Grange Hill, Boston Hill, Allen Hill and Crosspatrick Hill within this LCT					
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
This LCT forms a landmark.					
Visual receptors	Low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and rights of way	Some visibility for local residents and visitors. Some views from rights of way. Some visibility from transport routes.	Frequent views from residential properties, visitors enjoying the landscape and from rights of way	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of local residents.
Significant national transport corridors pass close to this LCT.					
Overall Visual Sensitivity: Medium/High					
Overall landscape sensitivity of this LCT (landscape character sensitivity + visual sensitivity) (Medium + Medium High) = Medium/High					
Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/ high	High
Perceptual aspects (scenic beauty, tranquillity, intactness)	Not tranquil, much human activity, limited natural beauty	Limited tranquillity, significant human detractors from natural beauty and rural qualities	Some human activity, affecting tranquillity, some sense of remoteness	Relatively tranquil with strong sense of remoteness. Distant human activity.	Tranquil and remote in character, natural beauty with limited human influences
Transport corridors bisect this LCT					

Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
Ecological/geodiversity designation	No designations within vicinity	Limited local designations	Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area
Kildare County Council's Green Infrastructure Plan shows a green corridor hill within this LCT, with the individual hilltops identified as stepping stones.					
Contribution to local landscape character	No contribution to local landscape character	Limited local landscape character contribution	Some contribution to local landscape character	Significant contribution to local landscape character	Key local characteristics forms integral part of the landscape and its setting
Comprising prominent visual elements this LCT contributes strongly to landscape character.					
Overall landscape value: Medium					
Combination of overall landscape sensitivity (Medium/High) with overall landscape value (Medium) = Landscape character capacity to accommodate development as LOW					

LCT 4: TRANSPORT CORRIDOR LANDSCAPE CHARACTER SENSITIVITY

Transport corridor

A linear landscape component transversing east to west (M7) and north to south (M9); M4 also runs east to west along Kildare Meath Border. These routes often run close or parallel to historic routes

Landscape Character	Low	Low/medium	Medium	Medium/high	High
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sensitivity criteria					
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
Motorways typically use cut and fill earthworks in their construction to achieve straight routes and consistent elevation changes. These topographic structures can be very noticeable in the landscape.					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance, a degree of consistency in pattern of land use and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic land use pattern	varied pattern, undisturbed consistent pattern of land cover and historic layout.
The linear form of a motorway, with its associated infrastructure of lights and gantries create a strong ordering device in the wider landscape.					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in settlement pattern	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g. recreation grounds, cemetery. Settlement has a historic core surrounded by more recent development	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into surrounding countryside. Settlement has some modern development.	Landscape pre-eminent; settlement subordinate. Surrounding countryside has some historic pattern. Few modern intrusions on landscape	Dispersed settlement, characterised by small scale vernacular or historic buildings.
Motorways connect or run adjacent to fast-growing areas, acting as magnets for urbanisation and other development.					
Quality of settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern

Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including medieval or designed landscapes.
Motorway routes typically avoid historical sites, but frequently run adjacent to them					
Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
Motorway construction destroys and fragment existing habitats. Their verges constitute may potentially provide habitats and/or corridors, but this possibility is largely unverified.					
Overall Landscape Character Sensitivity: Low					
Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing features (trees, topography etc.)	Occasional views into landscape where gaps in existing features allow	Some intervisibility with surrounding landscape. Landscape forms part of view structure	Strong visual links with surrounding landscape. Forms part of wider landscape views.	Extensive views into area. Major component of wider landscape views
Motorways proved views across the landscape.					
Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility	Location on elevated ground or surrounding higher ground creates significant intervisibility	Landscape forms part of a visible ridgeline, or surrounding higher ground offers extensive visibility over areas as part of landscape views
Views to and from transport corridor is variable.					
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context

This Landscape type offers a variety of views depending on the height of the earthen borders and the direction of travel. These motorways are relatively new and the low immature shrubs and trees of the roadside planting allow for occasional farmland and hill views.

