

ENVIRONMENTAL REPORT

ON THE
STRATEGIC ENVIRONMENTAL ASSESSMENT
OF THE
KILDARE COUNTY DEVELOPMENT PLAN
2011-2017

for: Kildare County Council

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List of Abbreviations

AA	Appropriate Assessment
CSO	Central Statistics Office
DCENR	Department of Communications, Energy and Natural Resources
DEHLG	Department of the Environment, Heritage and Local Government
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
EU	European Union
GSI	Geological Survey of Ireland
NHA	Natural Heritage Area
NIAH	National Inventory of Architectural Heritage
NSS	National Spatial Strategy
RBD	River Basin District
RMP	Record of Monuments and Places
RPS	Record of Protected Structures
RPGs	Regional Planning Guidelines
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SEO	Strategic Environmental Objective
SI No.	Statutory Instrument Number
SPA	Special Protection Area
WFD	Water Framework Directive (2000/60/EC)

Glossary

Biodiversity and Flora and Fauna

Biodiversity is the variability among living organisms from all sources including inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are a part; this includes diversity within species, between species and of ecosystems' (United Nations Convention on Biological Diversity 1992).

Flora is all of the plants found in a given area.

Fauna is all of the animals found in a given area.

Biotic Index Values (Q Values)

The Biotic Index Values, or Q values, are assigned to rivers in accordance with biological monitoring of surface waters - low Q ratings, as low as Q1, are indicative of low biodiversity and polluted waters, and high Q ratings, as high as Q5, are indicative of high biodiversity and unpolluted waters. Good status as defined by the Water Framework Directive equates to approximately Q4 in the national scheme of biological classification of rivers as set out by the Environmental Protection Agency.

Environmental Problems

Annex I of Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27 June 2001, on the assessment of the effects of certain plans and programmes on the environment (the Strategic Environmental Assessment Directive) requires that information is provided on 'any existing environmental problems which are relevant to the plan or programme', thus, helping to ensure that the proposed strategic action does not make existing environmental problems worse.

Environmental problems arise where there is a conflict between current environmental conditions and ideal targets. If environmental problems are identified at the outset they can help focus attention on important issues and geographical areas where environmental effects of the plan or programme may be likely.

Environmental Vectors

Environmental vectors are environmental components, such as air, water or soil, through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings.

Mitigate

To make or become less severe or harsh.

Mitigation Measures

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing a human action, be it a plan, programme or project. Mitigation involves ameliorating significant negative effects. Where there are significant negative effects, consideration should be given in the first instance to preventing such effects or, where this is not possible, to lessening or offsetting those effects. Mitigation measures can be roughly divided into those that: avoid effects; reduce the magnitude or extent,

probability and/or severity of effects; repair effects after they have occurred; and compensate for effects, balancing out negative impacts with other positive ones.

Protected Structure

Protected Structure is the term used in the Planning Act of 2000 to define a structure included by a planning authority in its Record of Protected Structures. Such a structure shall not be altered or demolished in whole or part without obtaining planning permission or confirmation from the planning authority that the part of the structure to be altered is not protected.

Recorded Monument

A monument included in the list and marked on the map which comprises the Record of Monuments and Places that is set out County by County under Section 12 of the National Monuments (Amendment) Act, 1994 by the Archaeological Survey of Ireland. The definition includes Zones of Archaeological Potential in towns and all other monuments of archaeological interest which have so far been identified. Any works at or in relation to a recorded monument requires two months notice to the Department of the Environment, Heritage and Local Government under section 12 of the National Monuments (Amendment) Act, 1994.

Scoping

Scoping is the process of determining what issues are to be addressed, and setting out a methodology in which to address them in a structured manner appropriate to the plan or programme. Scoping is carried out in consultation with the appropriate bodies.

Strategic Actions

Strategic actions include: *Policies*, which may be considered as inspiration and guidance for action and which set the framework for plans and programmes; *Plans*, sets of co-ordinated and timed objectives for the implementation of the policy; and *Programmes*, sets of projects in a particular area.

Strategic Environmental Assessment (SEA)

Strategic Environmental Assessment (SEA) is the formal, systematic evaluation of the likely significant environmental effects of implementing a plan or programme before a decision is made to adopt it.

Strategic Environmental Objective (SEO)

Strategic Environmental Objectives (SEOs) are methodological measures which are developed from international, national and regional policies which generally govern environmental protection objectives and against which the environmental effects of the Plan can be tested. The SEOs are used as standards against which the objectives of the Plan can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, if not mitigated.

Preamble

The Kildare County Development Plan 2011-2017 together with the accompanying SEA Environmental Report will need to be read in the context of other relevant plans and policies which relate to the County. It is important to understand that the control and care of the environment falls within the jurisdiction of a very wide range of departments and agencies. Within rural areas, for instance, major land-uses can be entirely regulated by Departments dealing with agriculture, forestry or energy – all of which have separate specialist approval and evaluation procedures that protect environmental resources. Similarly, it is important to note that other agencies make plans for the development of road, rail and energy infrastructure which must be accommodated by county and local plans. Such agencies are responsible for the separate environmental assessment of the adoption of these plans.

Spatial plans are principally about the arrangement of landuses to avoid conflicts and to protect amenities. Such plans exist as a series of layers that range from broad national policies – that have little spatial specificity – through regional, development and local area plans. Only the latter two types are likely to identify the locations where actual developments – and associated effects – are likely to occur. Each level of planning is subject to separate levels of assessment.

There are significant bodies of legislation that regulate how environmental resources are to be cared for. These exist and are implemented at a national level – with no local discretion. Such regulations cover the quality of air and water [surface, ground, drinking, marine and bathing waters], they cover River Basin Districts, they cover the protection of ecological resources [habitats, species] and they cover the protection of archaeology and national monuments.

Section 1 SEA Introduction and Background

1.1 Introduction and Terms of Reference

This is the Environmental Report of the Kildare County Development Plan 2011-2017 Strategic Environmental Assessment (SEA). The purpose of the report is to provide a clear understanding of the likely environmental consequences of decisions regarding the future accommodation of development in County Kildare. The SEA is carried out in order to comply with the provisions of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004) and in order to improve planning and environmental management of future development in the County. This report should be read in conjunction with the County Development Plan.

1.2 SEA Definition

Environmental assessment is a procedure that ensures that the environmental implications of decisions are taken into account before the decisions are made. *Environmental Impact Assessment*, or EIA, is generally used for describing the process of environmental assessment which is limited to individual projects such as waste incinerators, housing developments or roads while *Strategic Environmental Assessment*, or SEA, is the term which has been given to the environmental assessment of plans, and other strategic actions, which help determine what kind of individual projects take place.

SEA is a systematic process of predicting and evaluating the likely environmental effects of implementing a proposed plan, or other strategic action, in order to insure that these effects are appropriately addressed at the earliest appropriate stage of decision-making on a par with economic and social considerations.

The kind of development that occurs in the County and where it occurs will be partly determined by the implementation of the County Development Plan. By anticipating the effects and avoiding areas in which growth cannot be sustainably accommodated and by directing development towards more

compatible and robust receiving environments real improvements in environmental management and planning can occur. Also, the scope of both SEAs which may be required for lower-tier plans and programmes within the County and EIAs which may be required for individual projects within the County may be reduced.

1.3 Legislative Context

Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27 June 2001, on the assessment of the effects of certain plans and programmes on the environment, referred to hereafter as the SEA Directive, introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including land use planning. The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI No. 435 of 2004) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004). Both sets of Regulations became operational on 21 July 2004.

1.4 Implications for the Council and the Elected Members

The above legislation required the County Development Plan to undergo SEA. The findings of the SEA were expressed in an earlier draft of this Environmental Report which was submitted to the Elected Members alongside the Plan. The Elected Members were required to take account of the Environmental Report before the adoption of the Plan. On adoption of the Plan, the earlier draft of the Environmental Report was updated to become this final Environmental Report, taking into account changes which were made to the Draft Plan which was placed on public display. An SEA Statement has also been published and summarises, inter alia: how environmental considerations have been integrated into the Plan; and, the reasons for choosing the Plan as adopted over other alternatives detailed in the Environmental Report.

Section 2 SEA Methodology

2.1 Introduction

This section details how the SEA for the County Development Plan has been undertaken alongside the preparation of the Plan. The SEA process started in June 2009

and this report has been produced in May 2011.

Figure 2.1 lays out the main stages in the Plan/SEA process.

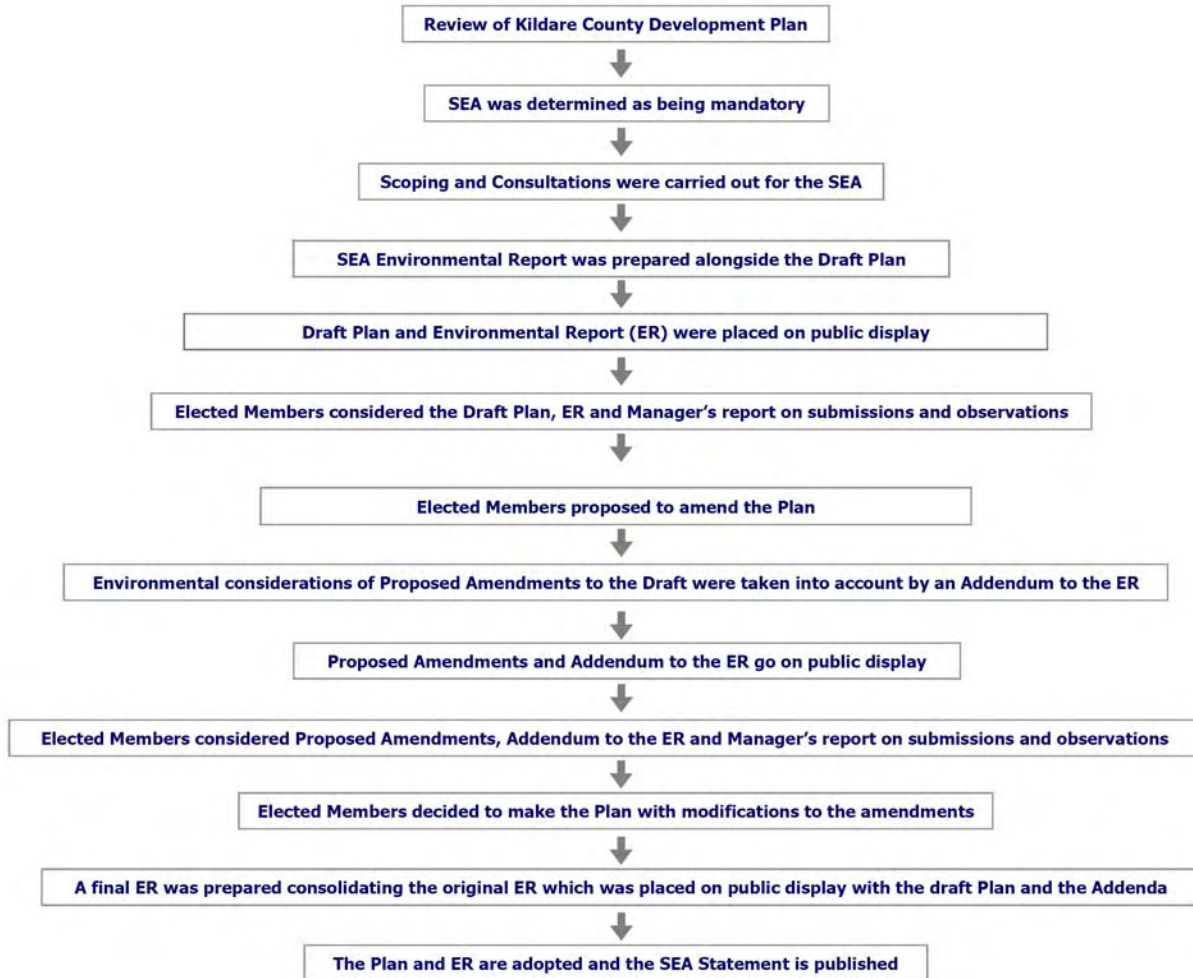


Figure 2.1 County Development Plan and SEA Stages

2.2 Scoping

2.2.1 Introduction

In consultation with the relevant authorities, the scope of environmental issues to be dealt with by the SEA together with the level of detail to which they are to be addressed was broadly decided on after preliminary data collection. Scoping of the SEA was continuous with certain issues being selected for further examination after certain data was obtained. Scoping helped the SEA to become focused upon the important issues, such as those relating to existing and potential environmental issues and environmental problems¹, thereby avoiding resources being wasted on unnecessary data collection.

Scoping facilitated the selection of issues relevant to the environmental components which are specified under the SEA Directive - biodiversity, fauna, flora, population, human health, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, and landscape.

With regard to human health, impacts relevant to the SEA are those which arise as a result of interactions with environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings). Impacts upon human beings arising as a result of social and economic conditions are not considered by SEA.

As environmental authorities identified under the SEA Regulations, the Environmental Protection Agency (EPA), the Department of the Environment, Heritage and Local

¹ Annex I of the SEA Directive requires that information is provided on 'any existing environmental problems which are relevant to the plan or programme', thus, helping to ensure that the proposed strategic action does not make existing environmental problems worse. Environmental problems arise where there is a conflict between current environmental conditions and ideal targets. If environmental problems are identified at the offset they can help focus attention on important issues and geographical areas where environmental effects of the plan or programme may be likely.

Government (DEHLG) and the Department of Communications, Energy and Natural Resources (DCENR)² were all sent SEA scoping notices indicating that submissions or observations in relation to the scope and level of detail of the information to be included in the environmental report could be made to Kildare County Council. The Eastern and Southern Regional Fisheries Boards were also sent SEA Scoping notices. Written submissions on the scope of the SEA were received from each of the environmental authorities and from the two fisheries boards and these were taken into account during the formulation of the scope of the SEA.

Representatives from the Southern and Eastern Regional Fisheries Boards, the EPA, the National Parks and Wildlife Service, the Department of Agriculture Fisheries and Food, Kildare County Council and CAAS attended an SEA Scoping Meeting on 4 September 2009. The information provided at this meeting - including that which relating to Appropriate Assessment (AA) - was taken into account during the formulation of the scope of the SEA.

The findings of the SEA were communicated to the plan-making team on an ongoing basis from the outset in order to allow for their integration into the Draft Plan thus minimising the potential for significant negative environmental effects arising from implementation of the Plan.

2.2.2 Principal Environmental Issues

The principal environmental issues centre on water and water-related issues³. This is because of the emergence of specific requirements from the River Basin Management Plans and the challenges of

² The Marine function of the Department of Communications, Marine and Natural Resources has been transferred to the Department of Agriculture Food and Fisheries

³ In order to help inform the content of both the Draft Plan and the SEA with regard to assimilative capacity and water services policies and objectives, a meeting was held with representatives from a number of departments in Kildare County Council, the EPA, the Southern and Eastern Regional Fisheries Boards, the National Parks and Wildlife Service and CAAS to discuss assimilative capacities of the County's water budget in the context of the review of the County Development Plan on 17 December 2009.

meeting those requirements on account of the existing condition and trends in both the surface and ground waters within and surrounding the County.

Surface Water

The capacity of rivers in the County to sustain effluents from increasing urban and peri-urban population concentrations is an important consideration - particularly where such water bodies are also designated as Natura 2000⁴ sites under Habitats Regulations.

The most recent EPA water quality data (see Figure 3.23) identifies Biotic Index Values or Q-values for multiple points on rivers throughout the County with quality ranging from High Status (Q5) to Bad Status (Q1, Q1-2 or Q2). Good status as defined by the Water Framework Directive (WFD) equates to approximately Good Status (Q4).

Water quality in the Liffey catchment is generally better than that in the Boyne and Barrow catchments in the County.

Most of the rivers within the County are classified by the WFD Risk Assessments - which take into account biological factors, chemical status as well as factors including morphology - as being either *at significant risk* or *probably at significant risk* of failing to achieve the objectives of the WFD by 2015 (see Figure 3.27).

There are also potential interacting issues due to dependence on both groundwater and surface waters which reduces low-flow characteristics of these surface waters during drought periods, thereby intensifying water stresses.

Groundwater

The Geological Survey of Ireland (GSI) rates aquifers according to their vulnerability to pollution (see Figure 3.29). Aquifer vulnerability refers to the ease with which

pollutants of various kinds can enter underground water. The most common ratings across the County are High Vulnerability and Moderate Vulnerability with areas of Extreme Vulnerability found in the east of the County - mainly at areas of elevated ground - and areas of Low Vulnerability found in the north and west.

The WFD Risk Assessments for groundwater shows that most groundwaters within the County are probably not at significant risk of failing to achieve the objectives of the WFD by 2015 (see Figure 3.28). Part of the groundwater body which underlies parts of County Dublin, the groundwater beneath the settlements of Leixlip, Maynooth and Celbridge is classified as being at significant risk of failing to achieve the objectives of the WFD by 2015. Groundwater beneath Naas, Newbridge and parts of the Curragh is classified as probably at significant risk while other groundwater bodies in the west and south are given the same classification.

Threats to groundwater have implications for the sustainability of the County and lower-tier plans to supply future water supplies for development or population growth in the County.

Water Based Habitats

Water-based habitats are the principal ecological resources in the County. They vary considerably in their character and extent ranging from the River Barrow in the west, to the River Liffey in the east, to various bogs and fens which are predominantly located in the western half of the County, to the Royal Canal in the north and the Grand Canal through the centre of the County.

There are 8 *Natura 2000* sites located wholly or partially within County Kildare (see Figure 3.11). As a result of the high level of protection which the Natura 2000 designation brings, these designations have the potential to limit population and economic growth with regard to the disposal of treated waste water and drinking water abstractions.

The west of the County contains areas of industrial peatlands - much of it in semi-state ownership. As the working lives of these areas draw to a close they will be subject to rehabilitation requirements in accordance with operating license conditions. The future of such areas will also be significantly determined

⁴ The 1992 Habitats Directive seeks to establish Natura 2000, a network of protected areas including Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) - throughout the European Union. SACs are designated and protected under the under the Habitats Directive due to their conservation value for habitats and species of importance in the European Union while SPAs are designated and protected under the 1979 Birds Directive.

by the Habitats Directive which recognises peatlands with a potential to be rehabilitated as priority habitats as identified by the Habitats Directive. Both of these factors may limit the range and type of future uses for such areas.

While many river systems in the greater Dublin area are not designated under the Habitats Directive, they may hold species that are designated under that Directive. The North Kildare area is traversed by a number of productive and important salmonid rivers, supporting Atlantic salmon (listed under Annex II and V of the Habitats Directive) and sea and brown trout. The River Liffey in particular represents a significant salmonid catchment⁵.

Other issues identified during the SEA Scoping process included mobility, noise, transport related energy usage, air quality, infrastructure corridors, energy use and supply in major industry, landscape, extractive industries and flooding.

2.3 Environmental Baseline Data and Other Strategic Actions

The SEA process is informed by the environmental baseline (i.e. the current state of the environment - flora and fauna, soil, water, cultural heritage etc.) to facilitate: the identification and evaluation of the likely significant environmental effects of implementing the County Development Plan and the alternatives; and, the subsequent monitoring of the effects of the Plan as adopted. Data was collected to describe the environmental baseline and its likely evolution without implementation of the Plan.

The SEA Directive requires that information is provided on 'any existing environmental problems which are relevant to the plan or programme'. Information is therefore provided on existing environmental problems which are relevant to the Plan, thus helping to ensure that the Plan does not exacerbate any existing environmental problems within or surrounding the County.

⁵ Eastern Regional Fisheries Board (2008) Scoping Submission on the Kildare County Development Plan 2011-2017

The SEA Directive requires that information on the baseline environment be focused upon the relevant aspects of the environmental characteristics of areas likely to be significantly affected and the likely evolution of the current environment in the absence of the strategic action i.e. the Plan. Any information that does not focus upon this is surplus to requirements; therefore the SEA focuses on the significant issues, disregarding the less significant ones. In addition, the SEA Directive aims to avoid duplication of the assessment whereby a strategic action forms part of a hierarchy. Furthermore, if certain matters are more appropriately assessed at different levels of the hierarchy in which the Plan is positioned, or, if certain matters have already been assessed by a different level of the hierarchy then additional assessment is not needed.

In order to describe the baseline (the current state of the environment) in the County, data was collated from currently available, relevant environmental sources.

2.4 Alternatives

The SEA Directive requires that reasonable alternatives (taking into account the objectives and the geographical scope of the plan or programme) are identified described and evaluated for their likely significant effects on the environment.

Taking into account the objectives and the geographical scope of the County Development Plan, alternatives were formulated by the plan-making team with guidance from CAAS.

2.5 The SEA Environmental Report

In this Environmental Report - an earlier version of which was placed on public display alongside the Draft Plan - the likely environmental effects of the Plan and the alternatives are predicted and their significance evaluated with regard to the environmental baseline. The Environmental Report provides the decision-makers, the members of Kildare County Council, who decide what type of Plan to make, as well as the public, with a clear understanding of the likely environmental consequences of decisions regarding the future accommodation of growth in the County. Mitigation measures to prevent

or reduce significant adverse effects posed by the Plan, or to maximise any benefits arising are identified - these have been integrated into the Plan. The alternatives are also presented in this report, as are measures concerning monitoring.

The draft of the Environmental Report which was placed on public display alongside the Draft Plan was required to be updated to take account of changes which were made to the Draft Plan after it was placed on public display.

2.6 The SEA Statement

When the Plan adopted a document referred to as the SEA Statement must be made public. This is required to include information on: how environmental considerations have been integrated into the Plan - highlighting the main changes to the Plan which resulted from the SEA process; how the Environmental Report and consultations have been taken into account - summarising the key issues raised in consultations and in the Environmental Report indicating what action, if any, was taken in response; and the reasons for choosing the Plan in the light of the other alternatives, identifying the other alternatives considered, commenting on their potential effects and explaining why the Plan was selected.

2.7 Legislative Conformance

This report complies with the provisions of the SEA Regulations and is written in accordance with Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004).

Table 2.1 (overleaf) is a reproduction of the checklist of information to be contained in the Environmental Report (DEHLG, 2004)⁶ and includes the relevant sections of this report which deal with these requirements.

⁶ DEHLG (2004) *Implementation of SEA Directive (2001/42/EC): Guidelines for Regional Authorities and Planning Authorities* Dublin: Government of Ireland.

2.8 Difficulties Encountered

2.8.1 Centralised Data Source

The lack of a centralised data source that could make all environmental baseline data for the County both readily available and in a consistent format posed a challenge to the SEA process. This difficulty is one which has been encountered while undertaking lower-tier SEAs at local authorities across the Country and was overcome by investing time in the collection of data from various sources and through the use of Geographical Information Systems.

2.8.2 Potential Monitoring Data Gaps

The following identifies issues with regard to the availability of data for the monitoring of selected SEA indicators (see also Section 10 Monitoring):

Indicator B1 (Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive) is to be sourced from:

- o the DEHLG report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive; and,
- o Consultations with the NPWS.

Consultations with the NPWS may be essential should the aforementioned report be of insufficient detail or frequency.

Indicator B2 (Percentage loss of functional connectivity to macro-corridors, stepping stones and contiguous areas of habitat which are important on a County level without remediation as a result of implementation of the Plan – as evidenced from a resurvey of CORINE mapping) is to be sourced from:

- o CORINE mapping;
- o Consultation with the National Parks and Wildlife Service; and,
- o Development Management Processes in the Council.

As noted in Section 4.2.2, important macro-corridors and contiguous areas of habitat include the County's rivers, lakes, uplands and peatlands. It is recommended that important

macro-corridors and contiguous areas of habitat are identified as part of the monitoring programme and that time resources are spent in the monitoring of these rather than in the monitoring of corridors or areas of habitat which are not important at County level.

Information Required to be included in the Environmental Report	Corresponding Section of this Report
(A) Outline of the contents and main objectives of the Plan, and of its relationship with other relevant plans and programmes	Sections 4 and 5
(B) Description of relevant aspects of the current state of the environment and the evolution of that environment without implementation of the Plan	Section 3
(C) Description of the environmental characteristics of areas likely to be significantly affected	Sections 3, 4, 7 and 8
(D) Identification of any existing environmental problems which are relevant to the Plan, particularly those relating to European protected sites	Section 3
(E) List environmental protection objectives, established at international, EU or national level, which are relevant to the Plan and describe how those objectives and any environmental considerations have been taken into account when preparing the Plan	Sections 4, 6, 7 and 9
(F) Describe the likely significant effects on the environment	Sections 7 and 8
(G) Describe any measures envisaged to prevent, reduce and as fully as possible offset any significant adverse environmental effects of implementing the Plan	Section 9
(H) Give an outline of the reasons for selecting the alternatives considered, and a description of how the assessment was undertaken (including any difficulties)	Sections 2, 6 and 7
(I) A description of proposed monitoring measures	Section 10
(J) A non-technical summary of the above information	Non Technical Summary (separately Bound)
(K) Interrelationships between each Environmental topic	Addressed as it arises within each Section

Table 2.1 Checklist of Information included in this Environmental Report

Section 3 County Kildare Environmental Baseline

3.1 Introduction

The environmental baseline of County Kildare is described in this section. This baseline together with the Strategic Environmental Objectives, which are outlined in Section 4, is used in order to identify, describe and evaluate the likely significant environmental effects of implementing the County Development Plan and in order to determine appropriate monitoring measures.

The environmental baseline is described in line with the legislative requirements encompassing the following components – biodiversity, flora and fauna, population, human health, soil, water, air and climatic factors, material assets, cultural heritage, landscape and the interrelationship between these components. A description is also included of the likely effects upon each environmental component under a do-nothing scenario i.e. the likely evolution of the environment without the implementation of the County Development Plan.

Kildare is an inland county bordered by counties Wicklow, Dublin, Meath, Offaly, Laois and Carlow. The County occupies an area of 418,645 acres (169,426 hectares), which consist of fertile plains with upland areas mainly on the eastern County boundary. The main towns include Naas, Sallins, Leixlip, Cellbridge, Newbridge, Maynooth and Athy.

The population of County Kildare has increased from 134,881 in 1996 to 186,335 in 2006, representing a growth of 38%. This equates to more than double the national population increase of 17% over the same period.

Land use in the County is primarily agricultural in the rural areas. Expanses of peat bog exist at various locations throughout the County, particularly in the west and north west of the County. A wide variety of uses including commercial, industrial and residential, exist in the urban areas of the County.

The County has a rich and diverse range of natural habitats such as bog and heath, fen, woodland, hedgerows, rivers, lakes and a canal, many of which are recognised as being of local, national and EU importance, and many are designated for protection/preservation under national and/or EU legislation.

The County is served by a number of rail lines including the Dublin to Sligo, Mayo, Cork and Galway lines. A number of major routes also traverse the County such as the N4, M6/N6, M7/N7 and N8.

3.2 Biodiversity and Flora and Fauna

3.2.1 Introduction

County Kildare supports a wide diversity of natural and semi-natural habitats and a wide range of plant and animal species, some of which have come under threat due to development pressures and increased demand for new development land.

Green space, which makes up a large part of the County, consists of a variety of habitats and corridors which provide for the movement of wildlife. Green space within Kildare is comprised of agricultural lands, bogs and heath, woodlands, grasslands and a number of open spaces in residential areas.

The County falls into the catchments of the Liffey, the Barrow and the Boyne. These rivers and their associated tributaries and lakes, support good areas of biodiversity.

Man-made habitats within the Plan area are also important biodiversity areas. Gardens provide habitats for a range of wildlife including various bird species, invertebrates, such as bees and butterflies and mammals, such as hedgehogs, mice, rats and foxes. These species move around between gardens using hedgerows and vegetated areas. These urban green spaces, however small, are therefore of importance as they form part of a network of green spaces across the Plan area including gardens, parks, graveyards, amenity walks, railway lines and patches of woodland and scrub within which animals and plants continue to thrive.

3.2.2 CORINE Land Cover Mapping⁷

CORINE land cover mapping⁸ for the County for the year 2006 is shown on Figure 3.3.

⁷ European Environment Agency Coordination of Information on the Environment (2004) *Ireland's Corine Land Cover 2000 (CLC2000)* Copenhagen: EEA

⁸ CORINE Land Cover (CLC) is a map of the European environmental landscape based on interpretation of satellite images. Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface. Because of the scale of the CORINE data and the method by which it was collected there are likely to be a number of inaccuracies at the local

Pastures are identified as the main land cover in the County. Large expanses of *Peat Bog* exist in the north western, central and south western parts of the County. A large amount of *Non-irrigated Arable Land* is dispersed throughout the County with smaller amounts of *Forest (Broad-Leaved, Mixed and Coniferous)* and *Transitional Woodland Scrub* evident. *Continuous* and *Dis-Continuous Urban Fabric* is evident at the settlements in the County.

Land cover differences between the CORINE 2006 data (see Figure 3.3) and the data for the year 2000 (see Figure 3.2) are illustrated on Figure 3.5. Changes occurring mainly involve the development of agricultural land.

Land cover differences between the CORINE 2000 data (see Figure 3.2) and the data for the year 1990 (see Figure 3.1) are illustrated on Figure 3.4. Most of the changes in land cover are from one agricultural cover to another, for example, from *Pastures* to *Non-Irrigated Arable Land*.

Land cover categories which indicate lands that are likely to be most valuable to biodiversity are illustrated on Figure 3.6. *Peat Bogs* make up the greatest extent of these land cover categories, followed by *Transitional Wood/Scrub*, *Broad-Leaved Forests*, *Mixed Forests*, *Natural Grassland* and *Inland Marshes*.

3.2.3 Ecological Networks

Article 10 of the Habitats Directive recognises the importance of ecological networks as corridors and stepping stones for wildlife, including for migration, dispersal and genetic exchange of species of flora and fauna. The Directive requires that ecological connectivity and areas of ecological value outside the Natura 2000 network of designated ecological sites are maintained and it recognises the need for the management of these areas through land use planning and development policies. Ecological networks are important in connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent islands of habitat from being isolated entities. Ecological networks are composed of linear features, such as treelines, hedgerows, rivers and streams, which provide corridors for wildlife species moving within their

level. It is noted, however, that the land cover shown on the maps is generally accurate. The European Environment Agency, in conjunction with the European Space Agency, the European Commission and member countries is currently updating the CORINE land cover database.

normal range. They are particularly important for mammals, especially for bats and small birds.

Key ecological corridors within the County include the River Liffey, Grand Canal, River Boyne, River Barrow, Slate River, Morell River and their tributaries and lakes where relevant.

3.2.4 Habitat Mapping

Habitats mapping was carried out for County Kildare. Habitats were mapped in the vicinity of Kildare (see Figure 3.7), Newbridge (see Figure 3.8) and Kilcullen (see Figure 3.9) to assist in the identification of places of biodiversity importance (Local Biodiversity Areas) as an action of the Kildare Heritage Plan. The objective of the study was to identify areas of biodiversity value particularly those which are linked to the existing high value areas such as the River Liffey, the Curragh and Pollardstown Fen through ecological networks. Habitat mapping took place within the planning boundaries during the summer of 2007.

The survey revealed a total of 37 (out of a possible 75) habitats. The dominant type was Improved Agricultural Grassland (Fossitt code GA1) reflecting the agricultural environs of these towns. Land and features of biodiversity interest cover c13%. They include rivers, other types of wetlands, hedgerows, semi-natural grasslands and woodlands. Descriptions were compiled of 24 sites of biodiversity value in Newbridge, 15 in Kilcullen and 12 in Kildare.

3.2.5 Designations

3.2.5.1 Introduction

Figure 3.10 maps a range of designated ecological sites⁹ (Special Protection Areas, candidate Special Areas of Conservation, Natural Heritage Areas, proposed Natural Heritage Areas and Nature Reserves) across the County. The Habitats Directive seeks to establish Natura 2000, a network of protected areas throughout the EU. It is the responsibility of each member state to designate SACs to protect habitats and species, which, together with the SPAs designated under the 1979 Birds Directive, form Natura 2000. Figure 3.11 maps and names designated Natura 2000 sites within the County and within 5, 10 and 15km of the site.

⁹ Site Synopses for SPAs, cSACs and NHAs are available from the National Parks and Wildlife Service at www.npws.ie

3.2.5.2 Special Protection Areas

Special Protection Areas (SPAs) have been selected for protection under the 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC) - referred to as the Birds Directive - by the DEHLG due to their conservation value for birds of importance in the European Union.

There is one SPA, Poulaphouca Reservoir SPA, located within the County. Wicklow Mountains SPA lies within a 15km boundary of the Plan area. These sites are listed on Table 3.1 and include various bogs, rivers and loughs.

3.2.5.3 Special Areas of Conservation

Special Areas of Conservation (SACs) have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) - referred to as the Habitats Directive - by the DEHLG due to their conservation value for habitats and species of importance in the European Union.

Candidate Special Areas of Conservation (cSACs) have been selected for protection under the European Council Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (92/43/EEC), referred to as the Habitats Directive, by the Department of the Environment, Heritage and Local Government due to their conservation value for habitats and species of importance in the European Union. The sites are *candidate* sites because they are currently under consideration by the Commission of the European Union.

There are seven cSACs located within the County. These sites are listed on Table 3.1 and include various bogs, fens, woods, grasslands and rivers. The nine cSACs located within a 15km radius of the Plan area are listed on Table 3.1 and mapped and named on Figure 3.11.

3.2.5.4 Natural Heritage Areas

Natural Heritage Areas (NHAs) are designated due to their national conservation value for ecological and/or geological/geomorphological heritage. They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. NHAs are designated under the Wildlife (Amendment) Act 2000.

In addition to the NHAs, a number of proposed NHAs were published on a non-statutory basis in 1995, but have not since been statutorily

proposed or designated. The NHAs and pNHAs within the County are mapped on Figure 3.10.

3.2.5.5 Ramsar Sites

The Convention of Wetlands of International Importance, especially as Water Fowl Habitat, was established at Ramsar in 1971 and ratified by Ireland in 1984. The main aim of the Convention is to secure the designation by each contracting state of wetlands in its territory for inclusion in a list of wetlands of international importance for waterfowl. This entails the commitment of each contracting state to a policy of protection and management of the designated wetlands, and of formulating and implementing planning so as to promote the conservation of designated wetlands and, as far as possible, the wise use of wetlands in its territory. Ireland presently has 45 sites designated as Wetlands of International Importance, with surface areas of 66,994 hectares. There is one Ramsar site designated within the County spanning 130 hectares of wetlands.

Pollardstown Fen (Site No. 474)¹⁰ was designated 30th May 1990. It is situated on the northern margin of the Curragh approximately 3km west-north-west of Newbridge and covers an area of 130ha. Pollardstown Fen is the largest remaining spring-fed fen in Ireland. Habitats include semi-natural fen, damp grassland, woodland, and open water. The open water attracts waterbirds in regionally important numbers. The fen supports an important assemblage of invertebrate fauna and contains a complete palaeoecological record dating back to the last glaciation. Interpretive material and an observation hide are available.

3.2.5.6 Statutory Nature Reserves

Statutory Nature Reserves are state-owned land, inland waters or foreshore areas forming the habitat of a species or community of flora and fauna of scientific interest or forming part of an ecosystem of scientific interest, which would benefit from protection measures, established under the Wildlife Act, 1976 and the Wildlife (Amendment) Act, 2000 and are protected under Ministerial order. Pollardstown Fen was established in 1986 as a State owned Nature Reserve.¹¹

¹⁰ Ramsar Convention Secretariat (2000) *The Annotated Ramsar List of Wetlands of International Importance* Switzerland: Ramsar Convention Secretariat

¹¹ National Parks and Wildlife Service (2007) *Statutory Nature Reserves: County Kildare* Dublin: Government of Ireland

3.2.5.7 Register of Protected Areas

In response to the requirements of the Water Framework Directive, a number of water bodies, or parts of water bodies, which must have extra controls on their quality by virtue of how their waters are used by people and by wildlife, have been listed on Registers of Protected Areas (RPAs) (see Section 3.5.6). There are a number of water dependent habitats in the County which have been listed on these registers. These are mapped on Figure 3.33.

3.2.5.8 Freshwater Pearl Mussels

The freshwater pearl mussel (*Margaritifera Margaritifera*) is a bivalve, which is a type of mollusc or snail with a body that is almost completely enclosed between a pair of shells. The habitat of the freshwater pearl mussel in Ireland is restricted to near natural, clean flowing waters, often downstream of ultra-oligotrophic lakes.

The Department of the Environment, Heritage and Local Government has prepared 27 Draft Management Plans for Freshwater Pearl Mussel in accordance with Article 13 (5) of the Water Framework Directive as transposed in Ireland by the European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003) and the Habitats Directive as transposed in Ireland by the European Communities (Natural Habitats) Regulations 1997 (S.I. No. 94 of 1997). The objective of the plans is to restore the freshwater pearl mussel populations in 27 rivers, or stretches of rivers that are within the boundaries of Special Areas of Conservation.

While the Dereen catchment in County Wicklow is the nearest catchment of the specified pearl mussel populations, there are no watercourses in Kildare which are in this catchment. It is noted that tributaries of the River Nore, which is designated for populations of Freshwater Pearl Mussels, rise in southern Kildare.

3.2.5.9 Salmonid Waters

Salmonid Waters are designated and protected under the European Communities (Quality of Salmonid Waters) Regulations 1998 (SI No. 293 of 1988). Salmonid Water designation imposes an obligation to maintain specific water quality standards and control pollution. The main channels of the River Boyne and River Slaney are designated Salmonid Rivers. These waters are mapped on Figure 3.32.

3.2.6 Existing Biodiversity and Flora and Fauna Problems

Changes in land cover indicated by the CORINE data (see Figure 3.4 for 1990-2000 changes and Figure 3.5 for 2000-2006 changes) indicate that semi natural areas within the County have been replaced by uses which generally include impermeable surfaces. These changes are also likely to result in losses of biodiversity and flora and fauna.

Aquatic flora and fauna is vulnerable to all forms of pollution. As identified under Section 3.5, most rivers and some underlying groundwater within and surrounding the County are "at significant risk" or "probably at significant risk" with regard to meeting legislative water quality objectives under the Water Framework Directive.

There are existing problems with regard to surface water quality in the County (see Section 3.5) which are likely to be impacting upon aquatic biodiversity and flora and fauna.

The NPWS Site Synopsis for the River Barrow and River Nore SAC states that Indian Balsam (*Impatiens glandulifera*), an introduced and invasive species, is abundant in places within the SAC. This species poses many threats to native species such as: out-competing native species; impeding flow at times of high rainfall where it grows in dense stands along river banks increasing the likelihood of flooding, and; die back of extensive stands over winter can leave river banks bare and exposed to erosion¹². It is noted that other invasive species may occur in the County.

3.2.7 Evolution of Biodiversity and Flora and Fauna in the absence of the Plan

In the absence of a Development Plan for County Kildare, development would have no guidance as to where it should occur and planning applications would be assessed on an individual basis with flora and fauna, habitats and ecological connectivity protected under a number of strategic actions relating to biodiversity and flora and fauna protection. The evolution of biodiversity and flora and fauna would be dependent on the rate and extent of any such developments which would take place.

¹² Biodiversity Ireland (2010), *National Invasive Species Database, Indian Balsam (Impatiens glandulifera) Datasheet* Waterford: DEHLG

Development along or adjacent to the banks of rivers such as the River Liffey, could result in a reduction in ecological connectivity within and between these and other habitats.

Any beneficial effects upon biodiversity and flora and fauna which would occur as a result of specific policies and objectives in the Plan would not arise if the Plan was not implemented.

In the absence of a Development Plan, any greenfield development would adversely impact upon biodiversity and flora and fauna by replacing natural or semi natural habitats with artificial surfaces. The significance of such impacts would be dependent on whether such developments would result in the loss of habitats or species of importance as well as the cumulative loss and fragmentation of habitats and species as a result of all greenfield developments.

A Development Plan for the area could contribute to the occurrence of development in an appropriate and sustainable manner.

In the absence of a Development Plan there would not be an integration of the ecological protection measures required by the Habitats Directive with the planning or development management of vulnerable areas. Therefore it is likely that there would be less effective protection of ecological resources in the absence of a Development Plan.

The County contains significant areas of industrial peatlands - much of it in semi-state ownership. As the working lives of these areas draws to a close they will be subject to rehabilitation requirements by the operating license conditions. The future of such areas will also be significantly determined by the Habitats Directive which recognises peatlands with a potential to be rehabilitated as priority habitats. Both of these factors may limit the range and type of future uses for such areas.

Pollution of water bodies as a result of any inappropriately sited or managed future developments along rivers would be likely to adversely impact aquatic biodiversity and flora and fauna including salmonid species and other species protected under the Habitats Directive.

Natura 2000 Sites Within County Kildare		Natura 2000 Sites Within 15km of the County Boundary	
Special Protection Areas (SPAs)	Code ¹³	Special Protection Areas (SPAs)	Code ¹³
Poulaphouca Reservoir SPA	004063	Wicklow Mountains SPA	004040
Candidate Special Areas of Conservation (cSACs)	Code	Candidate Special Areas of Conservation (cSACs)	Code
Ballynafagh Bog ¹⁴	000391	Ballyprior Grassland	002256
Ballynafagh Lake	001387	Glenasmole Valley	001209
Mouds Bog	002331	Holdenstown Bog	001757
Pollardstown Fen	000396	Mount Hevey Bog	002342
Red Bog, Kildare	000397	Mountmellick	002141
River Barrow and River Nore	002162	River Boyne And River Blackwater	002299
Rye Water Valley/Cartron	001398	Slaney River Valley	000781
		The Long Derries, Edenderry	000925
		Wicklow Mountains	002122

Table 3.1 Natura 2000 Sites within County Kildare and within 15km of its boundary

¹³ Each cSAC and SPA is assigned a unique six digit site code by the National Parks and Wildlife Service (NPWS)

¹⁴ The cessation of turf cutting at Ballynafagh Bog came into effect in 2009.

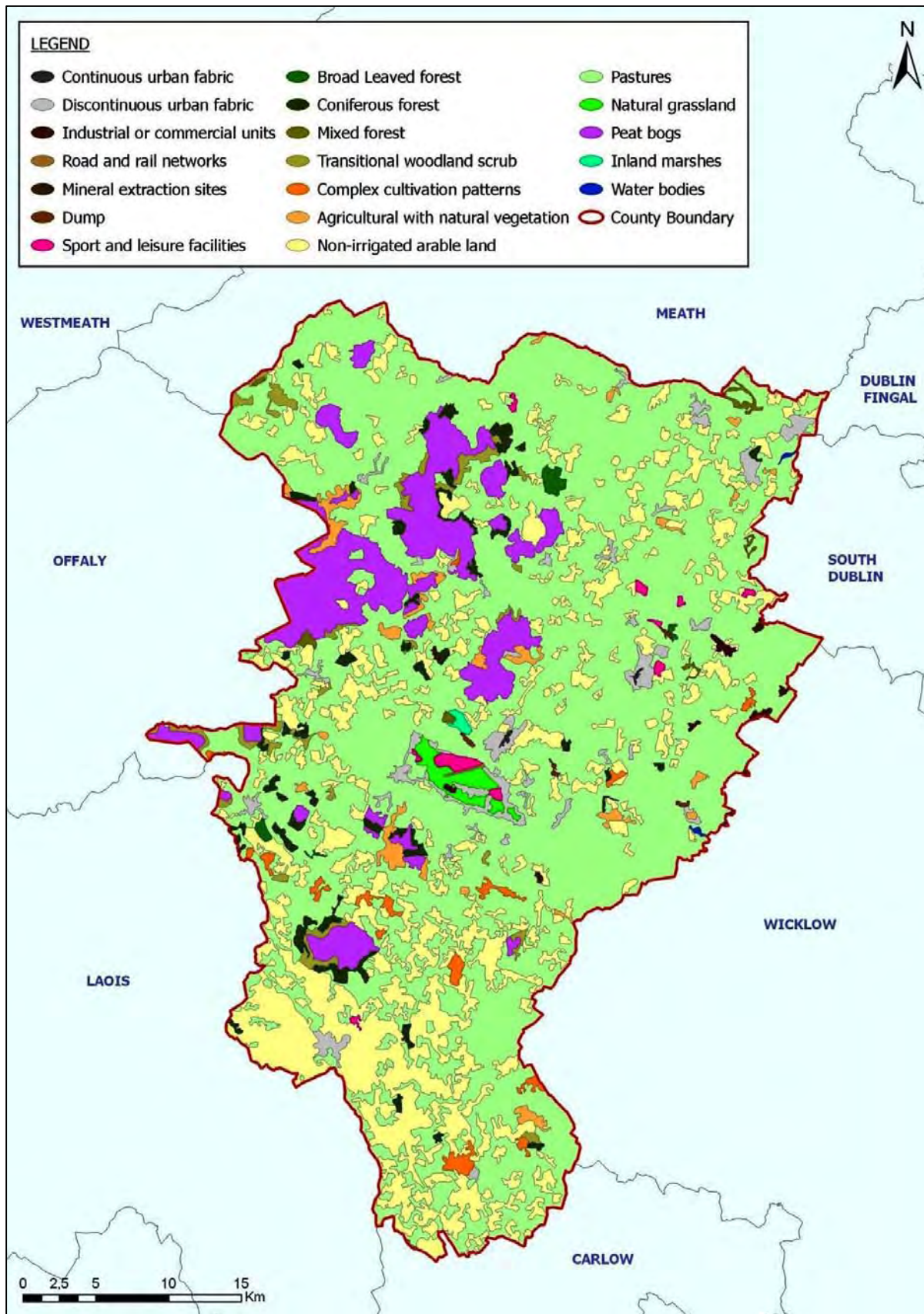


Figure 3.1 CORINE Land Cover 1990
 Source: EPA (2004)

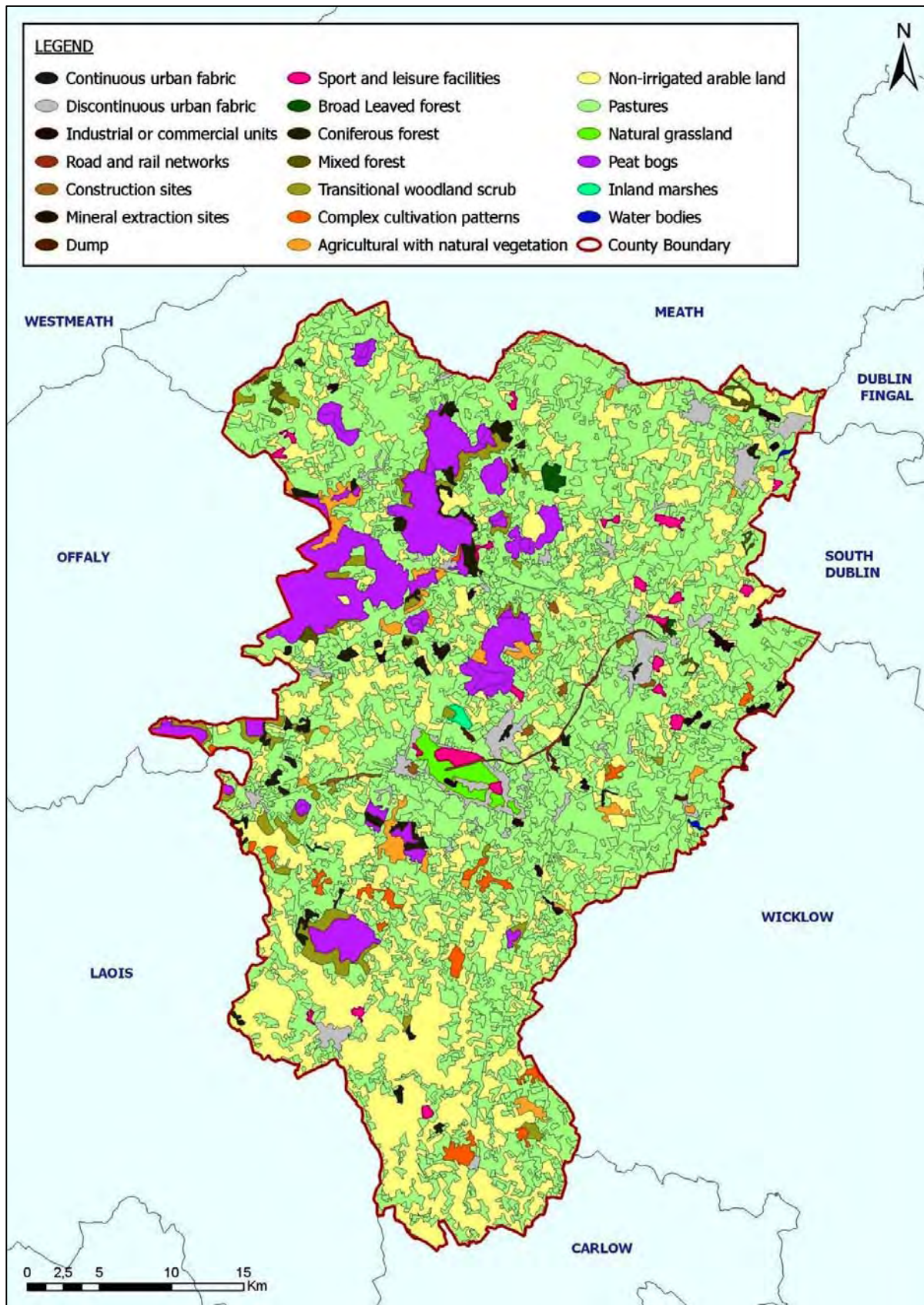


Figure 3.2 CORINE Land Cover 2000
Source: EPA (2009)

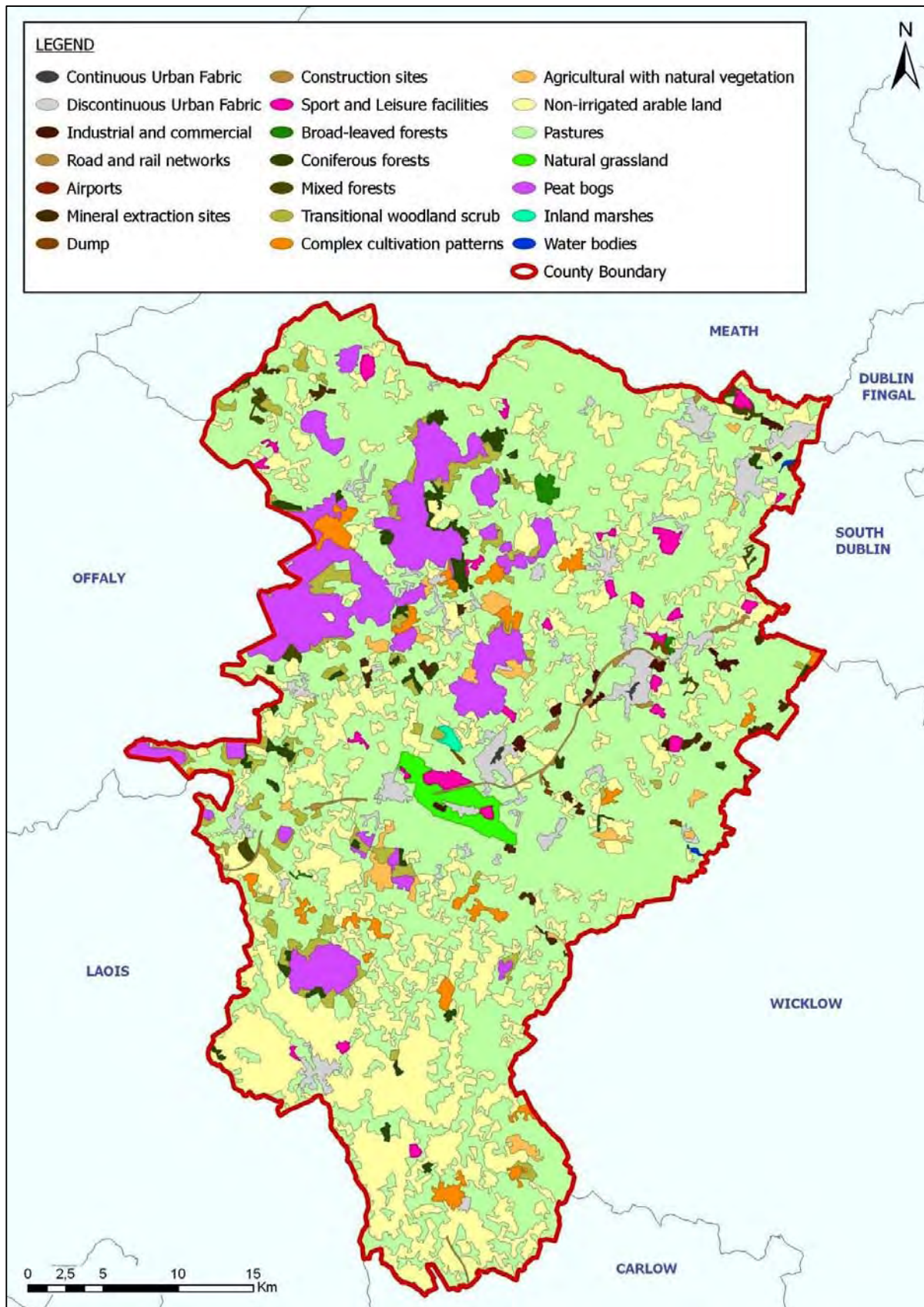


Figure 3.3 CORINE Land Cover 2006
Source: EPA (2009)