Visual receptors	Low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and rights of way	Some visibility for local residents and visitors. Some views from rights of way. Some visibility from transport routes.	Frequent views from residential properties, visitors enjoying the landscape and from rights of way	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of local residents.
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Transport engineers aim to minimise visual impact of the motorway infrastructure in the wider landscape.

Overall Visual Sensitivity: **Low**

Overall landscape sensitivity of this LCT **Low**

Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/high	High
Perceptual aspects (scenic beauty, tranquillity, intactness	Not tranquil, much human activity, limited natural beauty	Limited tranquillity, significant human detractors from natural beauty and rural qualities	Some human activity, affecting tranquillity, some sense of remoteness	Relatively tranquil with strong sense of remoteness. Distant human activity.	Tranquil and remote in character, natural beauty with limited human influences

While not tranquil it must be noted that the view from the motorway is an important one, and many commuters' primary experience of Kildare.

Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
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Transport engineers, in their route selection, aim to minimise impact of the motorway corridor on sensitive historic environments in the wider landscape.

Ecological/geodiversity designation	No designations within vicinity	Limited local designations	Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
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Motorway construction destroys and fragment existing habitats

Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area
Recreation is not compatible with major transport corridors					
Contribution to local landscape character	No contribution to local landscape character	Limited local landscape character contribution	Some contribution to local landscape character	Significant contribution to local landscape character	Key local characteristics forms integral part of the landscape and its setting
Strong linear form and associated infrastructure create a transport corridor character					
Overall landscape value: Low					
Combination of overall landscape sensitivity (Low) with overall landscape value (Low) = Landscape character capacity to accommodate development as Very High					

LCT 5 RIVER CORRIDOR LANDSCAPE CHARACTER SENSITIVITY

River Corridors: Note this LCT is generated as 200 m wide zone (100 m on each side of river line).

The principal rivers of the county, namely the Liffey (rising in the Wicklow foothills and ultimately drain north-easterly to Dublin Bay) and the Barrow (rising in the Slieve Bloom Mountain range in the centre of Ireland and flowing south into to Waterford harbour)

Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	High
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
The landform associated with river valleys, combined with ridges and slopes increase the diversity of the landscape and creates a quite complex landform.					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed.	Largely simple, some disturbance, largely fragmented	Some variety. Limited disturbance, a degree of consistency in pattern of	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some	varied pattern, undisturbed consistent pattern of land cover and historic layout.

	Fragmented landcover	landcover and land use	land use and cover	historic land use pattern	
Landscape patterns can vary in this landscape character type; A more natural valley character can be seen in parts along the River Barrow, whilst the Liffey valley changes in character along its length with layers of historic modification for recreational and social aspirations associated with demesne and parkland landscapes.					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in settlement pattern	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g. recreation grounds, cemetery. Settlement has a historic core surrounded by more recent development	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into surrounding countryside. Settlement has some modern development.	Landscape pre-eminent; settlement subordinate. Surrounding countryside has some historic pattern. Few modern intrusions on landscape	Dispersed settlement, characterised by small scale vernacular or historic buildings.
Many settlements in this LCT are associated with or have come into being because of the river.					
Quality of settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
Generally well-integrated.					
Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including medieval or designed landscapes.
Close to the river corridor, historical landscape features, including designed landscapes, industrial heritage, stone arched bridges, vernacular cottages including mill houses and former farm cottages contribute to landscape character and reinforce sense of historical settlement.					
Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.