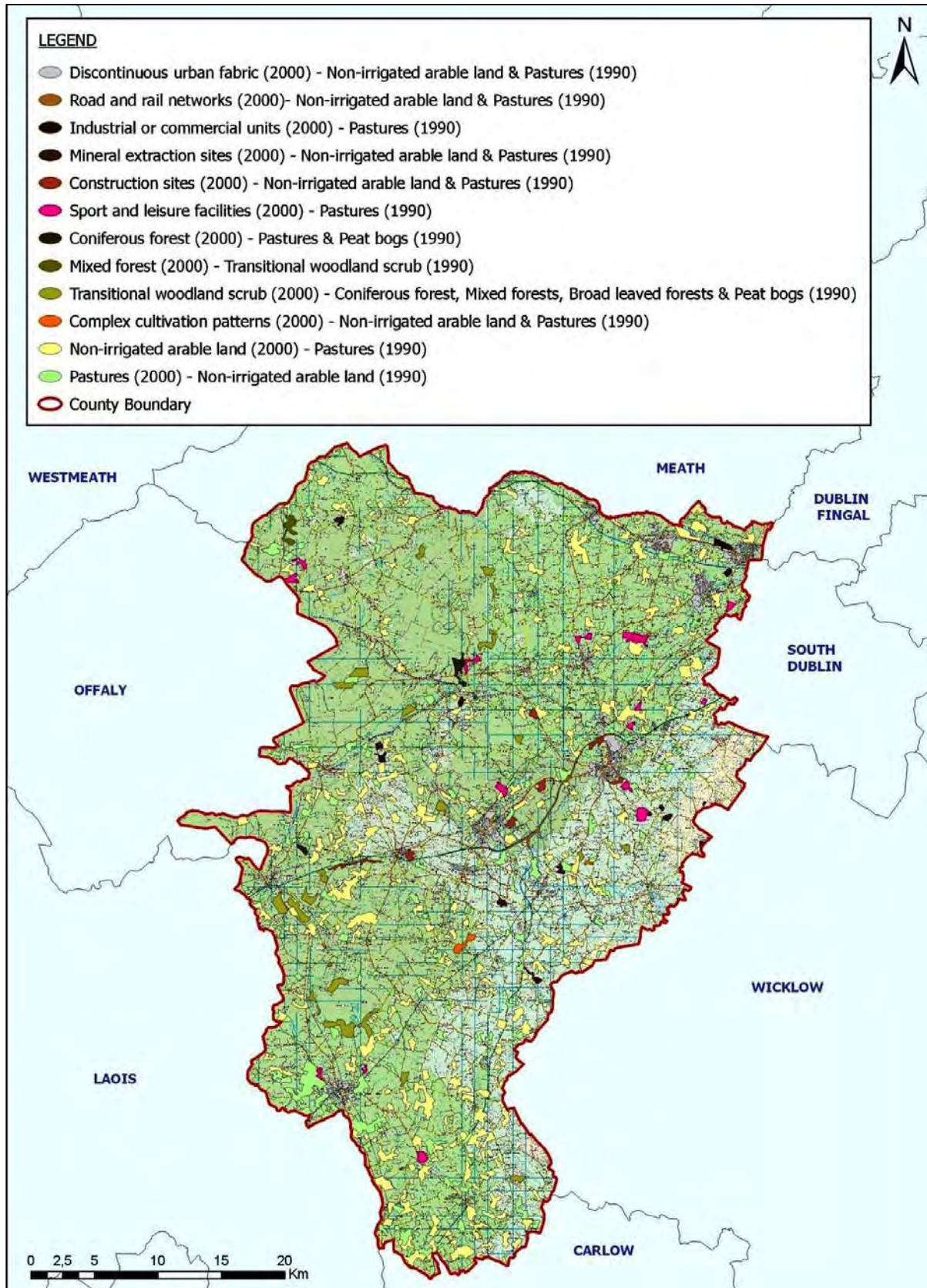


Figure 3.4 CORINE Land Cover Changes 1990-2000 showing their 2000 cover
 Source: EPA (2009)



Figure 3.5 CORINE Land Cover Changes 2000-2006 showing their current (2006) cover
 Source: EPA (2009)

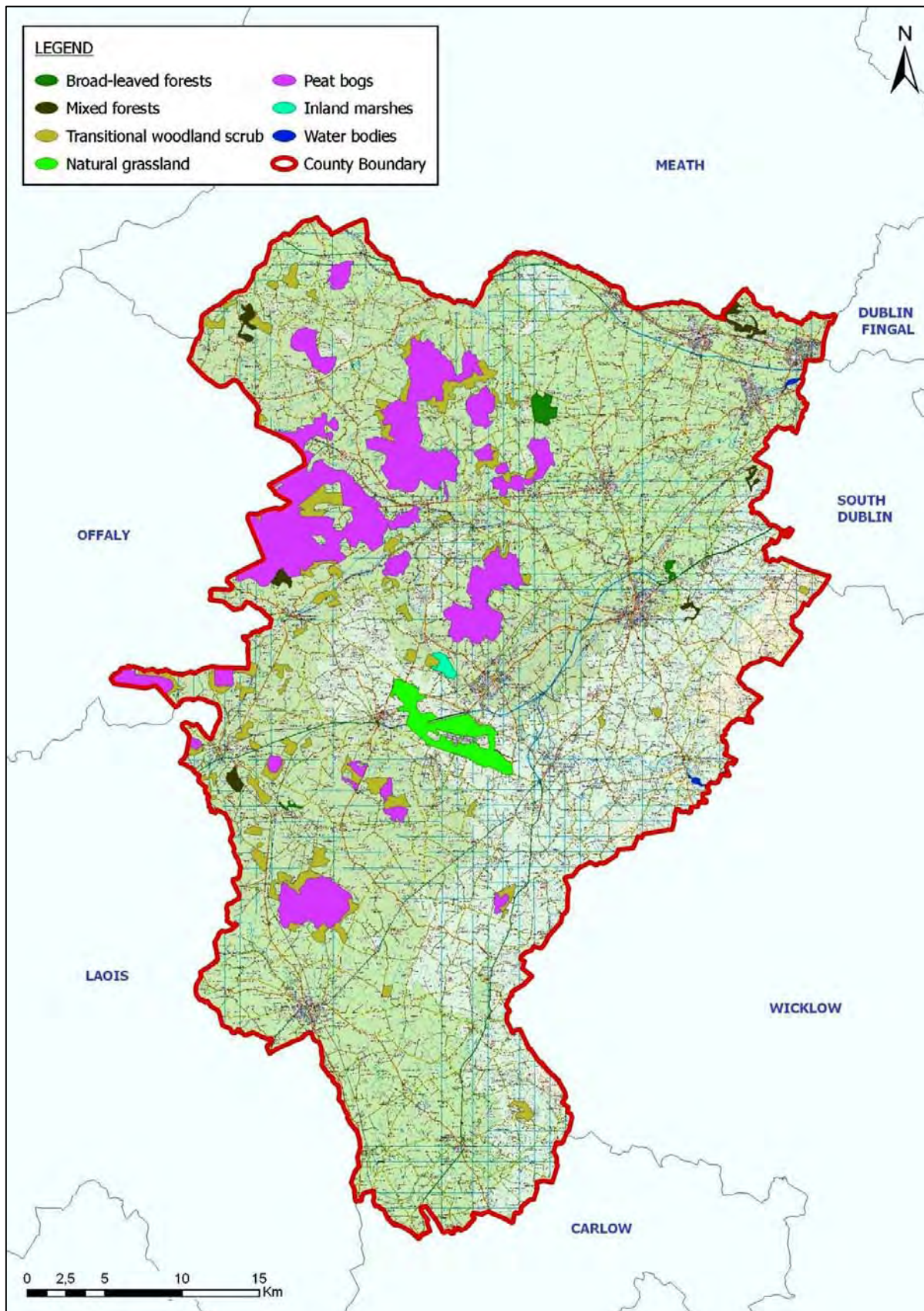


Figure 3.6 CORINE Sensitive Land Cover Classifications (lands that are likely to be most valuable to biodiversity)

Source: EPA (2009)

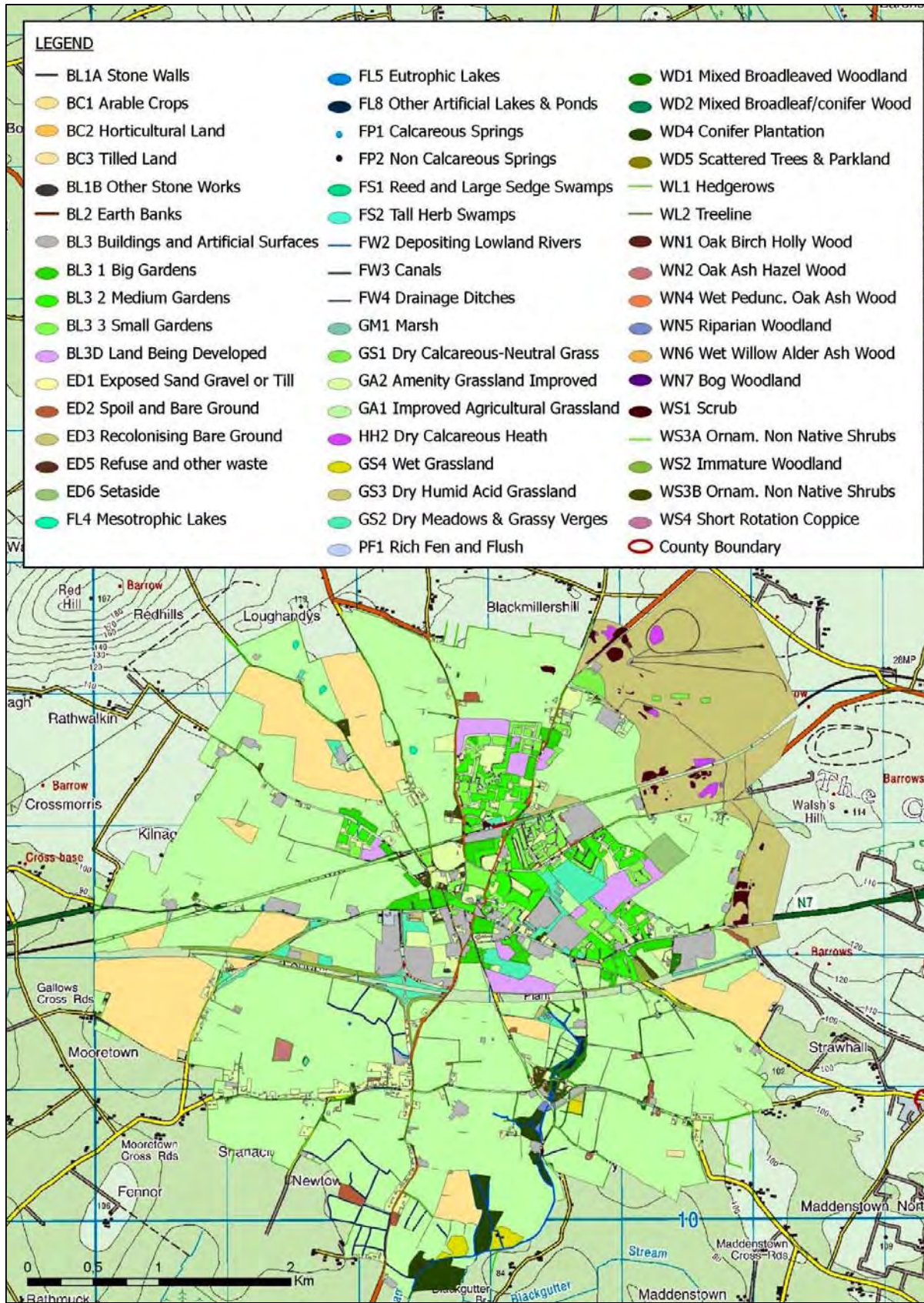


Figure 3.7 Habitat Mapping – Kildare
 Source: Mary Tubridy and Associates (2007)

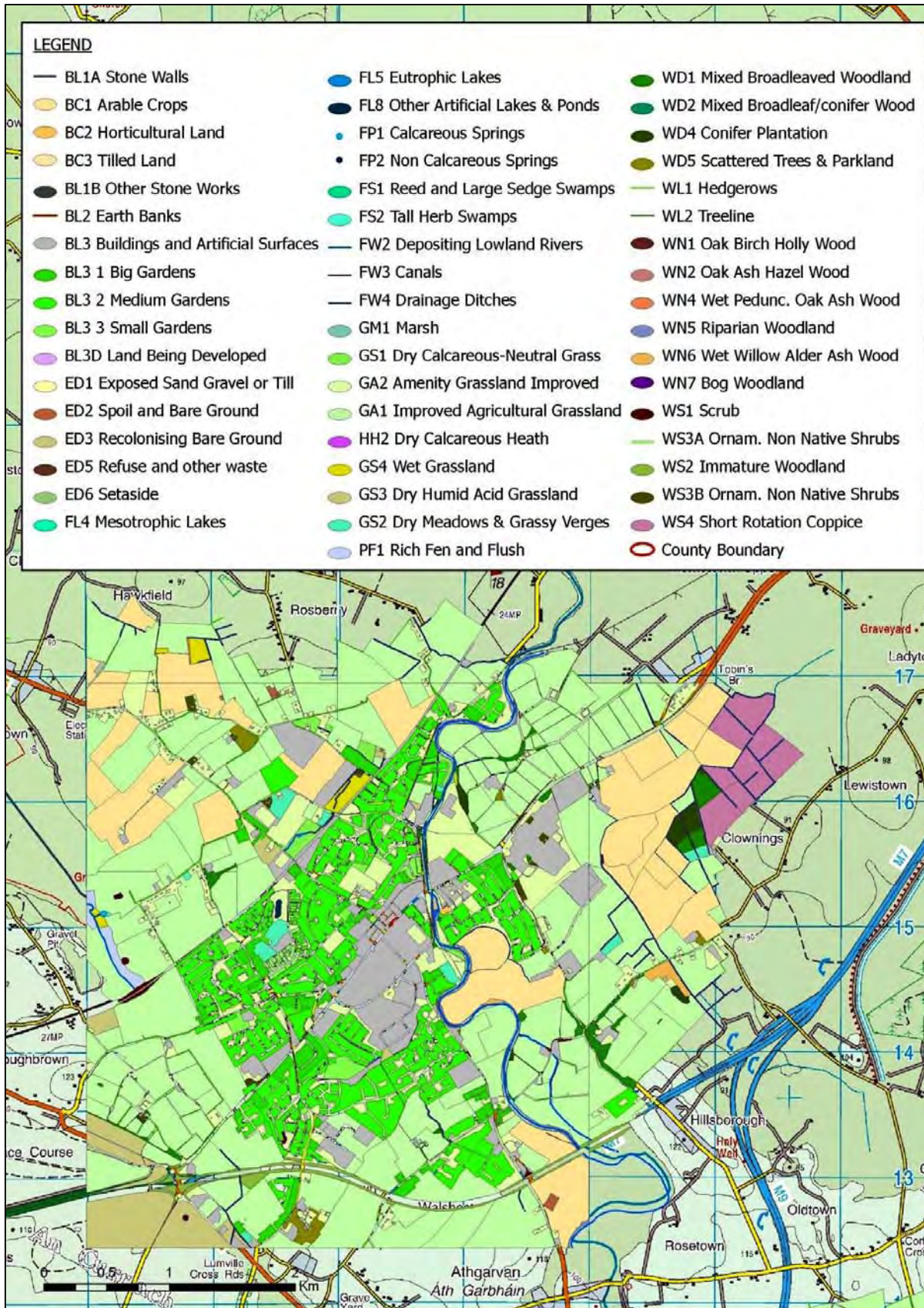


Figure 3.8 Habitat Mapping – Newbridge
 Source: Mary Tubridy and Associates (2007)

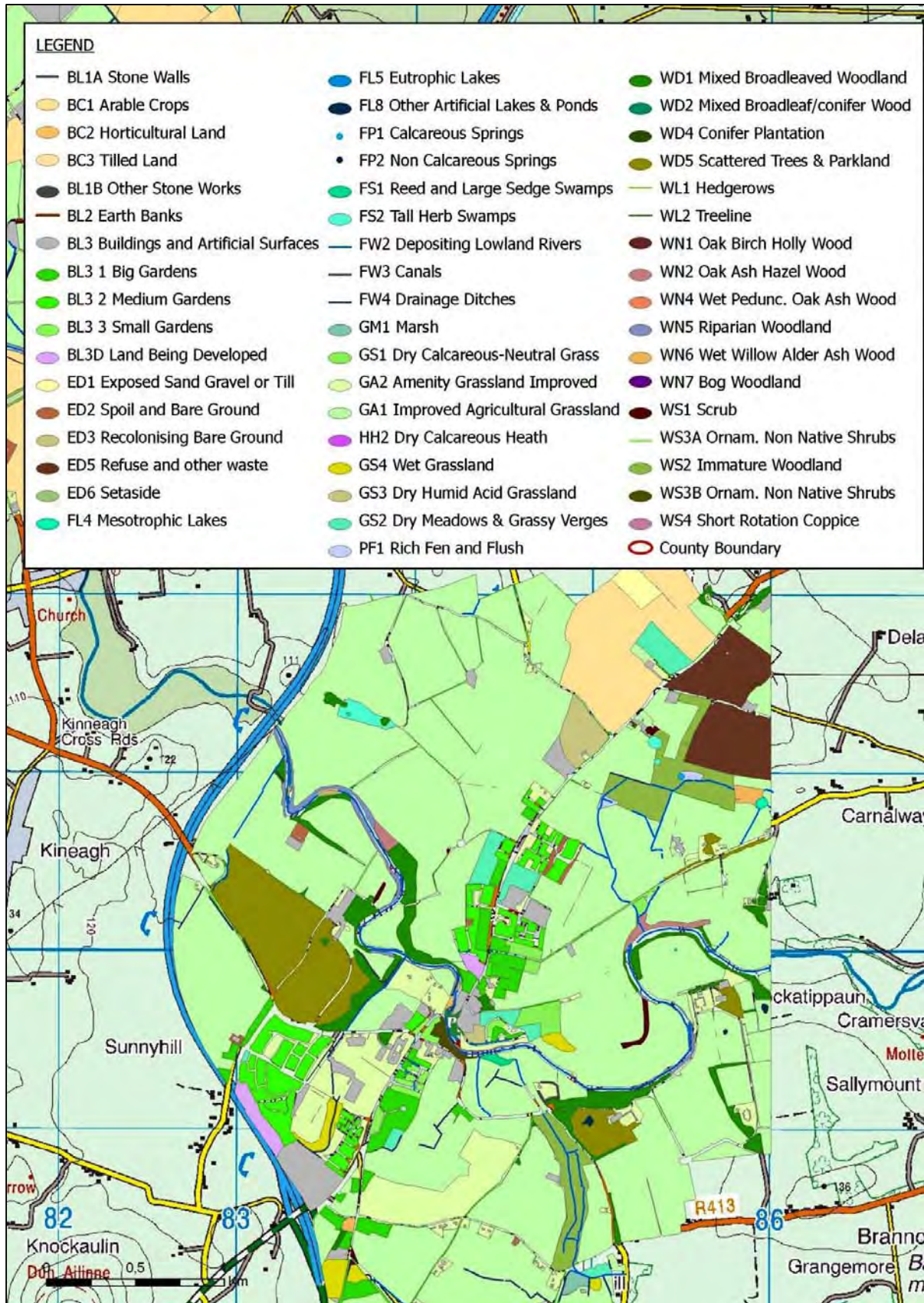


Figure 3.9 Habitat Mapping – Kilcullen
 Source: Mary Tubridy and Associates (2007)



Figure 3.10 cSACs, SPAs, NHAs, pNHAs and Nature Reserves in the County

Source: NPWS (datasets downloaded Jan. 2010) and Kildare County Council (Unknown)

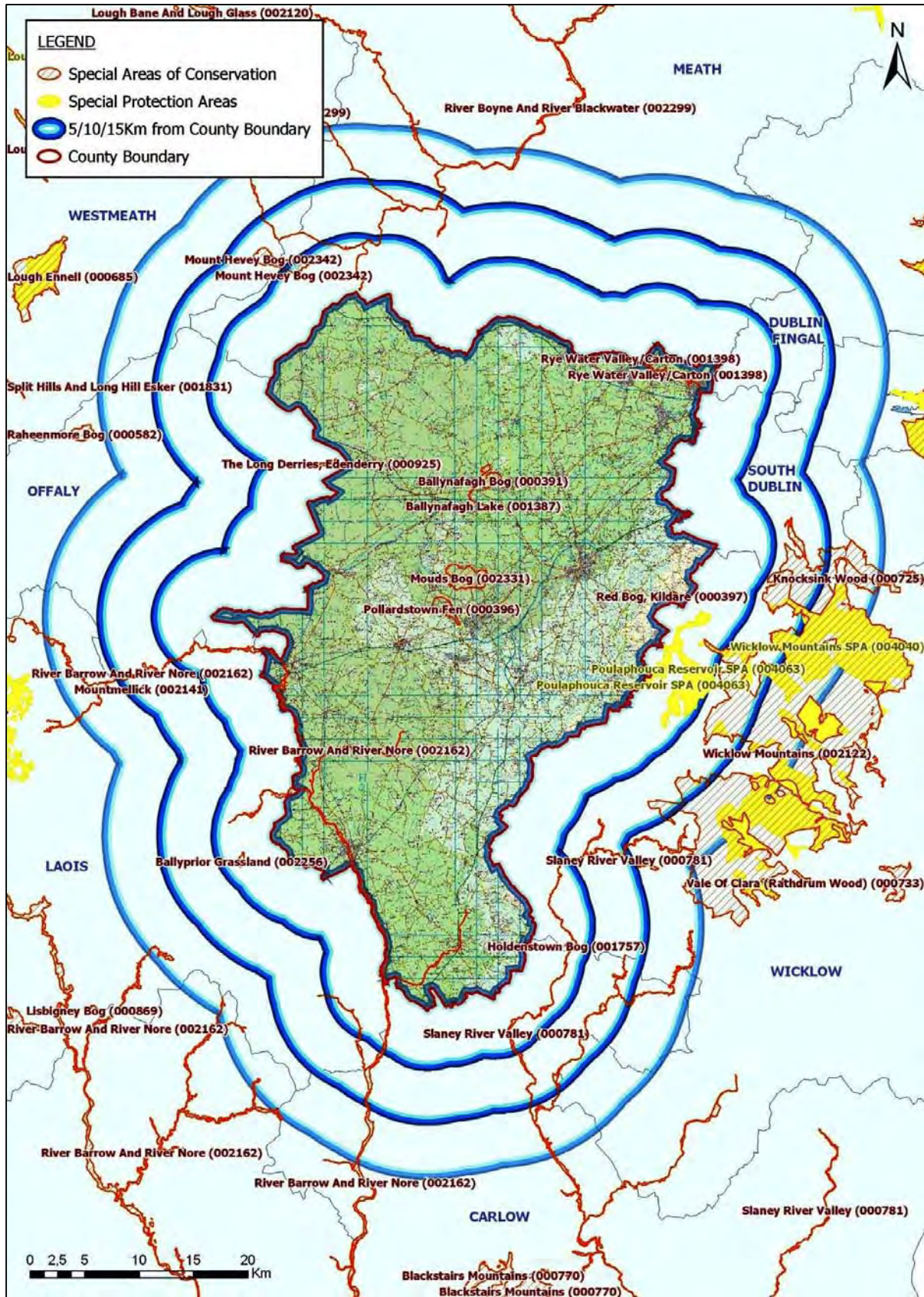


Figure 3.11 Designated Natura 2000 sites within the County and within 5, 10 and 15km of the boundary

Source: NPWS (datasets downloaded Jan. 2010)

3.3 Population and Human Health

3.3.1 Population¹⁵

The population of County Kildare has increased from 134,881 in 1996 to 186,335 in 2006, representing a growth of 38%. This equates to more than double the national population increase of 17% over the same period. Net migration from abroad and from other counties in Ireland to Kildare accounted for 59.8% of the increase in population.

Table 3.2 shows the population change that occurred in the County from 1990 to 2006. Figure 3.12 illustrates the current (2006) Census figures.

Significant population growth has occurred within and around the central towns of Naas, Newbridge, Kildare, Clane and Kilcullen, creating a pattern of growth along the M7 and M9 motorways. Significant pockets of population growth also occurred in the north of the County. Populations more than doubled in the rural hinterlands of urban centres like Athy, Naas, Newbridge, Clane and Kilcock and the village of Caragh. While the Athy area experienced significant population increase, the majority of the south of the County experienced lower levels of growth. Areas which experienced population decline over the same period include Leixlip, Rathangan, Ballymore Eustace and Milltown. Figure 3.13 maps population change from 2002-2006 and Figure 3.14 maps population change in the County from 1996-2002.

Population density is mapped on Figure 3.15. Density varies significantly from concentrations of over 2,000 persons per square kilometre in Newbridge to 0 to 10 persons per square kilometre in a western DED. The urban centres of Naas, Leixlip and Athy experience higher densities compared to more sparsely populated rural areas in the west and south of the county. The urban areas in the northeast of the County have the largest concentration of higher population densities.

¹⁵ CSO (various) *Census 2006 Volume 1 - Population Classified by Area; Census 2002 Volume 1 - Population Classified by Area; Census 1996 Volume 1 - Population Classified by Area* Cork: CSO.

3.3.2 Human Health

Human health has the potential to be impacted upon by environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings). Hazards or nuisances to human health can arise as a result of exposure to these vectors arising from incompatible adjacent land uses for example. These factors have been considered with regard to the description of: the baseline of each environmental component; and the identification and evaluation of the likely significant environmental effects of implementing the Plan and the alternatives.

3.3.3 Existing Problems

Certain environmental vectors within the Plan area - such as air, water or soil - have the potential to transport and deposit contaminants or pollutants, which have the potential to cause harm and adversely impact upon the health of the area's population.

IPPC licensed facilities and Seveso sites could be potential polluters to the Plan area if the facilities do not comply with their licenses.

Although air quality in Kildare meets current standards, there are traffic "hotspots" located along the main road routes especially at intersections in urban areas. These give rise to a harsh sensory environment which may impact upon human health (see also Section 3.7.3).

3.3.4 Evolution of Population and Human Health in the absence of the Plan

In the absence of a Development Plan for the area there would be no framework for the provision of infrastructure to serve existing and future development and this would be likely to delay or hinder the provision of infrastructure which would have the potential to result in impacts on environmental vectors to which humans are exposed e.g. a lack of appropriate waste water treatment infrastructure could adversely impact upon drinking water quality and subsequently upon human health.