<p>River corridors and existing/potential network of treelines and parklands combined with proximity to canals increase ecological value in an area that has seen considerable urbanisation.</p>					
<p>Overall Landscape Character Sensitivity: Medium/High</p>					
Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing features (trees, topography etc.)	Occasional views into landscape where gaps in existing features allow	Some intervisibility with surrounding landscape. Landscape forms part of view structure	Strong visual links with surrounding landscape. Forms part of wider landscape views.	Extensive views into area. Major component of wider landscape views
<p>Visibility varies within this LCT. From bridges and river valley floor, views are directed up and downstream of the river with the frequent presence of mature treelines. In other places a relatively flat valley form and dense riparian vegetation mean that the river is relatively hidden in the wider landscape.</p>					
Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility	Location on elevated ground or surrounding higher ground creates significant intervisibility	Landscape forms part of a visible ridgeline, or surrounding higher ground offers extensive visibility over areas as part of landscape views
<p>Varies</p>					
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
<p>Important views arise at bridges crossing and other in places where expansive views of the river occur.</p>					
Visual receptors	Low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and rights of way	Some visibility for local residents and visitors. Some views from rights of way. Some visibility from transport routes.	Frequent views from residential properties, visitors enjoying the landscape and from rights of way	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of local residents.

<p>Kildare County Council's Green Infrastructure Plan promotes recreational activity along the county's river corridors.</p>					
<p>Overall Visual Sensitivity: Medium/High</p>					
<p>Overall landscape sensitivity of this LCT (landscape character sensitivity + visual sensitivity) Medium/High</p>					
Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/high	High
Perceptual aspects (scenic beauty, tranquillity, intactness)	Not tranquil, much human activity, limited natural beauty	Limited tranquillity, significant human detractors from natural beauty and rural qualities	Some human activity, affecting tranquillity, some sense of remoteness	Relatively tranquil with strong sense of remoteness. Distant human activity.	Tranquil and remote in character, natural beauty with limited human influences
<p>This LCT varies in perceptual qualities. The River Barrow travels through areas of low population density while the River Liffey is associated more densely settled areas. Never-the-less the river corridor, with its linear structure and riparian vegetation frequently provides a quality tranquillity and intactness. River views are highly regarded.</p>					
Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
<p>Numerous historic features are generally associated with this LCT including cut-stone bridges, vernacular and urban cottages, industrial heritage and recreational features.</p>					
Ecological/geodiversity designation	No designations within vicinity	Limited local designations	Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
<p>The River Barrow is a designated Special Areas of Conservation (SAC).</p>					
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area
<p>High levels of recreational use including running, cycling, kayaking and informal recreation.</p>					
Contribution to local landscape character	No contribution to local	Limited local landscape	Some contribution to	Significant contribution to local	Key local characteristics forms integral part of the

landscape character	character contribution	local landscape character	landscape character	landscape and its setting
Combination of landscape features both natural, cultural and historical combine to create a highly scenic, attractive and interesting LCT.				
Overall landscape value: High				
Combination of overall landscape sensitivity (Medium/High) with overall landscape value (High) = Landscape character capacity to accommodate development as Negligible.				

LCT 6 CANAL CORRIDOR LANDSCAPE CHARACTER SENSITIVITY

Canal Corridor					
There are 120 km of these artificial waterways in Kildare comprising the Grand Canal, Royal Canal and the Barrow Line. They were constructed to promote trade by allow the passage of boats inland. No longer fulfilling this function, they, with their linear structure and associated embankments, locks and bridges offer recreational and ecological benefits					
Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	High
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographic al variety
Generally flat topography.					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance, a degree of consistency in pattern of land use and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic land use pattern	varied pattern, undisturbed consistent pattern of land cover and historic layout.
Relatively simple landscape pattern with locks offering a feature point; this remains nonetheless an important historical urban linear landscape feature. This linear pattern is reinforced, in places, where the railway runs parallel to the canal.					
Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or	Landscape is well connected to settlement on at least 2 sides. Some associated landscape	Landscape is connected to settlement. Some contribution to settlement separation and/or partial	Landscape pre-eminent; settlement subordinate. Surrounding countryside has some historic pattern. Few	Dispersed settlement, characterised by small scale vernacular

	breaks in settlement pattern	setting e.g. recreation grounds, cemetery. Settlement has a historic core surrounded by more recent development	extension into surrounding countryside. Settlement has some modern development.	modern intrusions on landscape	or historic buildings.
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Pattern of settlement along the canal. These vary in size associated with, and often developed because of, the canal.

Quality of settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
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In the north of the county the Royal Canal links some fast growing towns. Such population growth exerts pressure on the settlement edge.

Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including medieval or designed landscapes.
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Adjoining the canal corridor some of the older industrial features remain, primarily locks, bridges, lockhouses, mills etc

Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
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The linear nature of the canal create corridors and opportunities for habitat connectivity. As an old long established landscape feature canals often associated with mature and relatively undisturbed vegetation. The Royal Canal (002103) is a proposed Natural Heritage Area

Overall Landscape Character Sensitivity: **Medium**

Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
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Visibility	Views over landscape screened by existing features (trees, topography etc.)	Occasional views into landscape where gaps in existing features allow	Some intervisibility with surrounding landscape. Landscape forms part of view structure	Strong visual links with surrounding landscape. Forms part of wider landscape views.	Extensive views into area. Major component of wider landscape views
Visibility varies within this LCT. The vista from most of the arched canal bridges allows for long linear views that are highly attractive in places. A canal towpath can be more constrained linear views framed by the canal side vegetation. Within the towns and villages along the canals the canal can be a valuable contributor to the local townscape.					
Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility	Location on elevated ground or surrounding higher ground creates significant intervisibility.	Landscape forms part of a visible ridgeline, or surrounding higher ground offers extensive visibility over areas as part of landscape views
Visibility from bridges and in settlements.					
Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
Landmarks include built heritage features and some areas of established riparian vegetation. Towns along the canal regard their canal as a crucial part of their townscape heritage and include protection for the views of the canal in their Local Area Plans.					
Visual receptors	Low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and rights of way	Some visibility for local residents and visitors. Some views from rights of way. Some visibility from transport routes.	Frequent views from residential properties, visitors enjoying the landscape and from rights of way	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of local residents
Kildare County Council's Green Infrastructure Plan shows the canal network as a "Blueway" corridor within the overall network.					

Overall Visual Sensitivity: Medium/High					
Overall landscape sensitivity of this LCT (landscape character sensitivity + visual sensitivity): Medium/High					
Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/high	High
Perceptual aspects (scenic beauty, tranquillity, intactness)	Not tranquil, much human activity, limited natural beauty	Limited tranquillity, significant human detractors from natural beauty and rural qualities	Some human activity, affecting tranquillity, some sense of remoteness	Relatively tranquil with strong sense of remoteness. Distant human activity.	Tranquil and remote in character, natural beauty with limited human influences
Some areas within this LCT possess a high quality of tranquillity, particularly in the less populated west part of the county. The linear nature of canal waterways promotes the quality of intactness.					
Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
Some historic features.					
Ecological/geodiversity designation	No designations within vicinity	Limited local designations	Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
Woodlands and habitats associated with the canal are important ecological features.					
The Royal Canal (002103) is a proposed Natural Heritage Area					
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from outside the area	More than local importance for recreation; attracts visitors from outside area

High levels of recreational use including walking, running, cycling, kayaking and informal recreation.					
Contribution to local landscape character	No contribution to local landscape character	Limited local landscape character contribution	Some contribution to local landscape character	Significant contribution to local landscape character	Key local characteristics forms integral part of the landscape and its setting
The combination of landscape features both natural, cultural and historical combine to create a highly scenic, attractive and interesting LCT.					
Overall landscape value: Medium/High					
Combination of overall landscape sensitivity (Medium/High) with overall landscape value (Medium/High) = Landscape character capacity to accommodate development as Negligible/LOW					