Census	1991	1996	2002	2006
Population	122,656	134,881	163,944	186,335
Change on previous Census	-----	12,225	29,063	22,391

Table 3.2 Population Change 1991-2006

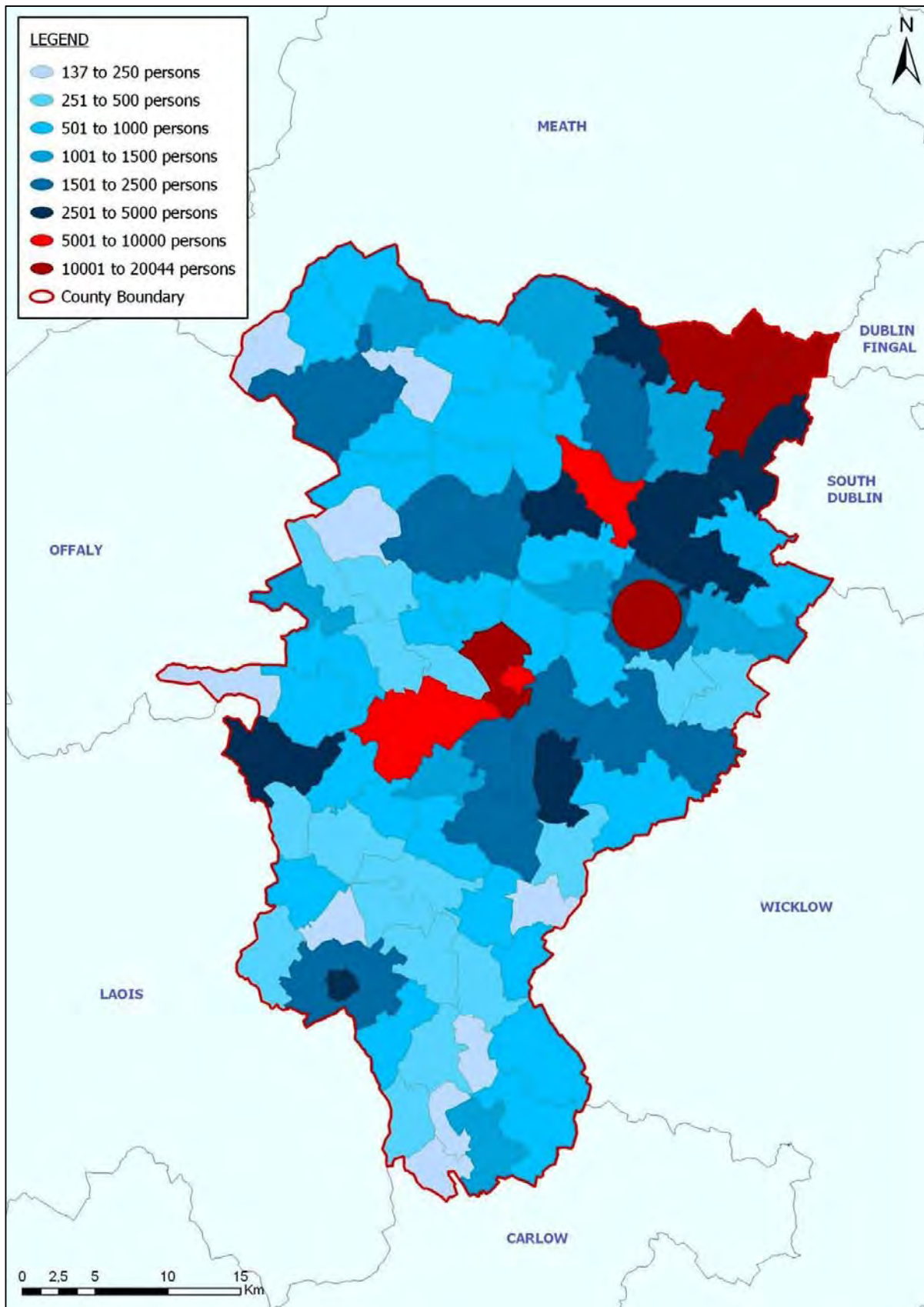


Figure 3.12 Population of County Kildare 2006
Source: CSO (2007)

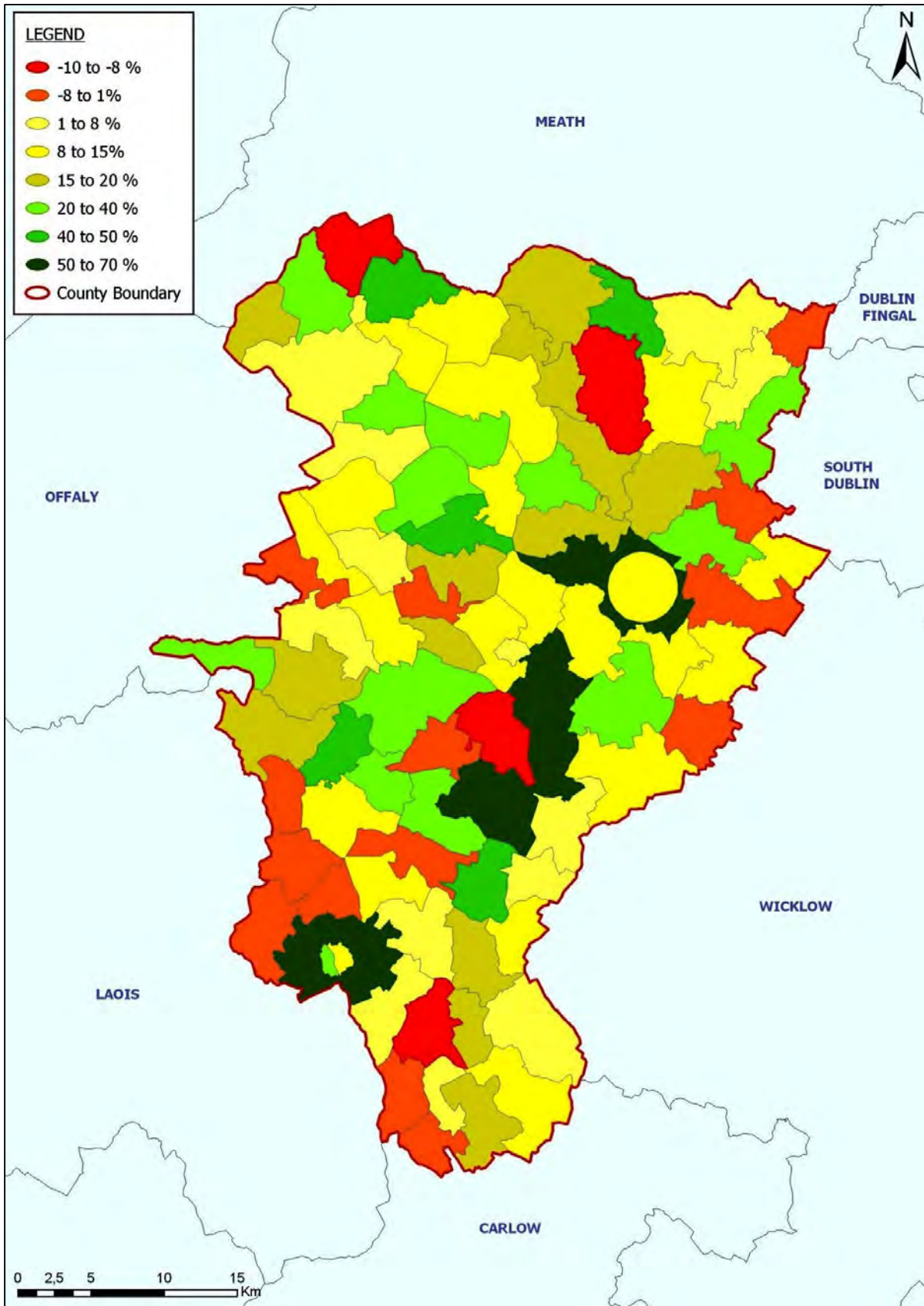


Figure 3.13 Population Change in County Kildare 2002-2006
Source: CSO (2007)

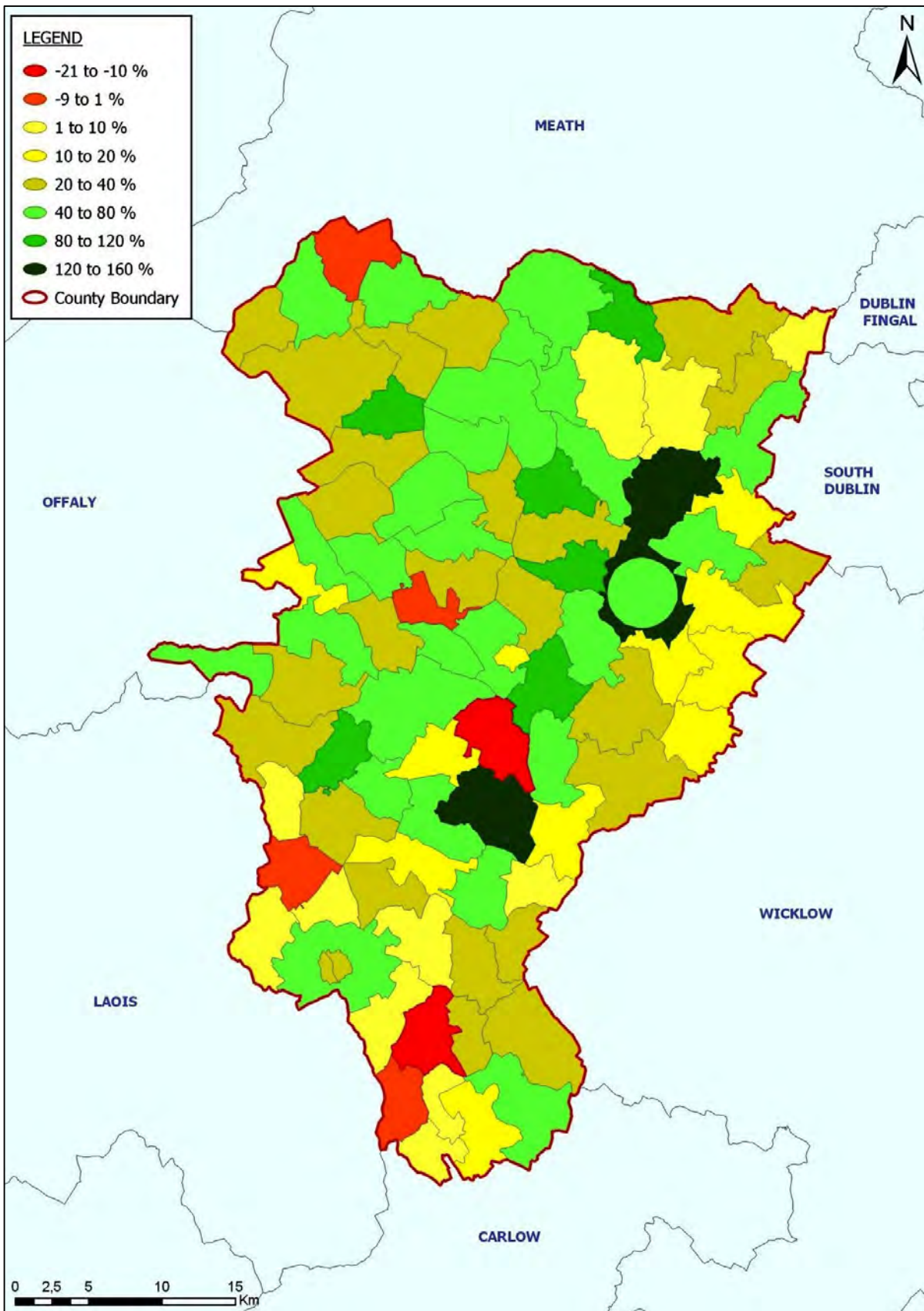


Figure 3.14 Population Change in County Kildare 1996-2002
Source: CSO (2003)

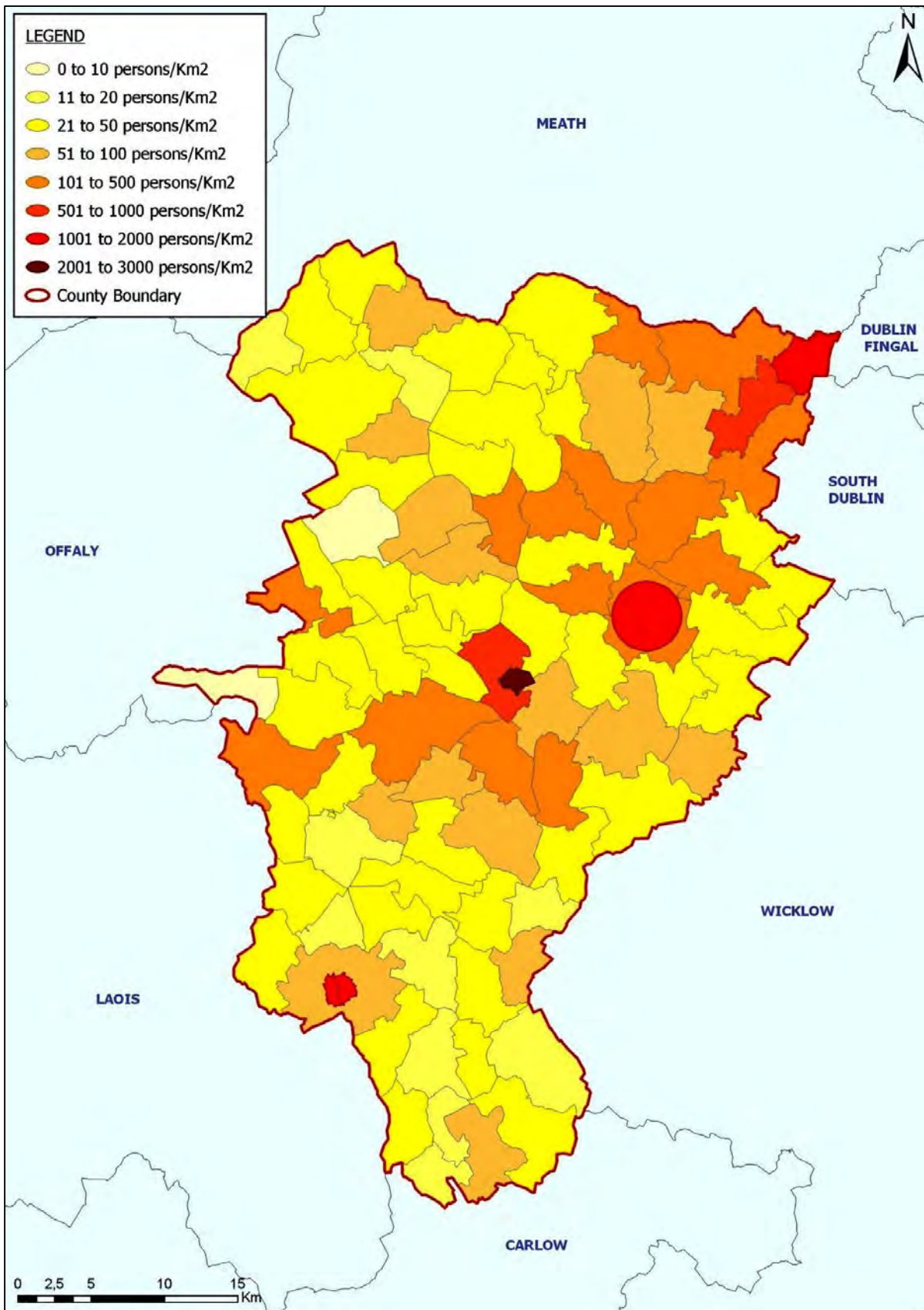


Figure 3.15 Population Density 2006
Source: CSO (2007)

3.4 Soil

3.4.1 Introduction

Soil is the top layer of the earth's crust. It is formed by mineral particles, organic matter, water, air and living organisms. Soil can be considered as a non-renewable natural resource because it develops over very long timescales. It is an extremely complex, variable and living medium and performs many vital functions including: food and other biomass production, storage, filtration and transformation of many substances including water, carbon, and nitrogen. Soil has a role as a habitat and gene pool, serves as a platform for human activities, landscape and heritage and acts as a provider of raw materials. Such functions of soil are worthy of protection because of their socio-economic as well as environmental importance.

Soils in any area are the result of the interaction of various factors, such as parent material, climate, vegetation and human action.

To date, there is no legislation which is specific to the protection of soil resources. However, there is currently an EU Thematic Strategy on the protection of soil which includes a proposal for a Soil Framework Directive which proposes common principles for protecting soils across the EU.

The Environmental Liability Directive (2004/35/CE) enforces the Polluter Pays Principle, has been transposed and is now in force in Ireland. In many aspects of their work local authorities are considered 'operators' under the legislation and are now liable for any Environmental Damage (damage to water; soil; and species and habitats as defined in the legislation) which they commit.

3.4.2 Soil Types¹⁶

Soil types as provided by the GSI are mapped on Figure 3.16, these soils have been classified by Teagasc. Subsoils in the County are mapped on Figure 3.17.

The soils of the County mainly comprise areas of well and poorly drained deep and shallow mineral soil. Large expanses of Cutaway Peat are evident in the north and west of the County. Pollardstown Fen is visible in the centre of the County identified

as Fen Peat, smaller areas of Fen Peat exist in the south of the County. Pollardstown Fen is an internationally important site, supporting a large variety of rare flora and fauna and it is protected under the Habitats Directive as described under Section 3.2.5.

In addition to being a valuable ecological resource, the Counties bogs provide employment through activities such as harvesting, tourism and agriculture.

Subsoils in the Plan area are primarily made up of Limestone dominated till and Limestone sands and gravels. A strip of sandstone dominated till runs down the eastern County boundary. Again, Fen Peat and Cutaway Peat is visible in the peaty north, west and north west of the County.

Alluvium, marl and lake sediments are dispersed throughout. These soils may indicate the current or historic flood plains of the County's various rivers and lakes.

Figure 3.18 shows soil sealing in the area. This map is generally in line with the areas mapped as man-made on both soil maps.

3.4.3 Mines and Quarries

Figure 3.19 maps the third edition (2001) of the GSI active quarry directory. It also maps mineral locations and historic mines within and in the vicinity of the County. A number of mineral locations are scattered around the County concentrated to the north west of Athy, south of Kilcullen and north of Sallins. The location of quarries in the County corresponds with these.

Historic mines are visible on the map in south County Laois. There are no mines in County Kildare.

3.4.4 Geology

Figure 3.20 maps the geology of the County. The majority of the underlying geology comprises limestone. A strip of siltstone and shale separates the limestone from greywacke which runs along the eastern County boundary. An area of granite lies in the south of the County. Regions of the north contain sandstone and shale. An area in the mid-west and centre of the County contains mixed bedrock of andesite, shale, greywacke, limestone, sandstone and siltstone and shale.

¹⁶ Teagasc, GSI, Forest Service & EPA (2006) *Soils and Subsoils Class* Dublin: DEHLG

3.4.5 Sites of Geological Importance

A number of sites of Geological Interest exist within the County. The GSI and the DEHLG are currently identifying sites of geological interest across the Country that will be proposed as Natural Heritage Areas.

The Sites of Geological Importance which have been identified are mapped on Figure 3.21.

3.4.6 Landslides

In early 2004 the GSI established a multi-disciplinary team, the Irish Landslides disciplinary team, the Irish Landslides Working Group (ILWG), with expertise in geology, geomorphology, geotechnical engineering, planning, and GIS. One of the main objectives was to build a national database of past landslide events. The initial search of reference sources has identified 117 events. Figure 3.22 maps the locations of recorded landslides in County Kildare and the surrounding Counties. Landslides occurring in County Kildare include Derrymullen in 1839 and Derrylea in 1954.

3.4.7 Existing Problems

Soil has the potential to be polluted and contaminated as a result of pollution from development which is not serviced by appropriate waste water infrastructure and from agricultural sources. Certain parts of the County are not within the catchment of waste water treatment networks and consequently development in these areas uses septic tanks systems to treat waste water arising - it is likely that local pollution of soil is occurring in certain areas as a result of poorly maintained systems.

Greenfield development involves the building upon and thereby sealing off of soil thus representing an environmental problem.

Soil erosion due mainly to surface erosion resulting from construction works and agricultural/forestry/quarrying/mining operations has major potential to impact on water quality and fishery.

Changes in land cover indicated by the CORINE data (see Figure 3.4 for 1990-2000 changes and Figure 3.5 for 2000-2006 changes) indicate that semi natural areas within the County have been replaced by uses which generally include impermeable surfaces. The resultant increase in run-off from precipitation and reduced natural surface area may increase the risk of flood events. These changes are also likely to result in losses of biodiversity and flora and fauna.

3.4.8 Evolution of Soil in the absence of the Plan

In the absence of the Development Plan, the evolution of soil would be dependent on developments which take place.

The currently proposed Soil Directive suggests encouraging the rehabilitation of brownfield sites, thus reducing the depletion of greenfield sites. However, in the absence of Plan, there would be no framework for the direction of growth towards brownfield sites, where such direction is appropriate. As a result greenfield development would be likely to occur on an increased basis and would result in the building upon and thereby sealing off of the non-renewable subsoil and soil resources.

In the absence of Plan, there would be no framework for the provision of infrastructure - such as that relating to waste water treatment - to serve existing and future development and therefore soil would have the potential to be polluted and contaminated as a result of pollution from development which is not serviced by appropriate waste water infrastructure.

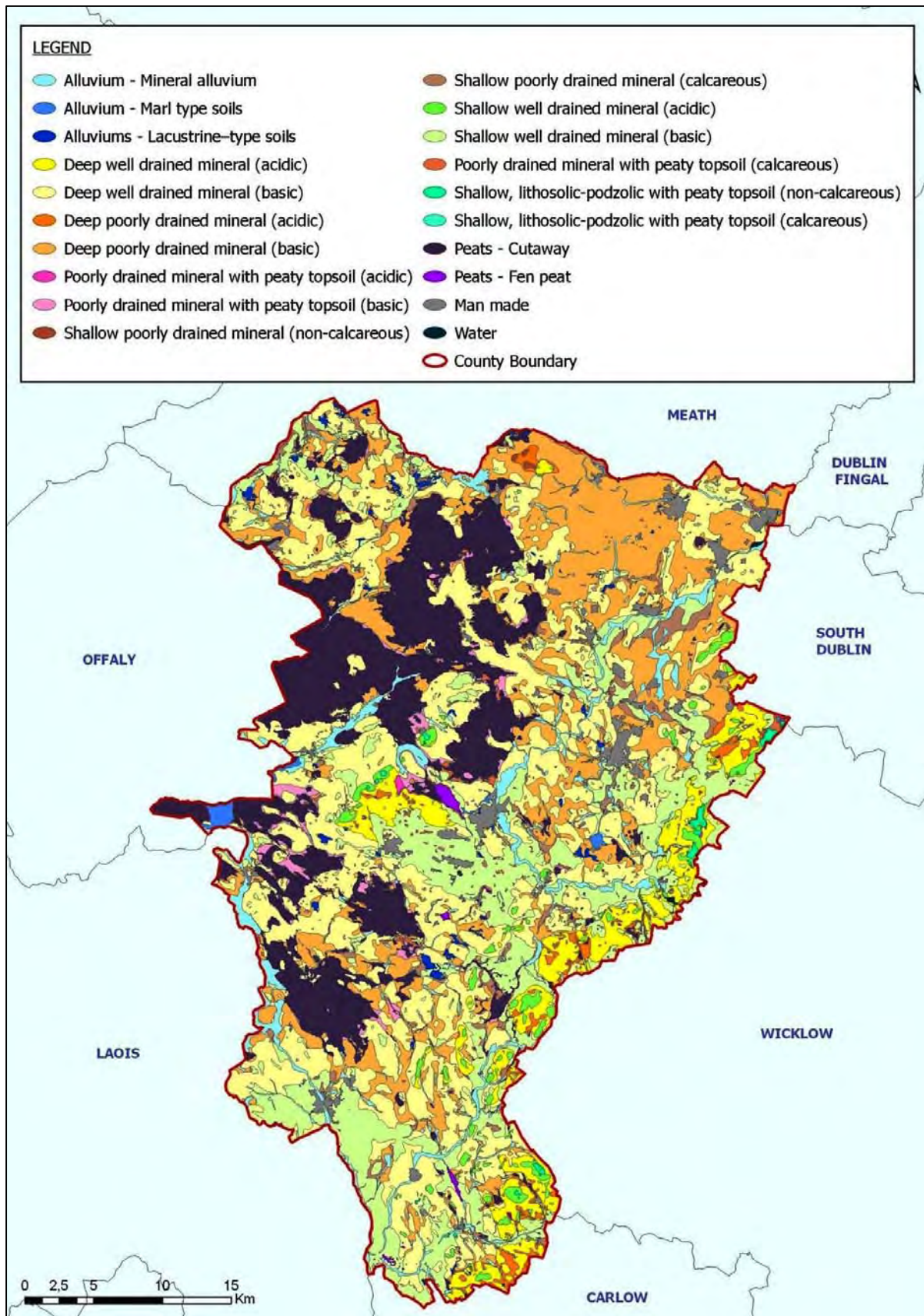


Figure 3.16 Soil Types

Source: Teagasc in co-operation with the Forest Service, EPA and GSI (2006)

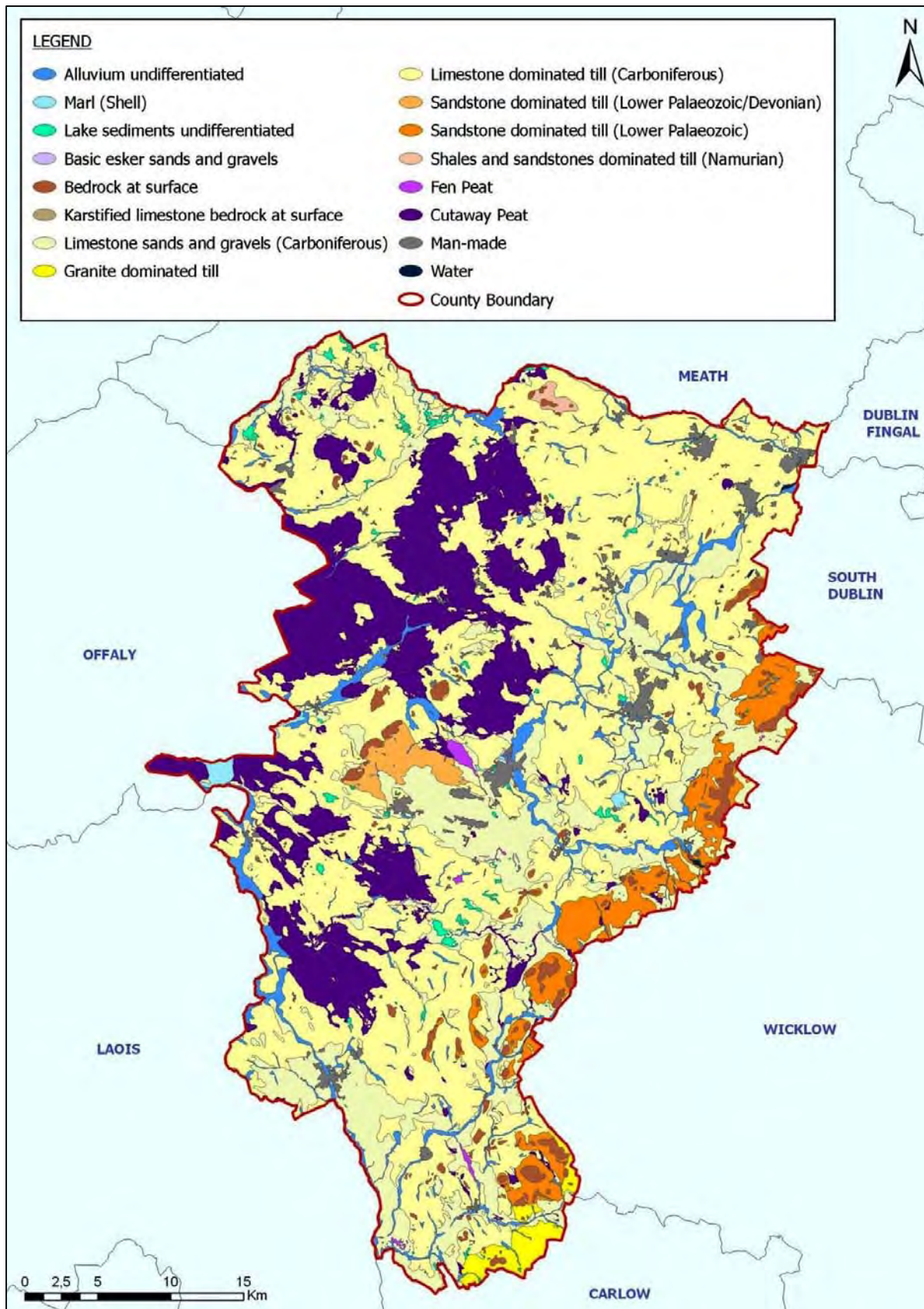


Figure 3.17 Subsoils

Source: Teagasc in co-operation with the Forest Service, EPA and GSI (2006)