LCT 7: PEATLANDS AND SEMI-NATURAL VEGETATION LANDSCAPE CHARACTER SENSITIVITY

Peatlands and semi-natural vegetation:					
An area with a high-water table and poor drainage. Soils are dominated by peat soils with some areas of grey brown podzolic and complex mineral soils.					
Landscape Character sensitivity criteria	Low	Low/medium	Medium	Medium/high	High
Topography	Simple, large-scale, predominately flat	Simple, large to medium scale, predominantly flat to mildly undulating	Occasional variety but lacking strong complexity	Complex topographical variety	Very complex with strong topographical variety
Flat topography with few fences or hedges which combine to create the potential for open panoramic views which is characterised by the expansive cut over peatlands.					
Landscape pattern	Simple, large-scale pattern, and /or regularly disturbed. Fragmented landcover	Largely simple, some disturbance, largely fragmented landcover and land use	Some variety. Limited disturbance, a degree of consistency in pattern of land use and cover	Varied pattern with some intricacy. Largely undisturbed and coherent landcover. Some historic land use pattern	varied pattern, undisturbed consistent pattern of land cover and historic layout.

While topography is uniform there is a mosaic of land use, with pasture and woodland along with significant areas of bog. Abandoned and former industrial peatlands rapidly become colonised by spontaneous vegetation.

Relationship to settlement pattern	Landscape associated with medium to large-scale settlement. No associated landscape setting or breaks in settlement pattern	Landscape is well connected to settlement on at least 2 sides. Some associated landscape setting e.g. recreation grounds, cemetery. Settlement has a historic core surrounded by more recent development	Landscape is connected to settlement. Some contribution to settlement separation and/or partial extension into surrounding countryside. Settlement has some modern development.	Landscape pre-eminent; settlement subordinate. Surrounding countryside has some historic pattern. Few modern intrusions on landscape	Dispersed settlement, characterised by small scale vernacular or historic buildings.
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Traditionally settlement avoided bogs/peatland. Settlements are sparse, with a few small villages or farmsteads on the periphery of the peatlands. Some settlements arose specifically associated with peat extraction.

Quality of settlement edge	Harsh, abrupt and unfiltered settlement edge	Occasionally filtered edge but predominantly abrupt	Variable edge, some historic but modern larger scale also evident	Variable edge, some modern influence but predominantly well filtered into landscape	Dispersed settlement edge filtered into historic landscape pattern
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Historic landscape	Modern large-scale expansion	Some historic elements but predominantly late modern large-scale expansion	Mixture of medieval or designed landscape and early modern	Large proportion medieval or designed landscape interspersed with more recent layout.	Predominantly historic including medieval or designed landscapes.
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The previous major land use in the area has been peat extraction. Relics of this activity are evident. The land use associated with industrial peatland is, by its nature, large in scale. In other parts of this LCT, small scale turf cutting has occurred in the recent past, and currently rewetting and rewilding activities are being undertaken.

Extent and variety of natural habitats	Denuded agricultural monoculture	Mainly monoculture but some habitats present	Some variety in habitats some high value	Some variety in habitats some of which are extensive and/or well connected	Large variety of well-connected extensive habitats of high ecological value.
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Despite 70 years of industrial peat extraction important remnants of raised bog remain in addition to significant areas of pastureland and coniferous planting, often located on cutaway bog.

Naturally regenerating vegetation is evident in areas.

Drainage channels, streams and large ditches are strongly characteristic in the landscape commonly draining east to west. Currently this LCT is at a pivotal moment with the 2021 cessation of industrial peat extraction by Bord na Mona across all its landbank

Overall Landscape Character Sensitivity: Medium

Visual sensitivity criteria	Low	Low/medium	Medium	Medium/high	high
Visibility	Views over landscape screened by existing features (trees, topography etc.)	Occasional views into landscape where gaps in existing features allow	Some intervisibility with surrounding landscape. Landscape forms part of view structure	Strong visual links with surrounding landscape. Forms part of wider landscape views.	Extensive views into area. Major component of wider landscape views

Fringe vegetation around bogs and former industrial peatland area often obscure views within the LCT.

Ridges and high ground	No higher ground within 15km	Distant (>5km) ridgeline or higher ground offering some visibility	Settlement is on elevated ground, or surrounding higher ground (<5km) offers some visibility	Location on elevated ground or surrounding higher ground creates significant intervisibility	Landscape forms part of a visible ridgeline, or surrounding higher ground offers extensive visibility over areas as part of landscape views
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The generally flat nature of the landform of this LCT can impede intervisibility.

Views and landmarks	Contains no landmarks and is not a feature in local views	Limited significance in views and/or local landmarks	Significant in locally important landmarks or views	Some important views or landmarks are available	Important views and landmark sites are part of the landscape context
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This landscape character type is one defining aspect of the Kildare landscape,

Visual receptors	Low number of viewers from properties and local transport routes	Occasional isolated views from local properties, transport routes and rights of way	Some visibility for local residents and visitors. Some views from rights of way. Some visibility from transport routes.	Frequent views from residential properties, visitors enjoying the landscape and from rights of way	High numbers of visitors to the landscape; visibility from long distance, major transport routes and high numbers of local residents.
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Proposed Kildare Co. Council Greenway, has the potential of opening up access to views within this LCA					
Overall Visual Sensitivity: Medium					
Overall landscape sensitivity of this LCT (landscape character sensitivity + visual sensitivity): Medium					
Experiential qualities and landscape value criteria	Low	Low/medium	Medium	Medium/high	High
Perceptual aspects (scenic beauty, tranquillity, intactness)	Not tranquil, much human activity, limited natural beauty	Limited tranquillity, significant human detractors from natural beauty and rural qualities	Some human activity, affecting tranquillity, some sense of remoteness	Relatively tranquil with strong sense of remoteness. Distant human activity.	Tranquil and remote in character, natural beauty with limited human influences
A dynamic and rapidly changing landscape; much of its perceptual qualities influenced by its edge treatment					
Historic environment	No significant historic features	Historic features but not strongly related to landscape	Some landscape related historic features	Some prominent historic features	Historic features are prominent in the landscape
Industrial heritage from peat extraction					
Ecological/geodiversity designation	No designations within vicinity	Limited local designations	Some local designations on or immediately adjacent. Statutory designation in vicinity	Statutory designations present or adjacent over a significant area.	Statutory designations are prominent in the landscape
This area contains many designations:					
<ul style="list-style-type: none"> Hodgestown Bog 001393 NHA, Ballynafagh Bog 000391 (Proposed NHA,) Mouds Bog 000395 (Proposed NHA), Ballynafagh Lakes 001387 (SAC and SPA), Mouds Bog, 002331(SAC and SPA), Hodgestown Bog 001393 (SAC and SPA), Ballynafagh Lakes 001387 (SAC and SPA), 					
In addition, areas of former extensive peat extraction can often be characterised now as wetlands, playing a valuable role in regulating water runoff, or naturally re-wilding and creating species rich open areas or first-generation woodland.					
Recreation	No recreational value	Local informal use for recreation	Locally important recreational value	Well used for recreation, attracts some visitors from	More than local importance for recreation; attracts

				outside the area	visitors from outside area
Kildare County Council's Green Infrastructure Plan shows a "Peatway" within this LCT, forming part of the GI network.					
Contribution to local landscape character	No contribution to local landscape character	Limited local landscape character contribution	Some contribution to local landscape character	Significant contribution to local landscape character	Key local characteristics forms integral part of the landscape and its setting
The bogland form an iconic Kildare landscape with the county's long association with peat extraction.					
Overall landscape value: Medium/High					
Combination of overall landscape sensitivity (Medium) with overall landscape value (Medium/High) = Landscape character capacity to accommodate development as Low					

LCT 8 SETTLEMENT LANDSCAPE CHARACTER SENSITIVITY

The LCA focuses on the landscapes primarily outside settlements which are covered by policies in the Kildare CDP 2023 -2029, Local Area Plans or non-statutory masterplans/town renewal masterplans.