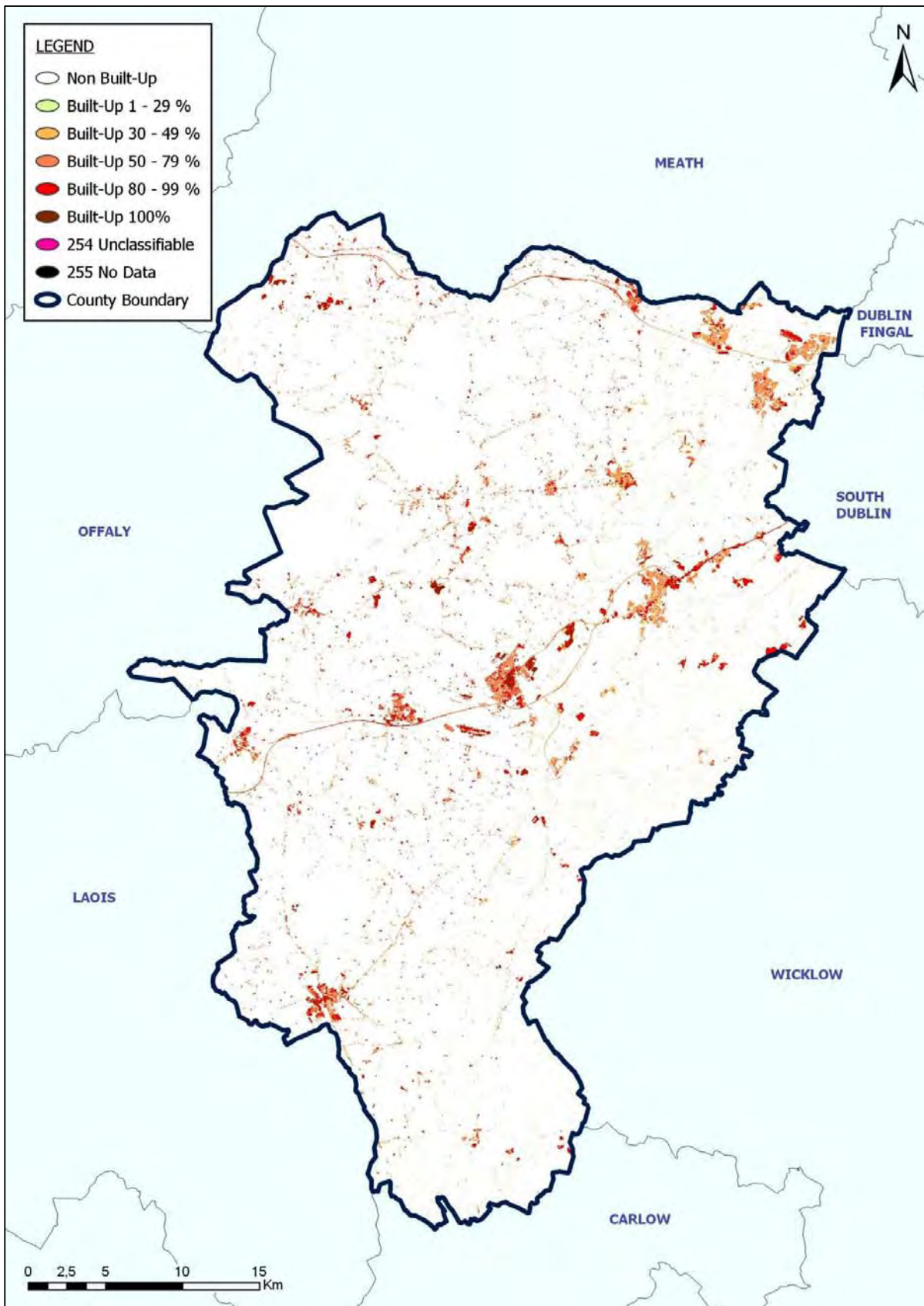


Figure 3.18 Soil Sealing
Source: EPA (2009)

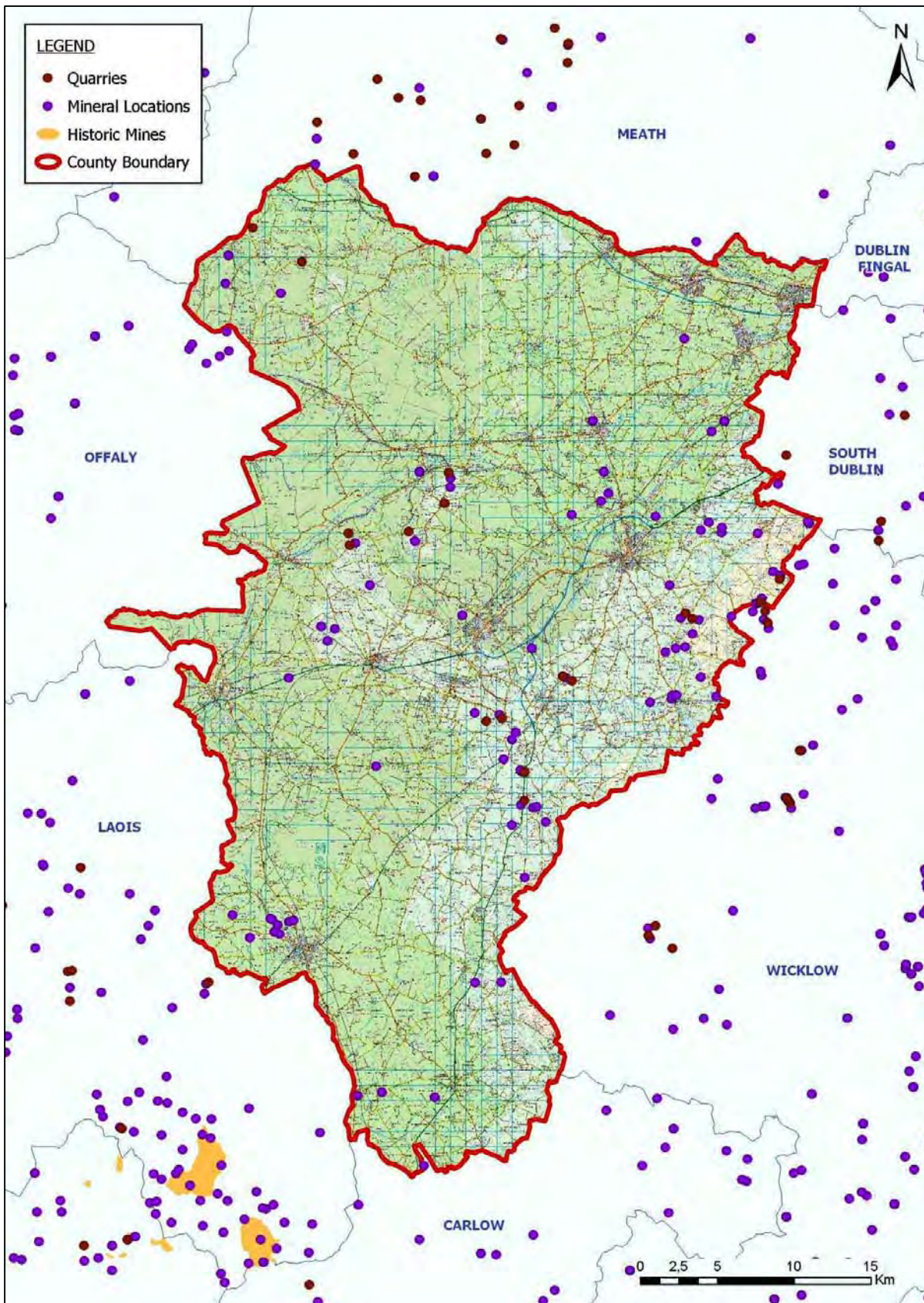


Figure 3.19 Quarries, Mineral Locations and Historic Mine Locations
Source: GSI (2001)

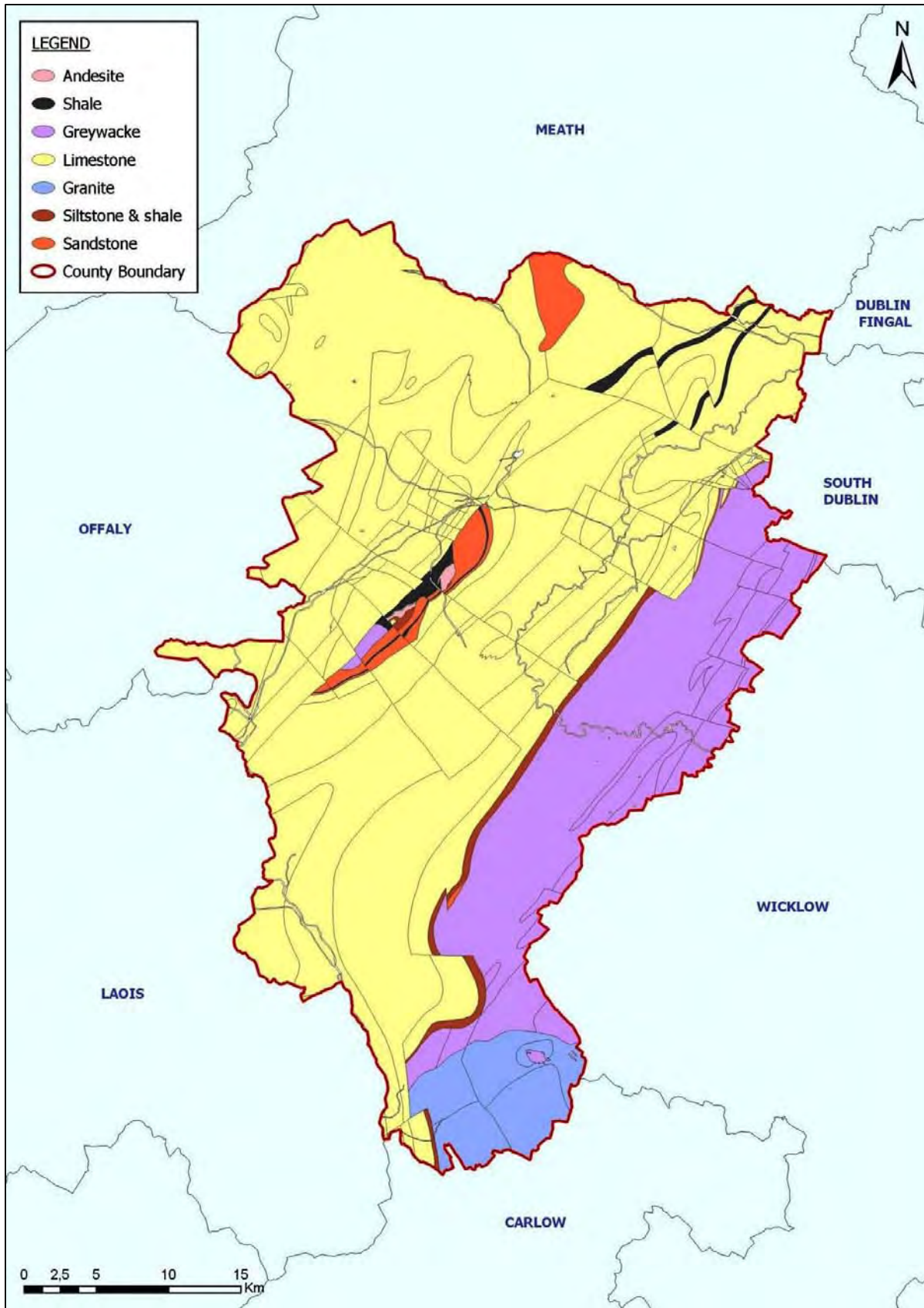


Figure 3.20 Geology
Source: GSI (2005)

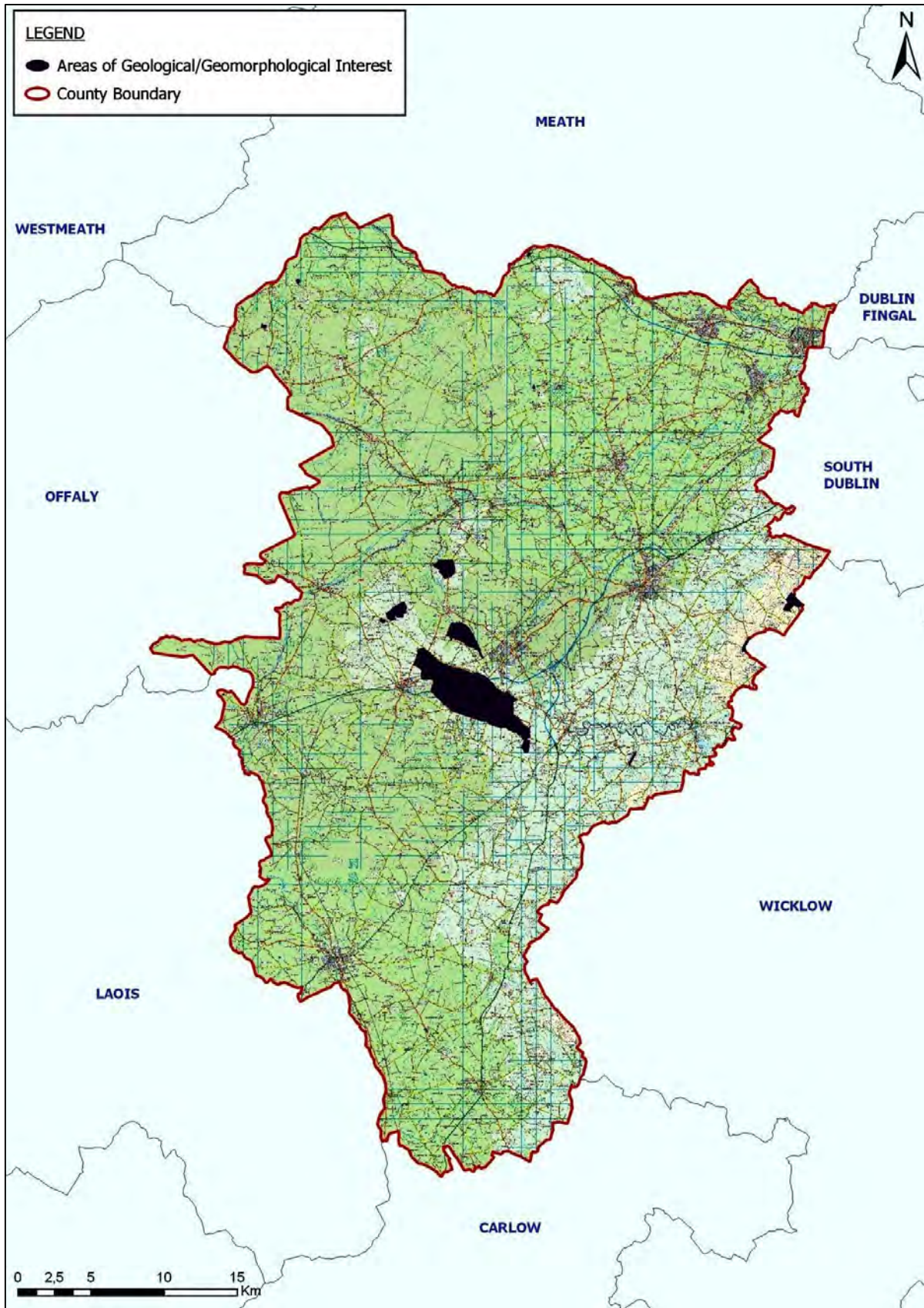


Figure 3.21 Areas of Geological/Geomorphological Interest
Source: Kildare County Council (Unknown)



Figure 3.22 Landslides within and in the vicinity of the County
Source: GSI (2009)

3.5 Water

3.5.1 Introduction

Water within and surrounding the County has many functions: it provides drinking water to the area's population; it sustains the biodiversity and flora and fauna described under Section 1.1; it provides amenity; and, it is an integral part of the landscape.

The river and canal networks are important landscape water bodies within the County. The River Liffey runs through the eastern part of the County, reaching as far as Newbridge and running into the Pollaphuca Reservoir at Ballymore Eustace, characterising the north-eastern share of the County. The River Barrow, together with the Black River and the Slate River typify the western County boundary. The Rye Water River – a tributary of the River Liffey - runs along the northern County boundary.

3.5.2 Potential Pressures on Water Quality

Human activities, if not properly managed, can cause deterioration in water quality. Pressures exerted by human activities include the following:

- sewage and other effluents discharged to waters from point sources, e.g. pipes from treatment plants;
- discharges arising from diffuse or dispersed activities on land;
- abstractions from waters; and,
- structural alterations to water bodies.

A point source pressure has a recognisable and specific location at which pollution may originate. Examples of significant point source pressures include direct discharges from waste water treatment plants, licensed discharges from industrial activities, landfills, contaminated lands (e.g. disused gas works) and mines.

A diffuse source pressure unlike a point source is not restricted to an individual point or location. The source of a diffuse pressure can be quite extensive. Significant examples of diffuse pressures include runoff from forestry and agricultural lands.

Excessive abstractions from surface waters and groundwater for drinking and industrial purposes can create pressures on the ability of a water body to maintain both chemical and ecological status.

Structural alterations such as river straightening; construction of embankments, weirs, dams, port facilities and dredging can create conditions such that a water body is no longer able to support the natural ecology which would have existed prior to such modifications. These pressures are also referred to as morphological pressures.

3.5.3 The Water Framework Directive

3.5.3.1 Introduction and Requirements

Since 2000, Water Management in the EU has been directed by the Water Framework Directive 2000/60/EC (WFD). The WFD requires that all Member States implement the necessary measures to prevent deterioration of the status of all waters - surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of achieving good status by 2015. All public bodies are required to coordinate their policies and operations so as to maintain the good status of water bodies which are currently unpolluted and improve polluted water bodies to good status by 2015.

3.5.3.2 River Basin Districts and Water Bodies

For the purpose of implementing the WFD, Ireland has been divided into eight river basin districts or areas of land that are drained by a large river or number of rivers and the adjacent estuarine / coastal areas. The management of water resources will be on these river basin districts.

Within each river basin district - for the purpose of assessment, reporting and management - water has been divided into groundwater, rivers, lakes, estuarine waters and coastal waters which are in turn divided into specific, clearly defined water bodies.

The County is located within the Eastern and South Eastern River Basin Districts.

3.5.3.3 WFD Risk Assessments

In order to achieve the objectives of the WFD it is necessary:

- to assess the risk that water bodies may not achieve good quality status;
- to identify the pressures from human activities causing this risk; and,
- to develop strategies and management plans to minimise the risk.

Risk assessment procedures were developed at national level and applied across all River Basin Districts in order to analyse the impact of the pressures referred to under Section 3.5.2. The risk assessments were predictive, i.e. they examined each pressure and predicted the magnitude which would be likely to have a negative impact.

Each water body has been assessed, on the basis of human activity, whether it is at risk or not at risk of failing to achieve the WFD's objectives by 2015. The classifications used for reporting this assessment are:

- (1a) At Significant Risk - water body is at risk of failing to meet good status in 2015;
- (1b) Probably at Significant Risk - water body is thought to be at risk of failing to meet good status in 2015 pending further investigation;
- (2a) Probably Not at Significant Risk - the water body is expected to meet good status in 2015; and,
- (2b) Not at Significant Risk - water body is expected to meet good status in 2015, pending further investigation.

Water bodies placed in the (1a) At Significant Risk category will need improvement to achieve the required status while water bodies in the (1b) Probably at Significant Risk category are likely to need improvement in order to achieve the required status.

It is important to note that the mapping of these Risk Assessments is based on a combination of generalised data which in turn take account of a wide range of factors; some of the mapping is based on upon incomplete data. The mapping also includes factors that are important to the integrity of the river [such as channel morphology] but which have little bearing on

pollution or the biological capacity of the river or stream. These factors mean that the mapping of risk factors is, of necessity, a broad-scale generalisation which – in general terms – is likely to graphically overstate the extent and significance of risk.

3.5.3.4 River Basin Management Plans

The Local Authorities located in the RBDs have prepared and adopted River Basin Management Plans. The Management Plans provide objectives for river basins in order to implement the requirements of the WFD to help protect and improve all waters in the RBDs.

The River Basin Management Plans include various data on waters within the river basins including that which relates to the status of water bodies.

3.5.4 Surface Water

3.5.4.1 EPA Monitoring

Water quality within the County is monitored by the EPA at a number of locations along rivers. The most recent water quality data¹⁷ identifies varying Q-values in the County from Bad Status (Q1) to High Status (Q5)¹⁸.

The River Liffey achieves Good Status (Q4) at many of its monitoring points. The south of the County water quality is of Poor (Q2-3, Q3) or Moderate Status (Q3-4). Bad Status (Q1, Q1-2, Q2) is recorded at five points on the County's rivers including the Tully, Slate and Kilcullen. Q values are mapped on Figure 3.23.

The EPA classifies lakes according to their trophic status¹⁹. The EPA monitored lake water quality at

¹⁷ EPA (various) *Water Quality in Ireland* Wexford: EPA

¹⁸ The Biotic Index Values, or Q values, are assigned to rivers in accordance with biological monitoring of surface waters - low Q ratings, as low as Q1, are indicative of low biodiversity and polluted waters, and high Q ratings, as high as Q5, are indicative of high biodiversity and unpolluted waters. Good status as defined by the Water Framework Directive equates to approximately Q4 in the national scheme of biological classification of rivers as set out by the EPA.

¹⁹ Nutrient enrichment, resulting in eutrophication, is the principal pressure on lake quality in Ireland. Nutrient inputs result in plant growth in lakes whose presence is quantified by a measure of the algal pigment chlorophyll. Lake trophic status, or the extent to which a lake is nutrient enriched, is determined by a consideration of the annual maximum chlorophyll values. Trophic Status ranges from Oligotrophic/Mesotrophic to Moderately Eutrophic to Highly/Strongly Eutrophic to Hypertrophic.

Golden Falls in Ballymore Eustace in 2003 it was classified as being oligotrophic/mesotrophic. This is mapped on Figure 3.26²⁰. Poulaphouca Reservoir, which is located in County Wicklow, received the same result. Mesotrophic lakes are lakes with an intermediate level of productivity, greater than oligotrophic lakes, but less than eutrophic lakes.

Good status as defined by the Water Framework Directive equates to mesotrophic in the trophic classification of lakes, as set out by the EPA.

3.5.4.2 WFD Surface Water Status²¹

The WFD defines “surface water status” as the general expression of the status of a body of surface water, determined by the poorer of its ecological status and its chemical status. Thus, to achieve “good surface water status” both the ecological status and the chemical status of a surface water body need to be at least “good”.

Ecological status is an expression of the structure and functioning of aquatic ecosystems associated with surface waters. Such waters are classified as of “good ecological status” when they meet Directive requirements.

Good surface water chemical status means that concentrations of pollutants in the water body do not exceed the environmental limit values specified in the Directive.

Figure 3.24 maps the WFD Surface Water Status for the part of the County which falls within the South Eastern River Basin District. It should be noted that Figure 3.24 is in draft form and revisions to the status are expected to be published by the River Basin District Offices before the end of 2011. Figure 3.25 maps the WFD Surface Water Status for the part of the County which falls within the Eastern River Basin District.

These maps illustrate that surface water status in the County is mainly of “poor” to “moderate status”. Two of the surface water catchments are of “bad status”. These catchments encompass Kildare Town, Maynooth and Leixlip. Areas of “good status” occur along the Fear English River, the Cushina River and the Morell River.

²⁰ EPA (2008) *State of lake water quality in Ireland including trends, legislation and actions required* Wexford: EPA.

²¹ These are preliminary maps of the WFD Surface Water Status maps for County Kildare and revisions to the status are expected to be published by the River Basin District Offices before the end of 2011.

3.5.4.3 Risk Assessment

Figure 3.27 maps the current risk assessments for the rivers in the Plan area.

The Liffey, Tully, Barrow, Greese, Lerr and the Slate together with most of their tributaries are almost entirely classified by the Risk Assessments contained in the Characterisation Reports of the Eastern and South Eastern River Basin Districts as being *at significant risk* of failing to achieve the objectives of the Water Framework Directive by 2015.

All remaining rivers and streams in the County, apart from a stretch of the Lemonstown Stream in the east of the County are *probably at significant risk* of failing to achieve the objectives of the Water Framework Directive by 2015.

The only lake in the vicinity of the County which has been classified is Poulaphouca which is *probably at significant risk* of failing to achieve the objectives of the Water Framework Directive by 2015. This is mapped on Figure 3.28.

3.5.4.4 Salmonid Waters

Salmonid Waters are designated and protected under the European Communities (Quality of Salmonid Waters) Regulations 1998 (SI No. 293 of 1988). Salmonid Water designation imposes an obligation to maintain specific water quality standards and control pollution. The main channels of the River Boyne and River Slaney are designated Salmonid Rivers. These waters are mapped on Figure 3.32.

3.5.5 Groundwater

3.5.5.1 Introduction

Groundwater is stored in the void spaces in underground layers of rock, or aquifers. These aquifers are permeable, allowing both the infiltration of water from the soils above them and the yielding of water to surface and coastal waters. Groundwater is the part of the subsurface water that is in the saturated zone - the zone below the water table, the uppermost level of saturation in an aquifer at which the pressure is atmospheric, in which all pores and fissures are full of water.

3.5.5.2 Groundwater Quality

The EPA national groundwater-monitoring network includes sampling at some locations that are used for the abstraction of drinking water. Groundwater is monitored at approximately 11

locations throughout the County. These locations are mapped on Figure 3.26.

3.5.5.3 Groundwater Protection Schemes

Groundwater Protection Schemes are county-based projects that are undertaken jointly between the GSI and the respective Local Authority.

Groundwater sources, particularly public, group scheme and industrial supplies, are of critical importance in many regions. Consequently, the objective of source protection zones is to provide protection by placing tighter controls on activities within all or part of the zone of contribution (ZOC) of the source.

A Groundwater Protection Scheme has been carried out in County Kildare. The resultant protection zones are shown on Figure 3.31.

3.5.5.4 WFD Risk Assessment of Groundwater

Figure 3.28 maps the current risk assessment of ground water underlying the County.

The groundwater underlying much of the County is classified as *probably not at significant risk*. An area classified as *not at significant risk* runs along part of the eastern County boundary while an area of groundwater in the north east of the County is *at significant risk*. Areas of groundwater which is *probably at significant risk* exist, mainly along the south western boundary and in the central area of the County.

3.5.5.5 Aquifer Vulnerability

The Geological Survey of Ireland (GSI) rates aquifers according to their vulnerability to pollution. Aquifer vulnerability refers to the ease with which pollutants of various kinds can enter underground water.

Figure 3.29 shows aquifer vulnerability data for the County.

Groundwater vulnerability in the County varies considerably from *low* to *extreme*. One large area of *high* vulnerability lies in the centre of the County. Areas of *extreme* vulnerability are mainly along the eastern boundary of the County and to the west of the large area of *high* vulnerability mentioned above. These areas generally contain areas with *rock near the surface or Karst*, the most extreme vulnerability. Groundwater of *low*, *moderate* and *high* vulnerability is dispersed throughout the County.

3.5.5.6 Aquifer Productivity

The GSI rates aquifers based on the hydrogeological characteristics and on the value of the groundwater resource. Ireland's entire land surface is divided into nine aquifer categories, eight of which occur in the County. Figure 3.30 shows aquifer vulnerability data for the County.

The predominant categorisation in the County and is *Locally Important Sand/Gravel Aquifers*. These types of aquifers are capable of yielding enough water to boreholes or springs to supply domestic, commercial and industrial uses, depending on the nature and scale of the development. Two large areas of *Locally Important Aquifers – Generally Moderately Productive* is identified in the north west of the County.

The most productive aquifers in the County - *Regionally Important Karstified Aquifers* - are found only in a small area in the south of the County. *Regionally Important Karstified Aquifers – Dominated by Diffuse Flow* are found in the west of the County and run through to the centre.

Poor Bedrock Aquifers - which are generally unproductive - are found in the east of the County these are interspersed with areas that are *productive in local zones*.

3.5.6 Register of Protected Areas

In addition to risk assessments, the WFD requires that Registers of Protected Areas (RPAs) are compiled for a number water bodies or part of water bodies which must have extra controls on their quality by virtue of how their waters are used by people and by wildlife.

The WFD requires that these RPAs contain: areas from which waters are taken for public or private water supply schemes; designated shellfish production areas; bathing waters; areas which are affected by high levels of substances most commonly found in fertilizers, animal and human wastes - these areas are considered nutrient sensitive; areas designated for the protection of habitats or species e.g. salmonid areas; Special Areas of Conservation (SACs); and, Special Protection Areas (SPAs). Waters within and surrounding the County which are listed on the RPAs are shown on Figure 3.33.

In Ireland, waters intended for human consumption are protected under the Drinking Water Regulations (S.I. 439/2000). The actual protected areas for drinking water are not outlined within these Regulations, so the

protected area for drinking waters is represented by the water body from which the water is abstracted, be it groundwater, river or lake. All groundwater underlying the County is listed on the RPA for Drinking Water Groundwater.

The RPA for Water Dependent Habitats includes habitats that are dependent on water: this includes areas already listed by the National Parks and Wildlife Service as Special Areas of Conservation and Special Protection Areas. Rivers on which certain habitats are dependant are also listed on the RPA. The SPAs and SACs identified under Section 3.2.5 are listed on the RPAs for *Water Dependent Habitats (SPA)* and *Water Dependent Habitats (SAC)*.

Nutrient Sensitive waters include nitrate vulnerable zones and areas designated as sensitive areas under the Urban Waste Water Treatment Directive (91/271/EEC). The Barrow and part of the River Liffey are listed on the RPA for Nutrient Sensitive Rivers.

3.5.7 Flooding

3.5.7.1 Introduction

Flooding is an environmental phenomenon which, as well as having causing economic and social impacts, could in certain circumstances pose a risk to human health. County Kildare is vulnerable to adverse effects which are exacerbated by changes in the occurrence of severe rainfall events and associated flooding of the County's rivers. Local conditions such as low-lying lands and inadequate surface water drainage increase the risk of flooding. The risk of flooding has also been increased in the past by human actions including the clearing of vegetation to make way for agriculture, draining of bog and wetland areas and the development of settlements in the flood plains of rivers. Infrastructural development, culverting, forestry operations and all urban development in the floodplain present ongoing flooding hazards. Increased surface water runoff due to construction of new hard surfaced areas is now generally not as significant a problem as it was in the past in terms of its impact on peak flows because of the implementation of Sustainable Urban Drainage Systems (SUDS).

3.5.7.2 EU Floods Directive

European Directive 2007/60/EC on the assessment and management of flood risks requires Member States to carry out a preliminary assessment by 2011 in order to identify the river basins and associated coastal areas at risk of flooding. For such zones, flood risk maps are

required to be drawn up by 2013. Flood risk management plans focused on prevention, protection and preparedness must be established by 2015. The OPW is currently involved in a research project to develop maps with national coverage indicating areas that might be prone to flooding from rivers and streams. Further work is underway to refine the method and outputs, which, if successful, may enable this information to be made available in March/April 2010.

3.5.7.3 DEHLG Flood Risk Management Guidelines

In November 2009 the DEHLG published *The Planning System and Flood Risk Management Guidelines for Planning Authorities*. These are aimed at ensuring a more consistent, rigorous and systematic approach which will fully incorporate flood risk assessment and management into the planning system. Planning authorities are required to undertake flood risk identification, assessment and management processes as appropriate when preparing or varying development plans and local area plans and in consideration of applications for planning permission.

A Strategic Flood Risk Assessment was undertaken for the Plan which informed the SEA and which resulted in the integration of a number of policies and objectives into the Plan, in particular those in Chapter 7 Water, Drainage and Environmental Services.

3.5.7.4 OPW's National Flood Hazard Mapping

Figure 3.34 maps the locations of the most significant flooding events in the Plan area - accessible from the OPW's National Flood Hazard Mapping website.

Flood events are recorded at various locations along the County's rivers. Flood extents are identified at Monasterevin and in the areas around Kildangan, Nurney, Johnstown and Kilberry.

The benefitting land data originates from maps prepared by the OPW to identify areas that would benefit from land drainage schemes, and typically indicate low-lying land near rivers and streams that might be expected to be prone from flooding. Benefitting lands are identified in the north and north west of Kildare.

Drainage District maps are similar to the Benefitting Land Maps, but were prepared with respect to the Land Commission Embankments and Drainage District Works that pre-dated the

Arterial Drainage Schemes that commenced in 1945.

There are a number of recurring flood events particularly at Newbridge, Athy, Maynooth and Celbridge. Many flood events were recorded for the years 1954, 1993, 2000 and 2002.

3.5.7.5 Future Influences of Flood Risk

Large scale changes in the County which could significantly influence flood risk and increase the magnitude and occurrence of flooding in the future may include:

- Climate changes resulting in increased river flows and rising sea levels;
- Large scale land use changes such as increased afforestation and associated clear-cutting, changes in agricultural land use and drainage of upland wetlands;
- Urban development increasing the speed and volume of run-off; and
- Changes to geomorphological processes such as sediment transport, siltation and erosion.

3.5.8 Existing Water Problems

The above descriptions identify a number of sensitivities with regard to the status of water bodies within the Kildare Plan area. These water quality problems have the potential for significant adverse impact upon human health, drinking water supplies, biodiversity and flora and fauna.

Water quality data identifies multiple points on rivers throughout the County as being of Moderate, Poor or Bad Status.

The main rivers in the County together with all their tributaries are almost entirely classified by the Risk Assessments contained in the Characterisation Reports of the various River Basin Districts as being either *at significant risk* or *probably at significant risk* of failing to achieve the objectives of the Water Framework Directive by 2015.

Flooding has occurred at various locations within the County.

3.5.9 Evolution of Water in the absence of the Plan

Based on the current risk assessments, certain surface and ground water bodies are either *at significant risk* or *probably at significant risk* of failing to meet the objectives of the Water Framework Directive by 2015.

If growth is not accompanied by appropriate waste water infrastructure/capacity then it is likely that:

- Certain river and ground water bodies would fail to meet the objectives of the WFD by 2015; and,
- Significant adverse impacts upon the biodiversity and flora and fauna of the County could potentially arise.

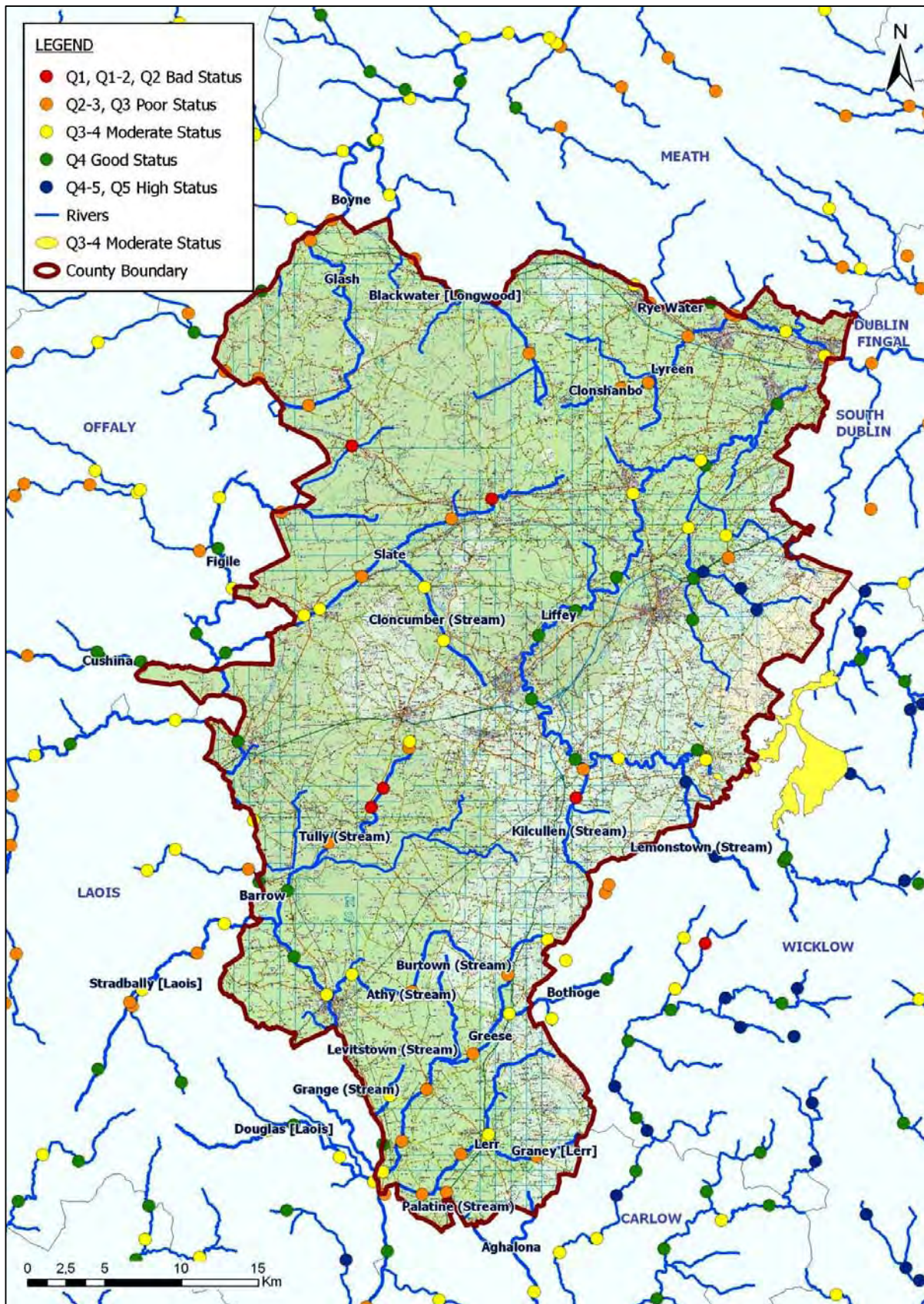


Figure 3.23 Q-Values (Biotic Index Ratings) at Points on Rivers
 Source: EPA (Various)

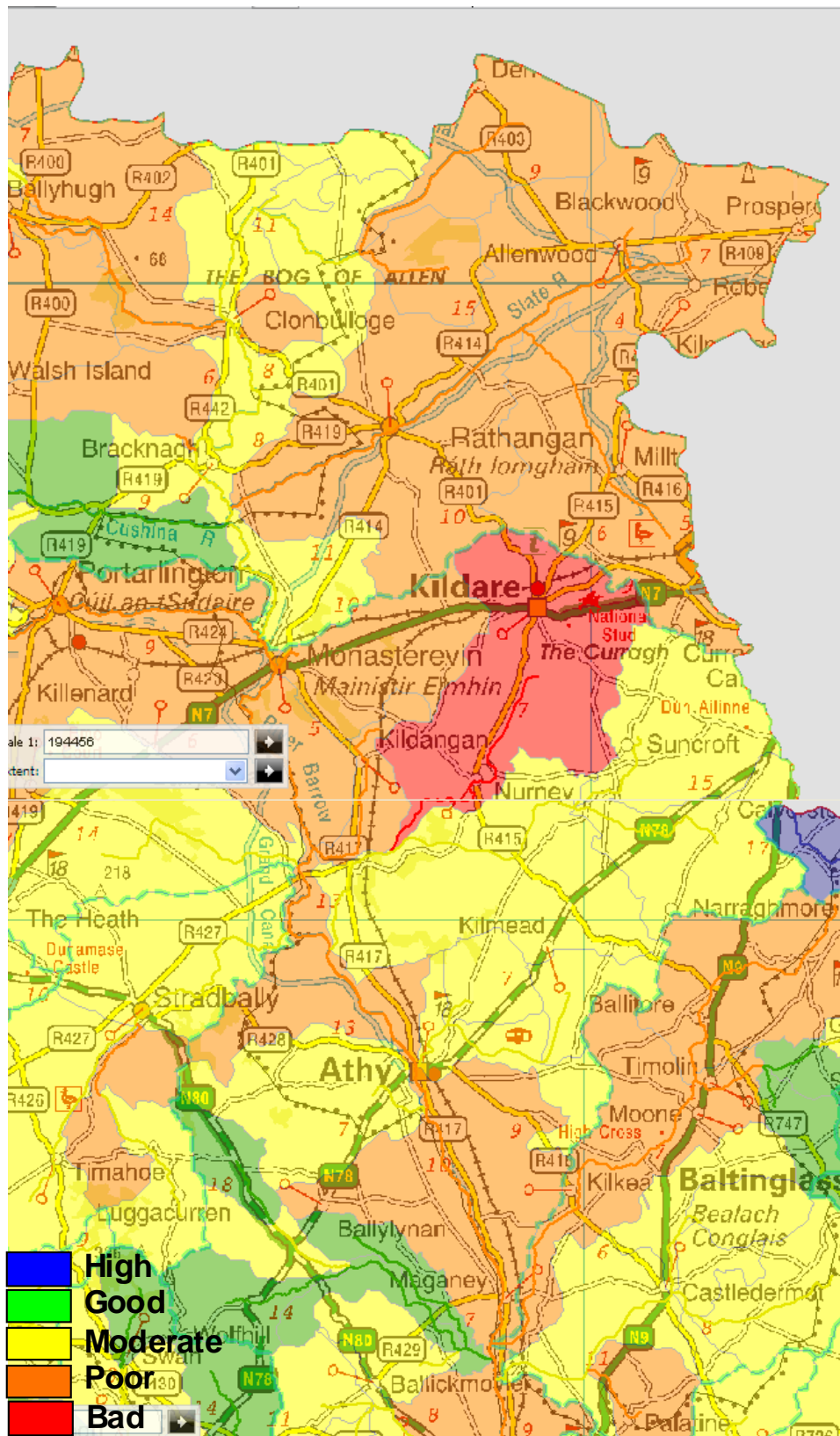


Figure 3.24 WFD Surface Water Status of part of County within the SERBD
Source: SERBD (2008)

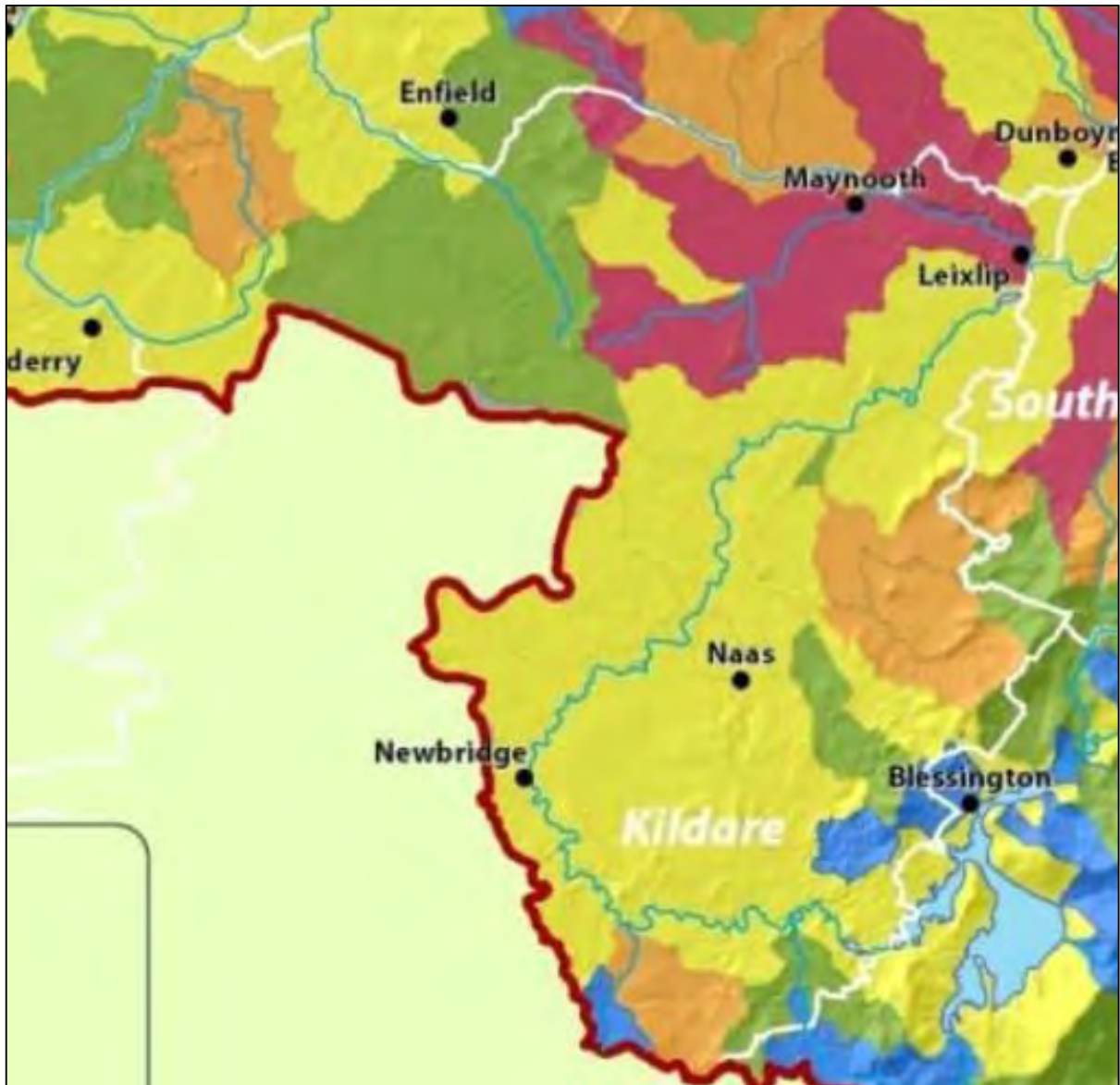


Figure 3.25 WFD Surface Water Status of part of County within the ERBD
Source: ERBD (2009)

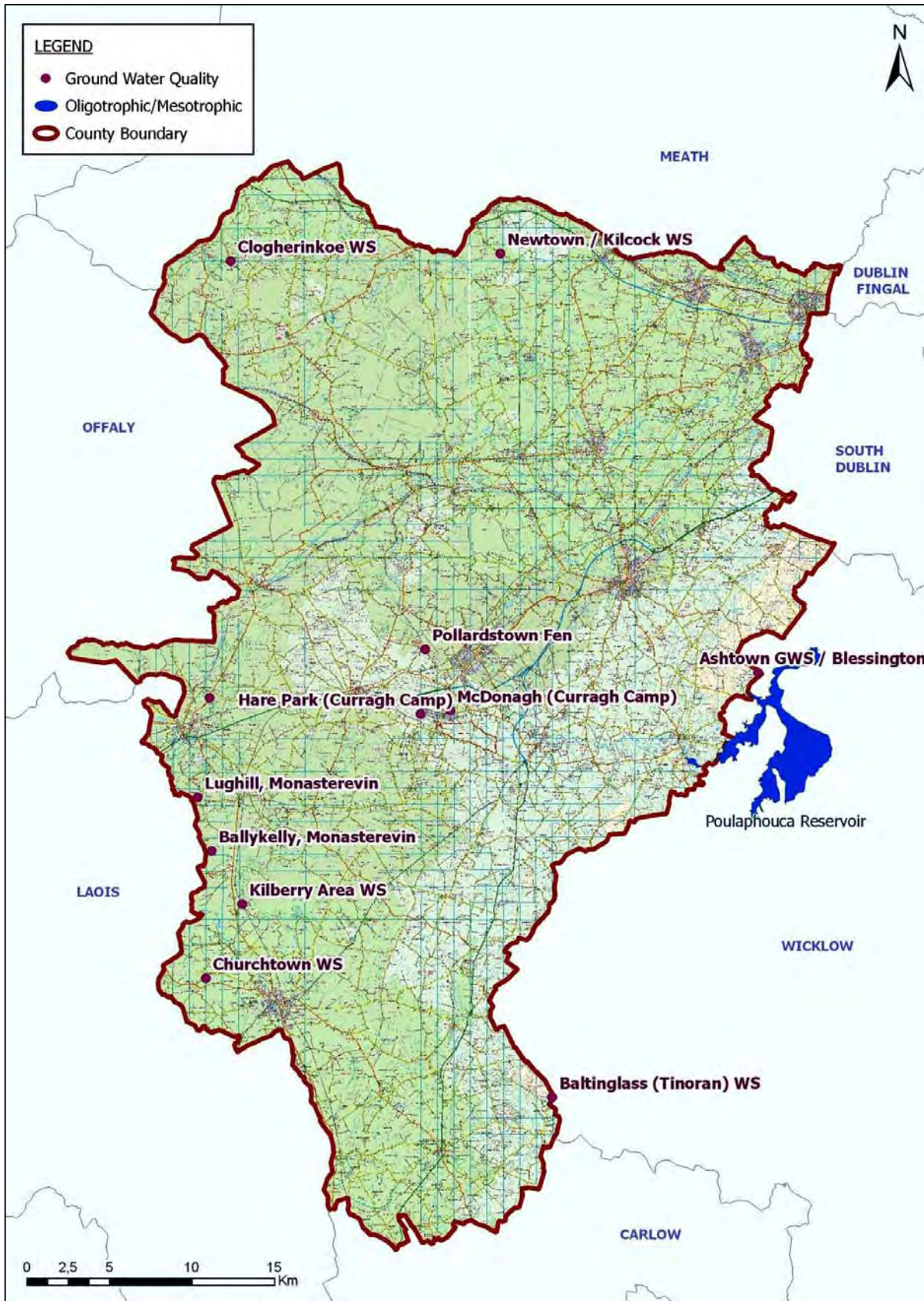


Figure 3.26 Lake and Ground Water Quality
 Source: EPA (2008/9)

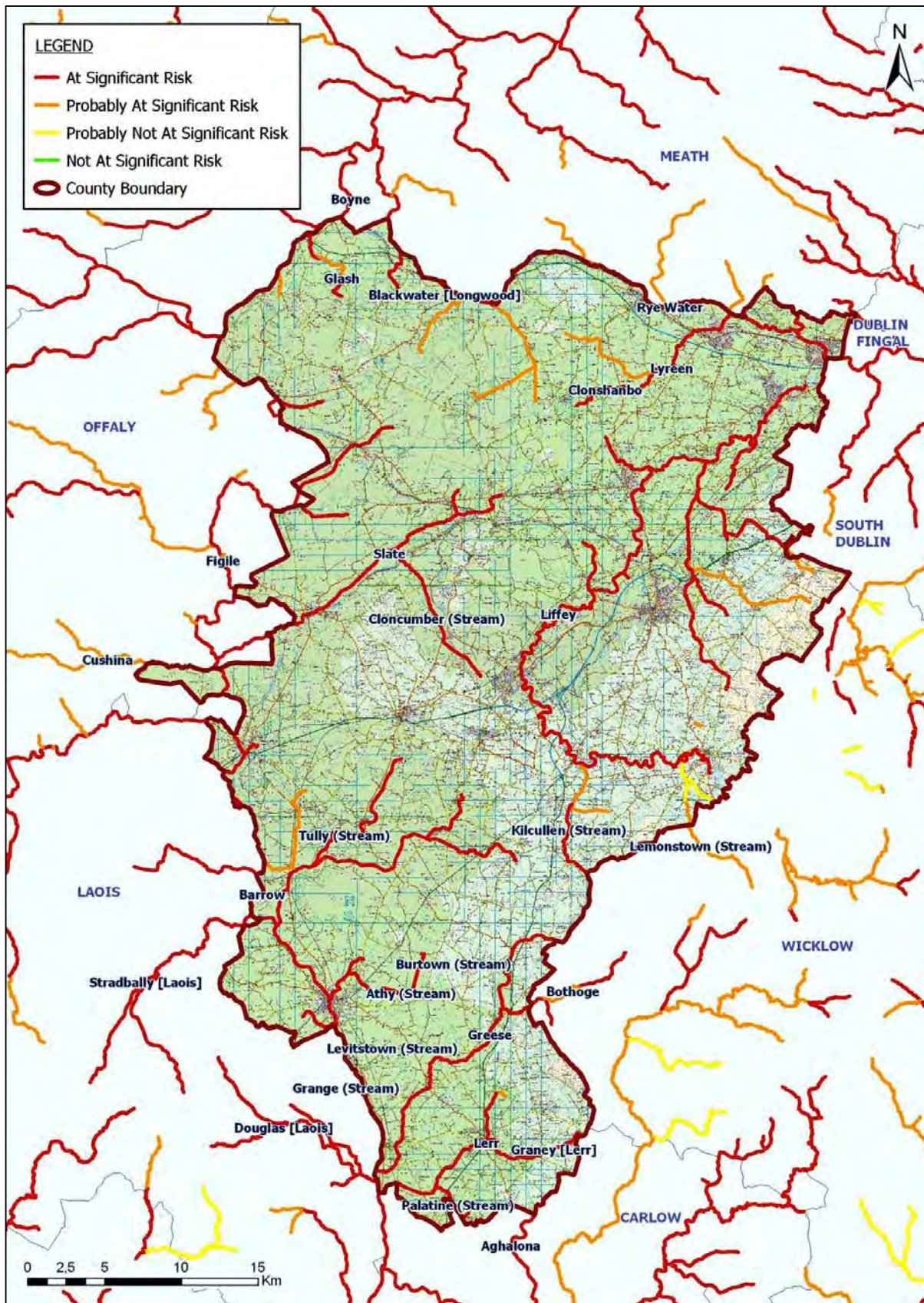


Figure 3.27 Risk Assessment of Rivers
 Source: EPA (2009)

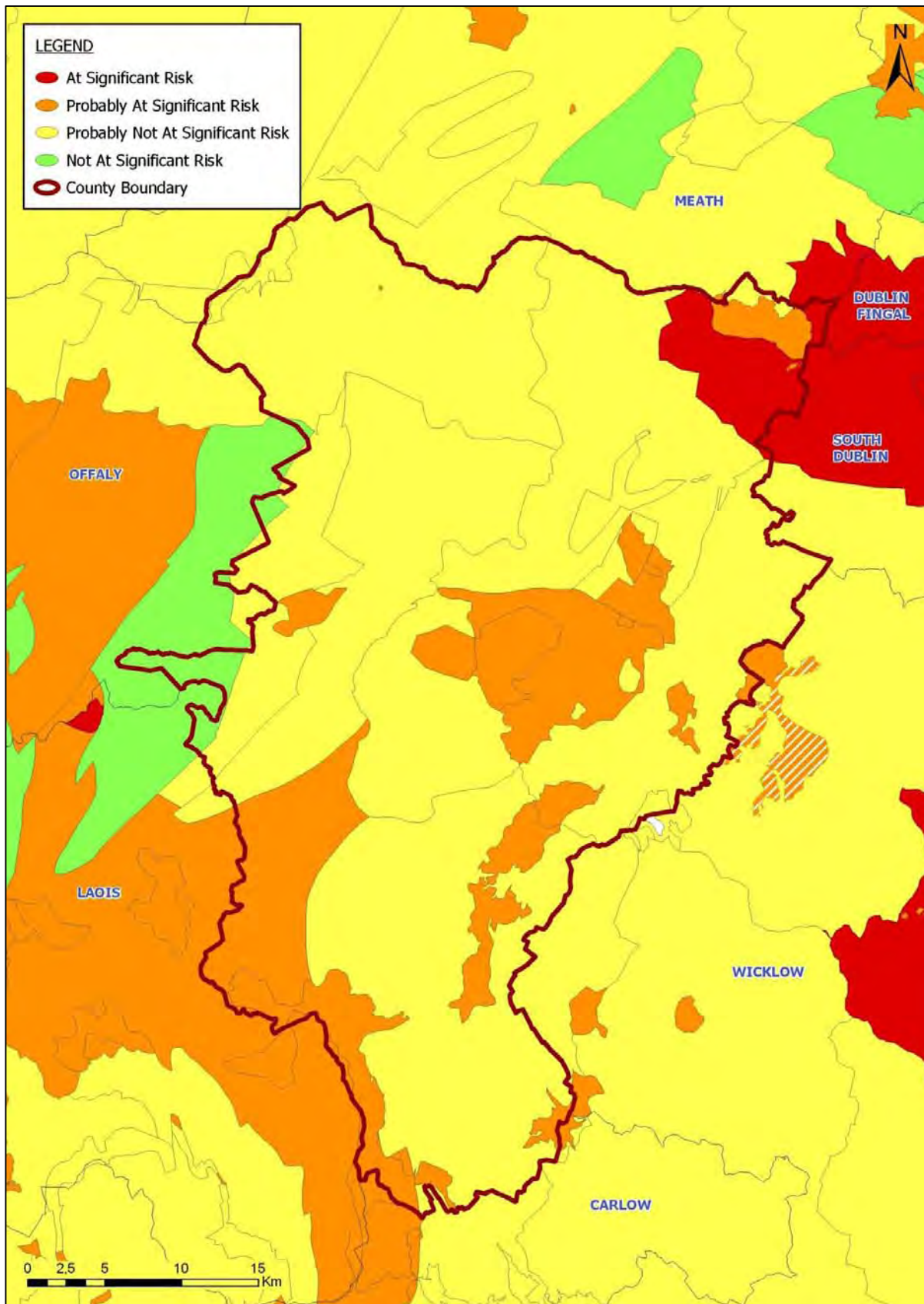


Figure 3.28 WFD Risk Assessment of Ground Water and Lakes
Source: EPA (2008)

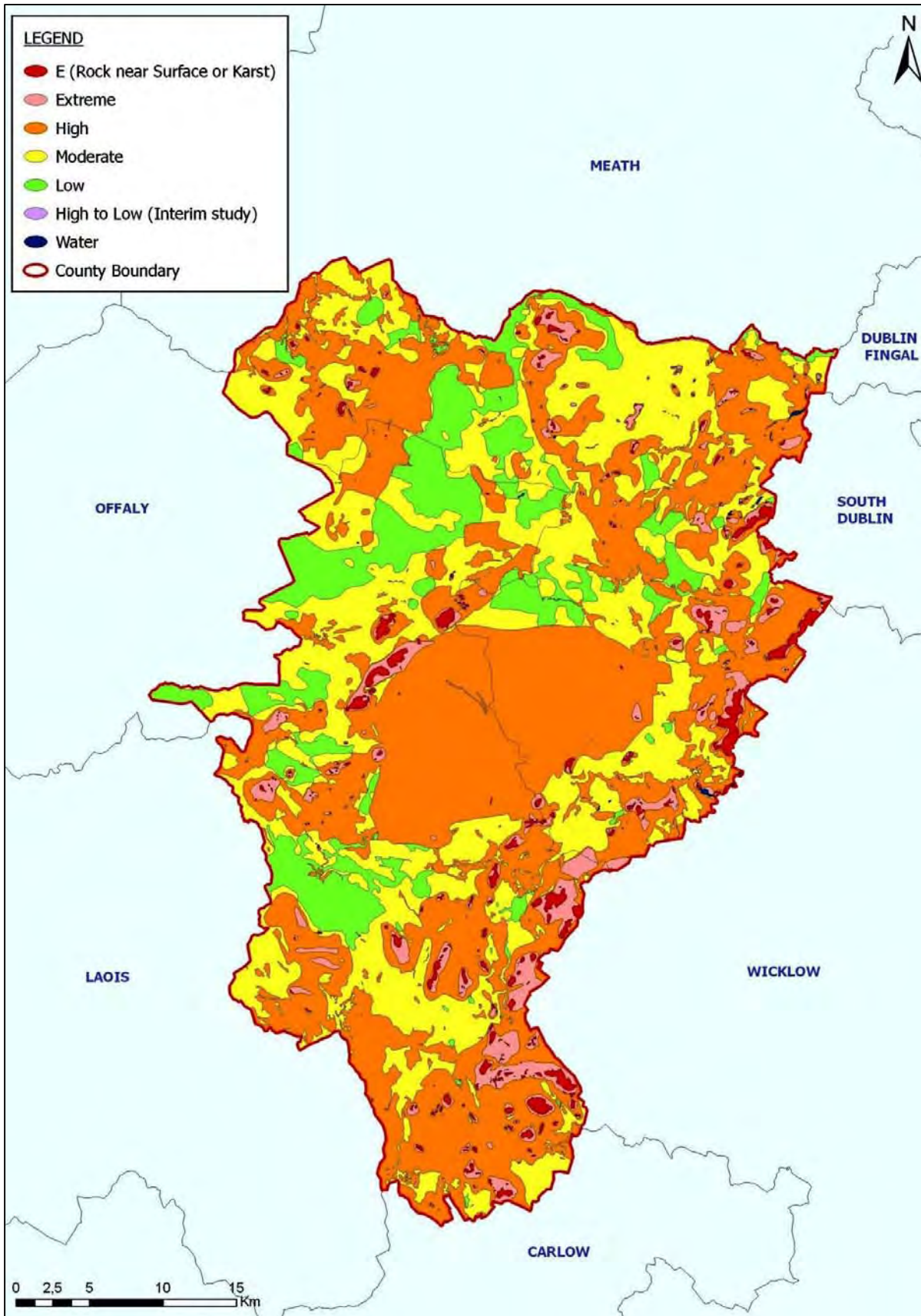


Figure 3.29 GSI Aquifer Vulnerability
Source: GSI (2006)

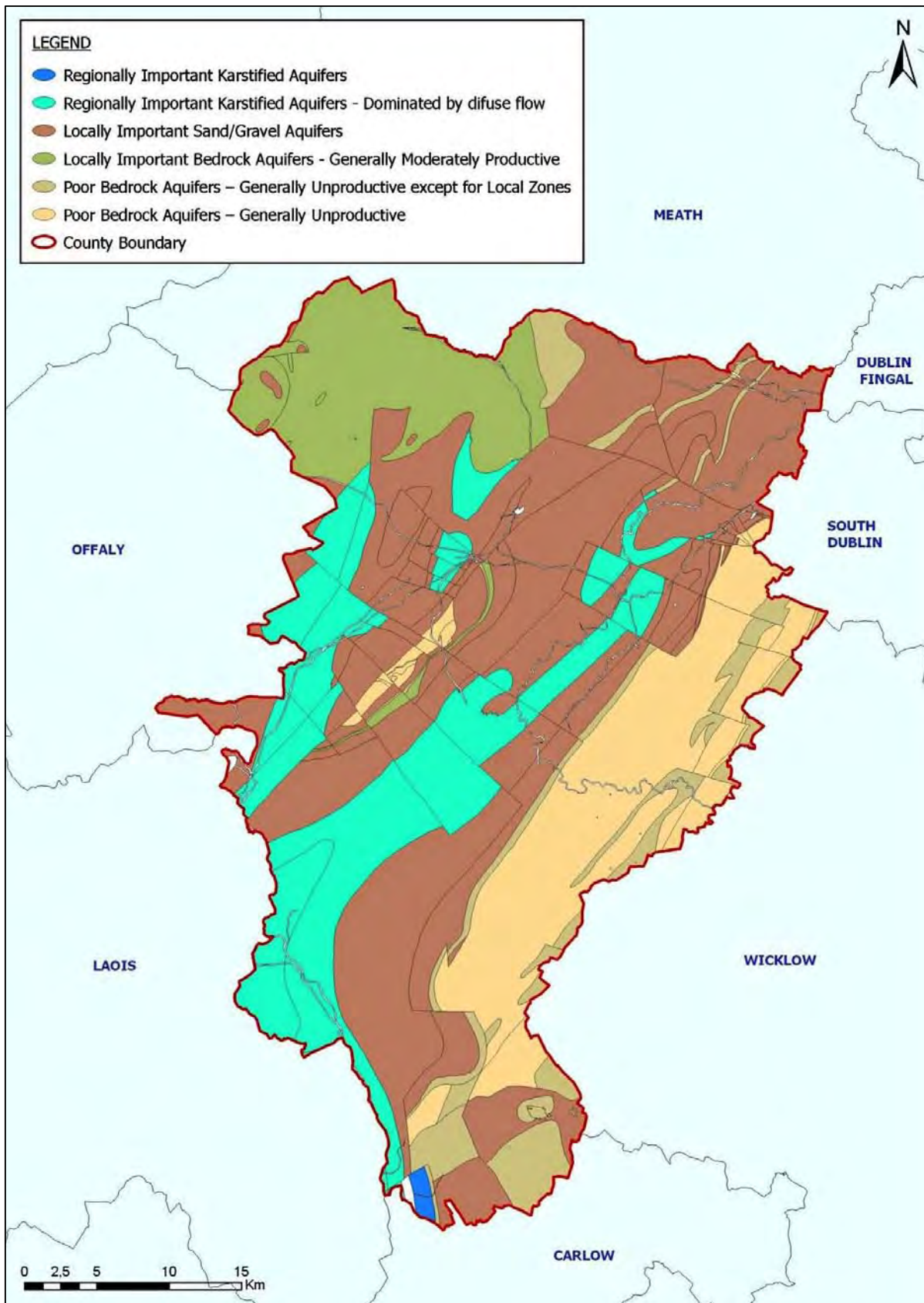


Figure 3.30 GSI Aquifer Productivity
Source: GSI (2005)

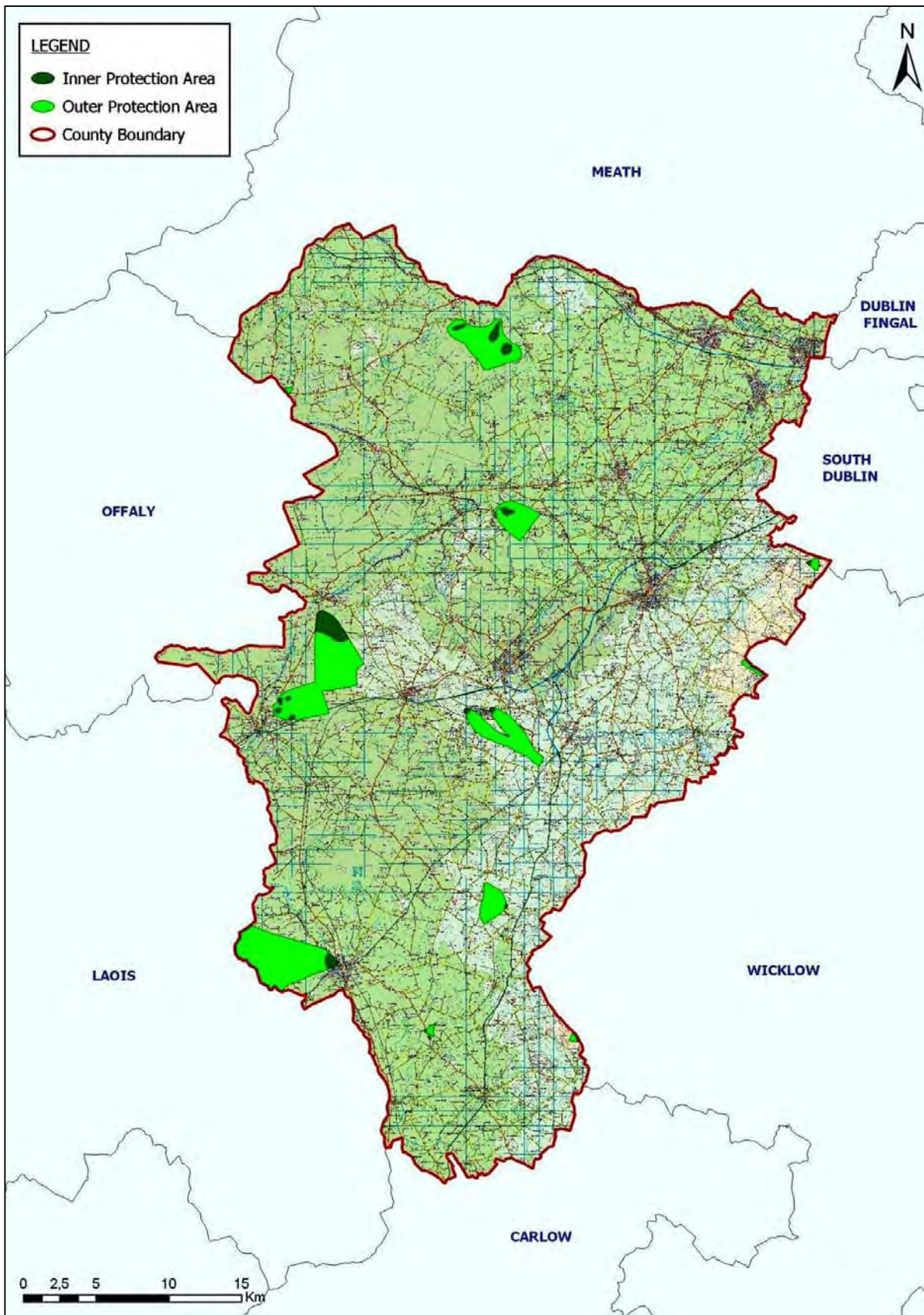


Figure 3.31 Ground Water Source Protection Areas
Source: Kildare County Council (2004)

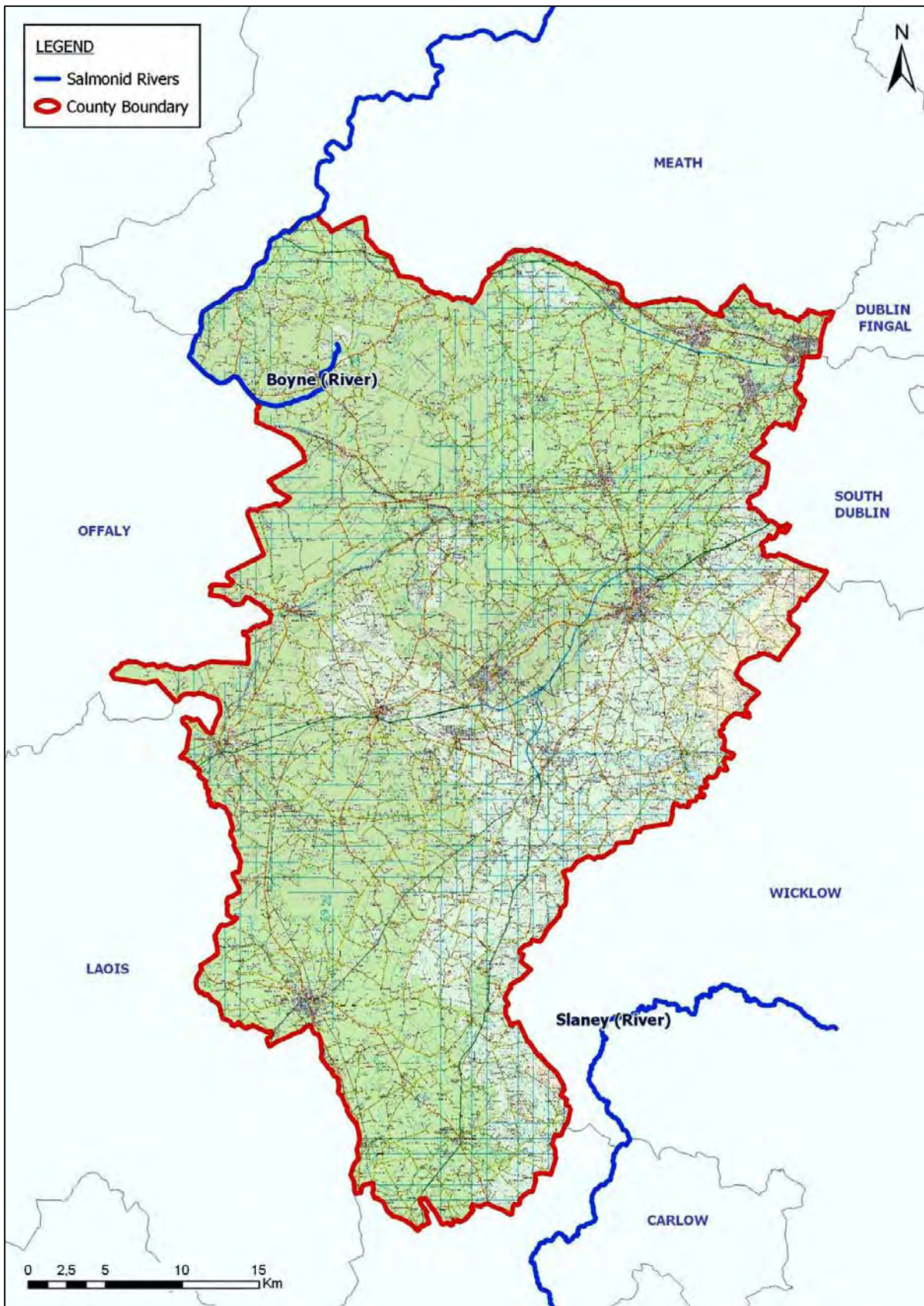


Figure 3.32 Designated Salmonid Waters
Source: EPA (2009)

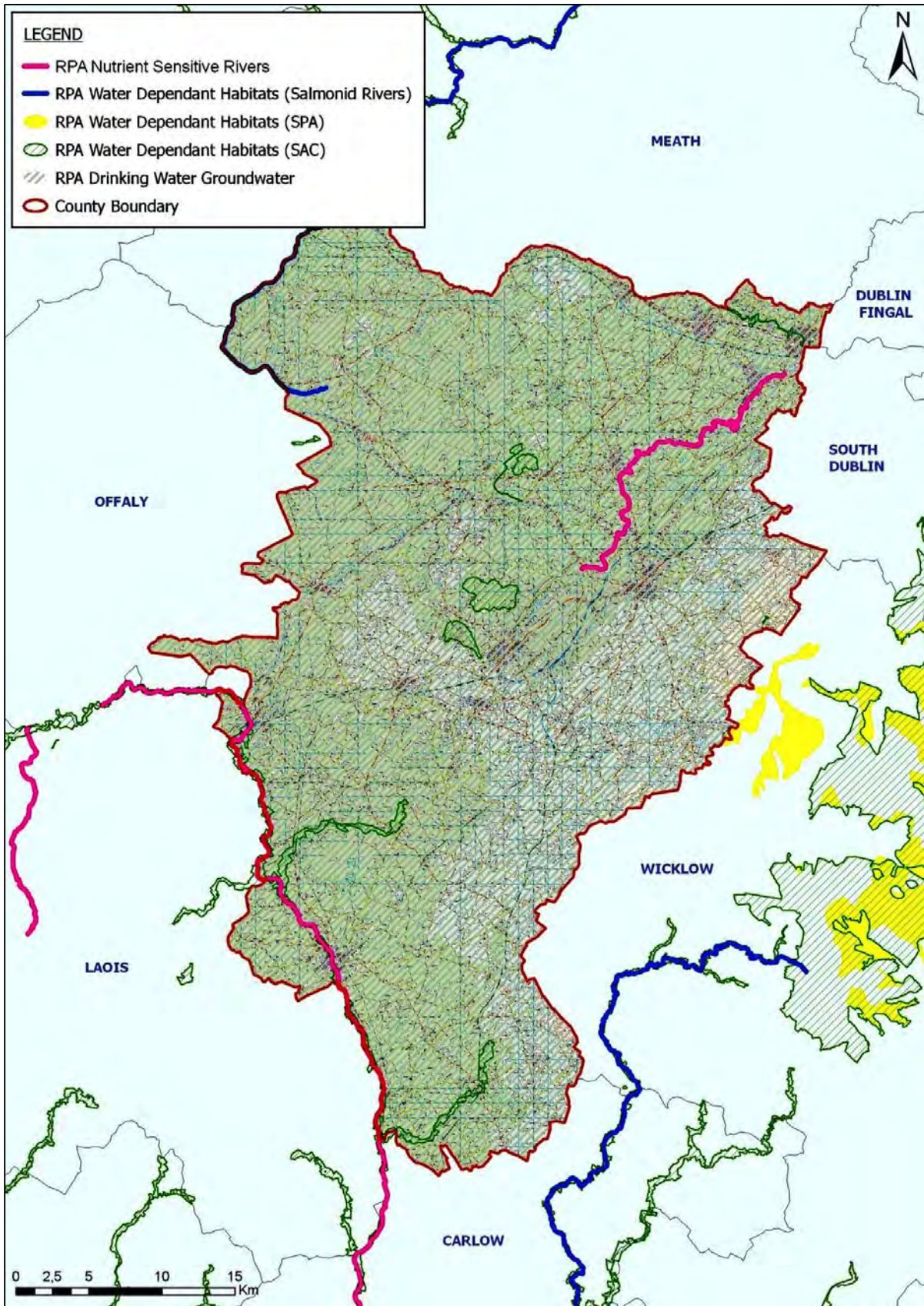


Figure 3.33 WFD Register of Protected Areas
Source: EPA (2009)

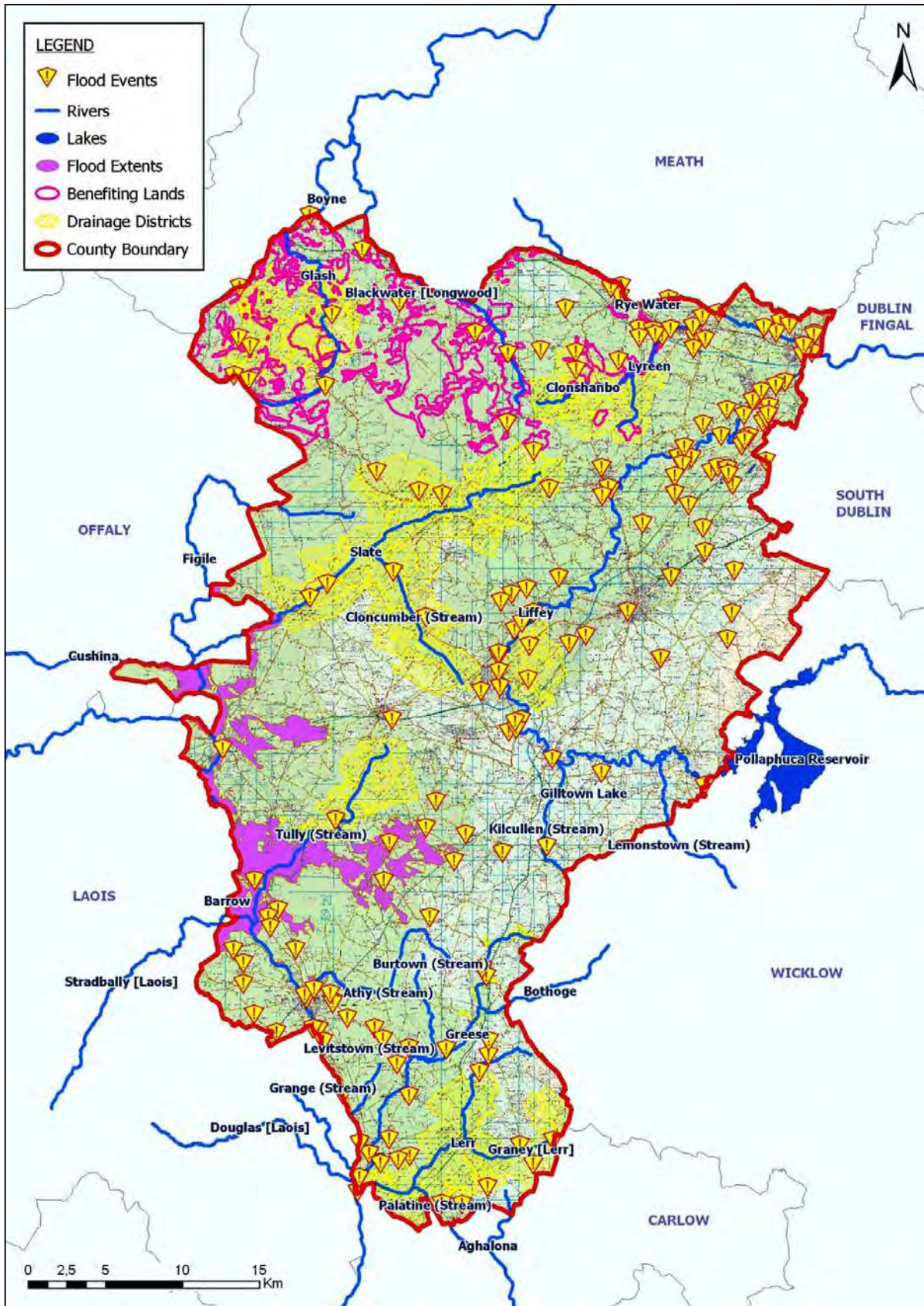


Figure 3.34 Flood Events & Extents, Benefiting Lands and Drainage Districts in the County
 Source: OPW (Various)

3.6 Material Assets

3.6.1 Waste Water

3.6.1.1 Relevant Legislation

The treatment of wastewater is governed by the Urban Waste Water Treatment Directive (91/271/EEC) (amended by Directive 98/15/EEC) transposed into Irish law by the Urban Waste Water Treatment Regulations 2001 (SI 254 of 2001). The Directive aims to protect the environment from the adverse effects of the wastewater discharges by ensuring that wastewater is appropriately treated before it is discharged to the environment. The Regulations stipulate that sewage treatment facilities are in place in all towns by 2005. The treatment of wastewater is also relevant to the Water Framework Directive which requires all public bodies, including Kildare County Council, to coordinate their policies and operations so as to maintain the good status of water bodies which are currently unpolluted and bring polluted water bodies up to good status by 2015 (see Section 3.5 *Water*). Figure 3.35 maps the Waste Water Treatment Plants, their discharge points and catchments, Section 4 licenses in the County.

3.6.1.2 Current Capacity and Demand and Future Upgrades

Relevant available information on waste water infrastructure capacity and demand has been collated for the County and is provided in this section.

Table 3.3 shows available information on waste water treatment capacity and demand at the main waste water treatment plants in the County which serve the main settlements. It is noted that this information is imperfect but is the best available at this time.

The information indicates that there is currently spare capacity at Leixlip (22,000 PE²²), Kildare (2,903 PE), Athy (2,000 PE), Rathangan (2,287 PE) and Monasterevin (6,057 PE). Osberstown is currently operating at capacity.

All plants are generally in compliance with the Urban Waste Water Treatment Directive 1991 as

²² Population equivalent (in waste-water monitoring and treatment) refers to the amount of oxygen-demanding substances whose oxygen consumption during biodegradation equals the average oxygen demand of the waste water produced by one person.

amended in 1998.²³ Wastewater is treated to varying degrees within the County.

The following is a list of planned upgrades and the stage these are at:

1. Kildare Town Sewerage Scheme (upgrade of plant and network – plant to 28,000PE):
 - Contract Documents Approved;
 - Tender Process ongoing with Tender Report submitted to DoEHLG;
 - Funding to be secured for this scheme.
2. Osberstown Wastewater Treatment Plant (plant to 130,000PE)²⁴:
 - Site Investigation ongoing;
 - Contract Documents being prepared;
 - Funding to be secured for this scheme.
3. Leixlip Wastewater Treatment Plant (Plant to 150,000PE)
 - Contract Documents prepared, awaiting approval;
 - Funding to be secured for the treatment plant upgrade.
 - Construction of associated Network Contracts ongoing.
4. Rathangan WWTW:
 - Requirement for upgrade detailed in Assessment of Needs;
 - Funding to be secured for this scheme.
5. Athy WWTW:
 - Requirement for upgrade detailed in Assessment of Needs;
 - Funding to be secured for this scheme.
6. Monasterevin WWTW:
 - Requirement for upgrade detailed in Assessment of Needs;
 - Funding to be secured for this scheme.

²³ Kildare County Council (2009)

²⁴ The Osberstown WWTP is currently operating at capacity.

Settlement	Current (2009) Population (est.)	WWTP	Current Loading [P.E.]	Current WWTP Capacity	Current Spare Capacity or Shortfall ²⁵	Predicted Population in 2017	Predicted Loading in 2017 ²⁶	Planned WWTP Capacity in 2017 ²⁷	Predicted Spare Capacity or Shortfall	Q Value of Receiving Water ²⁸
Kilcock	6,101					5,956				
Maynooth	11,955					15,897				
Celbridge	18,556					25,084				
Leixlip	15,563					21,326				
total	52,175	Leixlip	58,000	80,000	22,000	30,000	33,349	150,000	116,651	Q3
Naas	22,048					27,933				
Newbridge	18,746					23,245				
Kilcullen	3,281					4,014				
Kill	2,761					3,001				
Sallins	4,187					4,550				
Clane	5,465					5,939				
Prosperous	2,133					2,315				
total	58,621	Osberstown	80,000	80,000	0	30,000	40,941	130,000	89,059	Q4
Kildare ²⁹	8,292	Kildare	6,797 ³⁰	9,700	2,903	10,176	8,341	28,000	19,659	Q2-3
Athy	8,737	Athy	13,000	15,000	2,000	8,737	13,000	22,500	9,500	Q4
Rathangan	1,890	Rathangan	1,713 ³¹	4,000	2,287	2,055	1,863	4,000	2,137	Q3-4
Monasterevin	3,319	Monasterevin	2,943 ³⁰	9,000	6,057	4,056	3,597	15,000	11,403	Q3-4

Table 3.3 Waste Water Capacity and Demand Information

²⁵ Shortfall indicates unlikely to be compliance with Urban Waste Water Treatment Directive

²⁶ Predictions have been calculated by extrapolation of PE from Plans' target populations (for the year 2017) at same ratios as current populations (Current (2009) Population (est.)) to current PE figures

²⁷ These upgrades are dependent on finance being available but are currently included on Kildare County Council's Assessment of Needs 2007 – 2014

²⁸ Source: EPA (various) *Water Quality in Ireland* Wexford: EPA

²⁹ The critical factor at the Kildare Town WWTW is the Tully Stream (the receiving waters). These waters do not have the required assimilative capacity to treat higher amounts of wastewater. It is also noted that the planned extension of the treatment plant includes for the treatment of waste generated by the Kildare Chilling Plant (Meat factory) and for the construction of a new effluent rising main to the River Barrow at Kildangan

³⁰ This PE figure is as a result of a PE survey undertaken by the Water Services Section and may be subject to some seasonal factors

³¹ Recent PE load tests indicate a varying load from 799 to 1713PE

3.6.2 Drinking Water

3.6.2.1 Drinking Water Quality³²

Drinking water must be clean and wholesome. That means it must meet the relevant water quality standards and must not contain any other substance or micro-organism in concentrations or numbers that constitute a potential danger to human health.

Compliance with the drinking water requirements is determined by comparing the results of analyses submitted by water suppliers to the standard for 48 parameters specified in the European Communities (Drinking Water) Regulations (No. 2), 2007. To ensure that these standards are met, each water supply must be monitored on a regular basis.

Under Section 58 of the Environmental Protection Agency Act 1992 the EPA is required to collect and verify monitoring results for all water supplies in Ireland covered by the European Communities (Drinking Water) Regulations, 2000. The EPA publishes their results in annual reports which include Remedial Action Lists (RALs). The RAL identifies water supplies which are not in compliance with the Regulations mentioned above. There are no water supplies operated by Kildare County Council which are on the RAL.

3.6.2.2 Current Supply Capacity and Demand and Future Upgrades

Currently in Kildare, excluding the approximate 13MLD demand of Intel, the domestic demand is 63MLD and the non-domestic demand is 13MLD³³. Kildare County Council is very much dependant on the Greater Dublin Region for its water supply – this will remain the case until it is possible to reduce the percentage dependency on the Region by commissioning the remaining well field schemes and the Barrow Abstraction Scheme as outlined below:

Barrow Abstraction Scheme (31.5 MLD treatment plant):

- Pre-qualification process complete;
- Tenders received;
- Tender Report currently being prepared.

Kildare Wellfield Development Scheme (Robertstown & Johnstownbridge):

- Contract Documents under revision in accordance with the new Conditions of Contract;
- Commissioning date estimated at Q4 2012.

Drinking water abstraction points are mapped on Figure 3.35.

3.6.3 Waste

A Waste Management Plan for County Kildare has been drawn up in accordance with the 1996 Waste Management Act. The Plan is valid for the period of 2005 - 2010. Section 22 of the Act requires that the Plan be reviewed at least once every five years. The Plan sets out key actions that are to be delivered in each of the Plan's five years.

Waste collected is currently transferred to Dublin from the Integrated Waste Management Facility at Silliot Hill, Kilcullen for baling prior to disposal at Arthurstown Landfill Site. Waste licensed facilities in Kildare are mapped on Figure 3.37.

3.6.4 Vehicular Circulation

County Kildare is well served in terms of vehicular access. The current road and rail networks in the County are mapped on Figure 3.36 along with proposed routes

Close proximity and good connections to Dublin Airport present a convenient entry point for international business connections.

3.6.5 Existing Problems relating to Material Assets

Certain regions of the Plan area are not within the catchment of the waste water treatment network and consequently development in these areas use septic tanks to treat waste water arising.

Certain parts of the County are not within the catchment of the waste water treatment network and consequently development in these areas use septic tanks to treat waste water arising.

There are no problems foreseen in terms of waste capacity for the Plan area.

³² Text in this section is sourced from EPA (2009) *The Provision and Quality of Drinking Water in Ireland: A Report for the Years 2007-2008*, Wexford: EPA

³³ These are approximate

3.6.6 Evolution of Material Assets in the absence of the Plan

In the absence of a Development Plan, it is likely that dispersed development would occur. This would make it more difficult to provide the necessary infrastructure such as waste water treatment plants and networks, water supply infrastructure, transport infrastructure and powerlines etc.

Failure to provide sufficient infrastructure for development would be likely to result in significant adverse impacts. For example, failure to upgrade and provide new waste water infrastructure would be likely to adversely impact upon water quality and indirectly significantly adversely impact upon biodiversity and flora and fauna, drinking water supplies and human health.

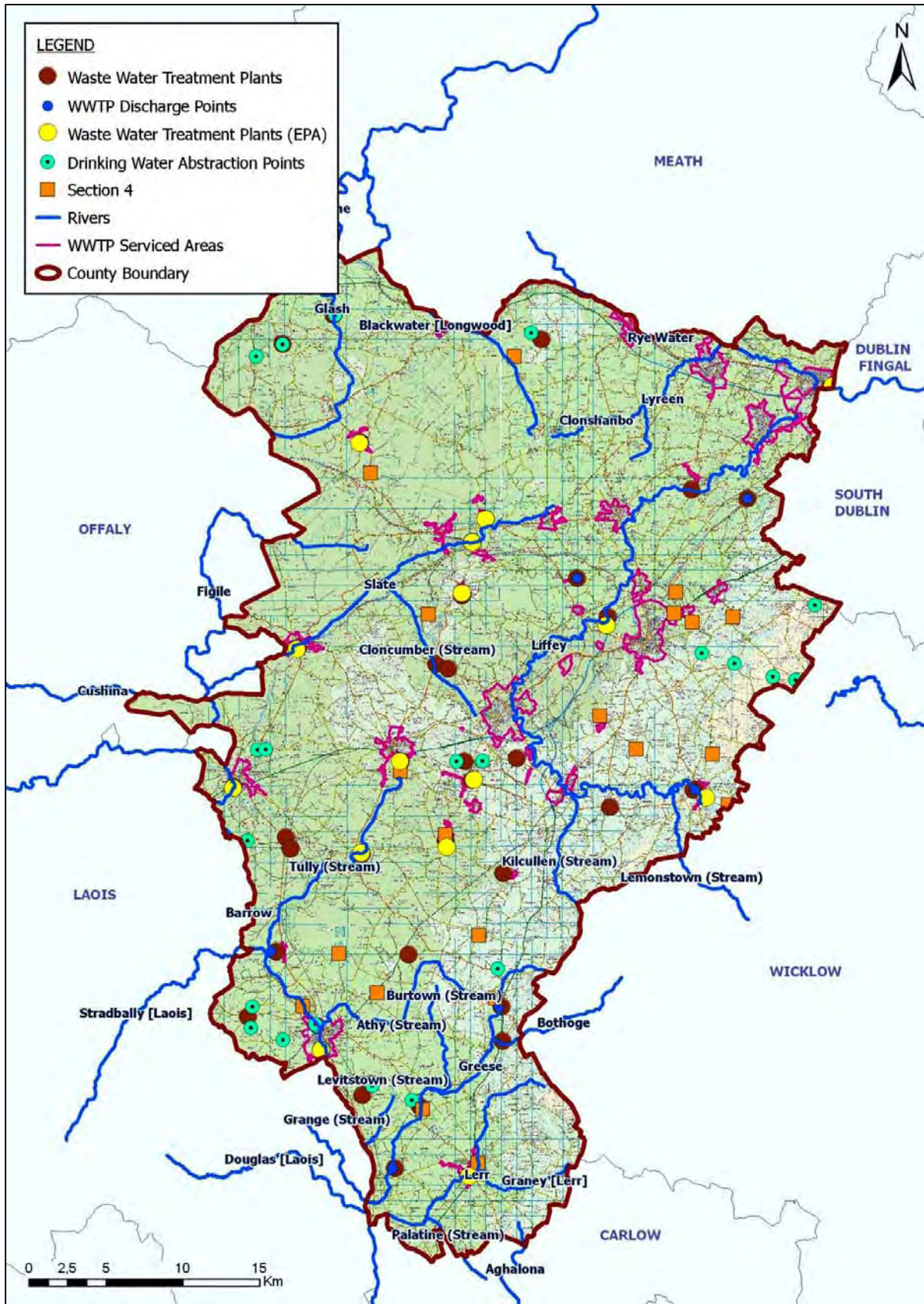


Figure 3.35 Waste Water Treatment Works, Water Treatment Plants and Discharge Points
 Source: Kildare County Council (Various)

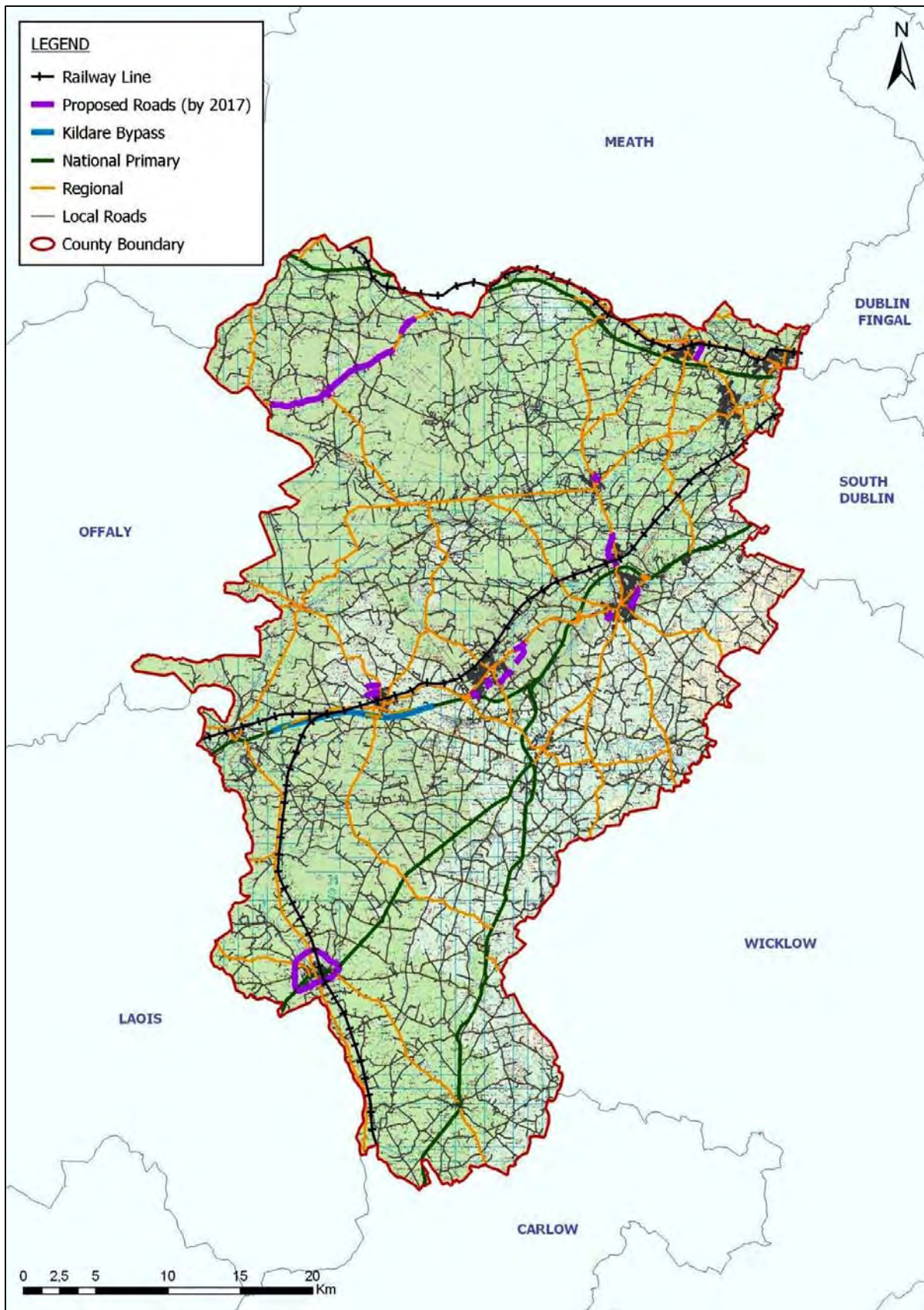


Figure 3.36 Road and Rail Network and the proposed N4 and N5 Routes
Source: Kildare County Council (Various)

3.7 Air and Climatic Factors

3.7.1 Ambient Air Quality

3.7.1.1 Introduction and Legislation

In order to protect human health, vegetation and ecosystems, EU Directives set down air quality standards in Ireland and the other Member States for a wide variety of pollutants. These pollutants are generated through fuel combustion, in space heating, traffic, electricity generation and industry and, in sufficient amounts, could affect the well being of the areas inhabitants. The EU Directives include details regarding how ambient air quality should be monitored, assessed and managed.

The principles to this European approach are set out under the Air Quality Framework Directive 1996 as transposed into Irish law under the Environmental Protection Agency Act 1992 (Ambient Air Quality Assessment and Management) Regulations 1999 (SI No. 33 of 1999).

Four daughter Directives lay down limits or thresholds for specific pollutants. The first two of these directives cover: sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead; and, carbon monoxide and benzene. Two more daughter directives deal with: ozone; and polyaromatic hydrocarbons, arsenic, nickel, cadmium and mercury in ambient air.

In order to comply with these directives, the EPA measures the levels of a number of atmospheric pollutants. For the purposes of monitoring in Ireland, four zones are defined in the Air Quality Standards Regulations 2002 (SI No. 271 of 2002). The main areas defined in each zone are:

- Zone A: Dublin Conurbation.
- Zone B: Cork Conurbation.
- Zone C: 21 Other cities and large towns comprising Galway, Limerick, Waterford, Clonmel, Kilkenny, Sligo, Drogheda, Wexford, Athlone, Ennis, Naas, Carlow, Tralee and Dundalk.
- Zone D: Rural Ireland, i.e. the remainder of the State - small towns and rural areas of the country - excluding Zones A, B and C.

County Kildare is mostly in Zone D apart from the areas of Celbridge, Naas and Newbridge which are designated as Zone C. These zones are mapped on Figure 3.37.

Air quality monitoring commenced at the Kildare County Council offices at Newbridge in October 2009. Air Quality was monitored on the Sallins Road in Naas at the location shown on Figure 3.37 from October 2003 to April 2004. The following parameters are measured at both locations: PM10, Carbon Monoxide, Sulphur Dioxide, Benzene, Lead and Oxides of Nitrogen. These locations are shown on Figure 3.37.

3.7.2 Potential Point Sources of Emissions to Air

3.7.2.1 IPPC Licensed Facilities

The EPA has been licensing certain large-scale industrial and agriculture activities since 1994. Originally the licensing system was known as Integrated Pollution Control (IPC) licensing, governed by the Environmental Protection Agency Act, 1992. The Act was amended in 2003 by the Protection of the Environment Act, 2003 which gave effect to the Integrated Pollution Prevention Control (IPPC) Directive. Detailed procedures concerning the IPPC licensing process are set out in the EPA Acts 1992 to 2007 and the associated licensing regulations.

IPPC licences aim to prevent or reduce emissions to air, water and land, reduce waste and use energy/resources efficiently. An IPPC license is a single integrated license which covers all emissions from the facility and its environmental management. All related operations that the license holder carries in connection with the activity are controlled by this license. Before a license is granted, the EPA must be satisfied that emissions from the activity do not cause a significant adverse environmental impact.

There are approximately 20 IPPC licensed facilities distributed throughout the County. These are mapped on Figure 3.37.

3.7.2.2 Waste Licensed Facilities

In 1996 the EPA began licensing certain activities in the waste sector. These include landfills, transfer stations, hazardous waste disposal and other significant waste disposal and recovery activities.

A waste license is a single integrated license dealing with emissions to all environmental media and the environmental management of the facility. All related waste operations connected to the activity are considered in determining a license application. The EPA must be satisfied that the activity will not cause environmental pollution when carried on in accordance with the license

conditions. Detailed procedures on processing waste license applications are set out in the Waste Management Act, 1996 which was amended by the Protection of the Environment Act, 2003 and associated regulations.

There are 11 waste licensed facilities distributed throughout the County. These are mapped on Figure 3.37.

3.7.3 Noise

Noise is unwanted sound. It can seriously harm human health and interfere with daily activities at school, at work, at home and during leisure time. Areas within the County which are commonly affected by noise are urban areas and areas along roadsides.

Generally, the main noise source in the County is from traffic. Streets in low lying areas that have high traffic counts as well as enclosing taller buildings are likely to have harsh sensory environments with regard to noise levels with regard to this source. As mentioned below, traffic hotspots, such as intersections, are likely to have higher noise levels.

Traffic noise alone is harming today the health of almost every third European³⁴. The main health risks of noise identified by the WHO include: pain and hearing fatigue; hearing impairment; annoyance; interferences with social behaviour; interference with speech communication; sleep disturbance and all its consequences; and performance at work and school. Any of these can lead to annoyance and possibly more overt reactions, including complaints. *Traffic hotspots* within some of the County's towns are likely to have elevated levels of air pollution and noise due to traffic congestion. These hotspots are located along the main road routes - especially at intersections - and provide for a harsh sensory environment which may impact upon human health.

In addition, there are localised noise sources which include air conditioning equipment, marine traffic, train movements and night clubs.

A Noise Action Plan has been prepared by Kildare County Council in accordance with the requirements of the Environmental Noise Regulations 2006, Statutory Instrument 140 of 2006. These Regulations give effect to the EU

³⁴ World Health Organization Regional Office for Europe (2003) *Technical meeting on exposure-response relationships of noise on health 19-21 September 2002* Bonn, Germany Bonn: WHO

Directive 2002/49/EC relating to the assessment and management of environmental noise.

Strategic noise mapping was undertaken in 2007 by the National Roads Authority for the following major roads:

1. M4 between the boundary with South Dublin County Council at Leixlip and the boundary with Meath County Council at Ballynakill and between the boundary with Meath County Council at Martinstown and the boundary with Meath County Council at Clonard;
2. N7/M7 between the boundary with South Dublin County Council at Castlewarden and the boundary with Laois County Council at Jamestown;
3. M9 between its junction with the M7 at Hillsborough and the Kilcullen Interchange; and
4. N9 between Moone and Crookstown, County Kildare.

The results of this assessment have been presented as maps and summary tables of statistics showing the estimated area, number of dwellings and people exposed to long term road traffic noise within the area covered by the noise maps. The results are mapped as a series of coloured 5 dB(A) wide noise level bands above 55 dB L_{den} ³⁵ and 50 dB L_{night} ³⁶ which can be seen on Figure 3.38 and Figure 3.39.

3.7.4 Climatic Factors

3.7.4.1 Greenhouse Gases

In order to reduce greenhouse gas emissions the internationally agreed Kyoto Protocol established emissions reduction targets for developing countries. Ireland's emission target for greenhouse gases is to limit the increase in their combined emissions during the five-year period 2008-2012 to 13 per cent above 1990 levels.

Based on the inventory figures for 2006³⁷, the EPA estimates that Ireland's emissions in 2006 were 25.5 per cent higher than the baseline estimate that underlies Ireland's allowable emissions for the period 2008-2012, as agreed in the peer review of Ireland's 2006 submission to the United

³⁵ L_{den} is the 24 hour noise rating level determined by the averaging of the L_{day} , with the $L_{evening}$ plus a 5 dB penalty, and the L_{night} plus a 10 dB penalty

³⁶ L_{night} is the A-weighted long-term average sound level between 23.00 and 07.00

³⁷ EPA (2008) *Ireland's Emissions of Greenhouse Gases for the period 1990-2006* Wexford: EPA

Nations Framework Convention on Climate Change.

With regard to overall emissions, *Agriculture* is the single largest contributor, at 27.7% of the total, followed by *Energy* (power generation & oil refining) at 22.3% and *Transport* at 19.7%. The remaining 30% is made up by the Residential sector at 10.4%, *Industry and Commercial* at 17.2%, and *Waste* at 2.6%.

Transport continues to be the dominant growth sector with emissions at 682,000 tonnes higher in 2006 than in 2005. This represents a 5.2% increase on 2005 levels and 165% increase on the 1990 transport emissions. Road transport accounts for 97% of the transport sector emissions. The increase in the GHG emissions from the transport sector reflects sustained increases in fuel consumption with petrol usage up 3.4% and diesel consumption up 7.9% from the previous year.

3.7.4.2 Climate Change

Climate change refers to any change in climate over time, whether due to natural variability or as a result of human activity. The release of greenhouse gases into the atmosphere as a result of human activities adds to natural climate variability by increasing the naturally occurring greenhouse effect. This greenhouse effect occurs in the atmosphere and is caused by greenhouse gases which exist naturally in the atmosphere. The greenhouse gases retain the radiation which is released from the earth as a result of heating by the sun. This retention maintains a global temperature which is suitable for ecosystems and life.

Climate change is not limited to changes in temperatures or weather - it can also mean changes in the occurrence of extreme and unstable weather conditions, storms and floods, droughts and coastal erosion.

3.7.4.3 Potential Effects of Changed Climate

The EPA's 'Climate Change: Regional Climate Model Predictions for Ireland' (2005)³⁸ report provides an analysis of future Irish climate conditions for the period 2021–2060 based on the outputs from a new regional climate modelling facility located in Met Éireann.

³⁸ Community Climate Change Consortium for Ireland (2005) *Environmental RTDI Programme 2000–2006 Climate Change: Regional Climate Model Predictions for Ireland (2001-CD-C4-M2) Final Report* Wexford: Environmental Protection Agency

As increased temperatures will lead to greater amounts of water vapour in the atmosphere and an accelerated global water cycle, it is reasonable to expect that river catchment areas will be exposed to a greater risk of flooding. The increase in winter precipitation will be likely to produce a significant increase in the more intense discharge episodes, raising the risk of future flooding.

The report identifies that although it is not possible to comment on changes in flood magnitude and frequency, the increase in winter runoff indicated for many parts of the west of the country, especially under the scenario for the period 2061–2090, is likely to have significant implications. River flooding tends to be more common during the wetter winter months when soils are near saturation and can be exacerbated in coastal areas when interactions occur between high tides and high flows. Many of the rivers draining upland areas have a rapid or "flashy" response to rainfall enhanced by rising topography. Steep slopes and thin soils favour rapid flow pathways and water is rapidly transmitted to the channel network especially in urbanised catchments with extensive areas of impermeable surfaces.

3.7.5 Existing Problems

Traffic hotspots within the County area are likely to have elevated levels of air pollution and noise due to traffic congestion.

Localised air pollution incidences with regard to PM10 and PM2.5 and noise pollution are both likely to occur when demolition/construction takes place - especially in relation to PM10 if suppression techniques are not introduced - and when traffic is queuing for long periods of time.

Ireland's current emissions are exceeding targets agreed in the peer review of Ireland's 2006 submission to the United Nations Framework Convention on Climate Change. It is unlikely that Ireland will meet these targets and it is likely therefore that financial penalties will be incurred. Transport related emissions continue to be the dominant growth sector.

Changes in sea level and/or changes in the occurrence of severe rainfall events as a result of climate change could adversely impact upon the area's human beings, its biodiversity and its economy (see also Section 3.5.7 *Flooding*).

3.7.6 Evolution of Air and Climatic Factors in the absence of the Plan

Increases in the use of catalytic converters, cleaner fuels, better engine technology and maintenance is generally reducing the pollution omitted per motor vehicle, however, this reduction is probably being offset by the increase in the number of cars as well as the increase in the volume and incidences of traffic congestion. Increases in the number of cars as well as the increase in the volume and incidences of traffic congestion may lead to increases in air and noise pollution in the future.

If new dispersed development occurs in the County, adverse impacts upon air quality and noise levels, and resultant impacts upon human health, would be likely to arise if unmitigated.

In the absence of the Plan, the realisation of objectives relating to energy efficiency, renewable energy and a reduction in local transport related emissions to air contained within the Plan would be dependent upon the objectives contained in lower tier development and local area plans - which are required to provide for proper planning and sustainable development.

The Plan inter alia provide an opportunity to provide for the regeneration of certain urban and inner suburban areas within the County which are close to existing and proposed high quality public transport linkages. This regeneration would provide for an increased population which would be less dependent upon private modes for local transportation and would therefore be likely to generate less local transport related greenhouse gas emissions than populations located further away from the urban areas. In the absence of the Plan regeneration of the urban areas across the County would be less likely to be achieved as population would be more likely to gravitate towards the east of the County which is in closest proximity to and better connected to the Greater Dublin Area. Such gravitation would produce less additional national and interregional vehicular movement by private and goods vehicles and such increases would be more likely to use capacity in existing and emerging installed infrastructure capacity. It is noted however that the gravitation of new populations to the east would be dependent upon the nature of lower tier development plans which are required to include objectives for the development and renewal of areas in need of regeneration.

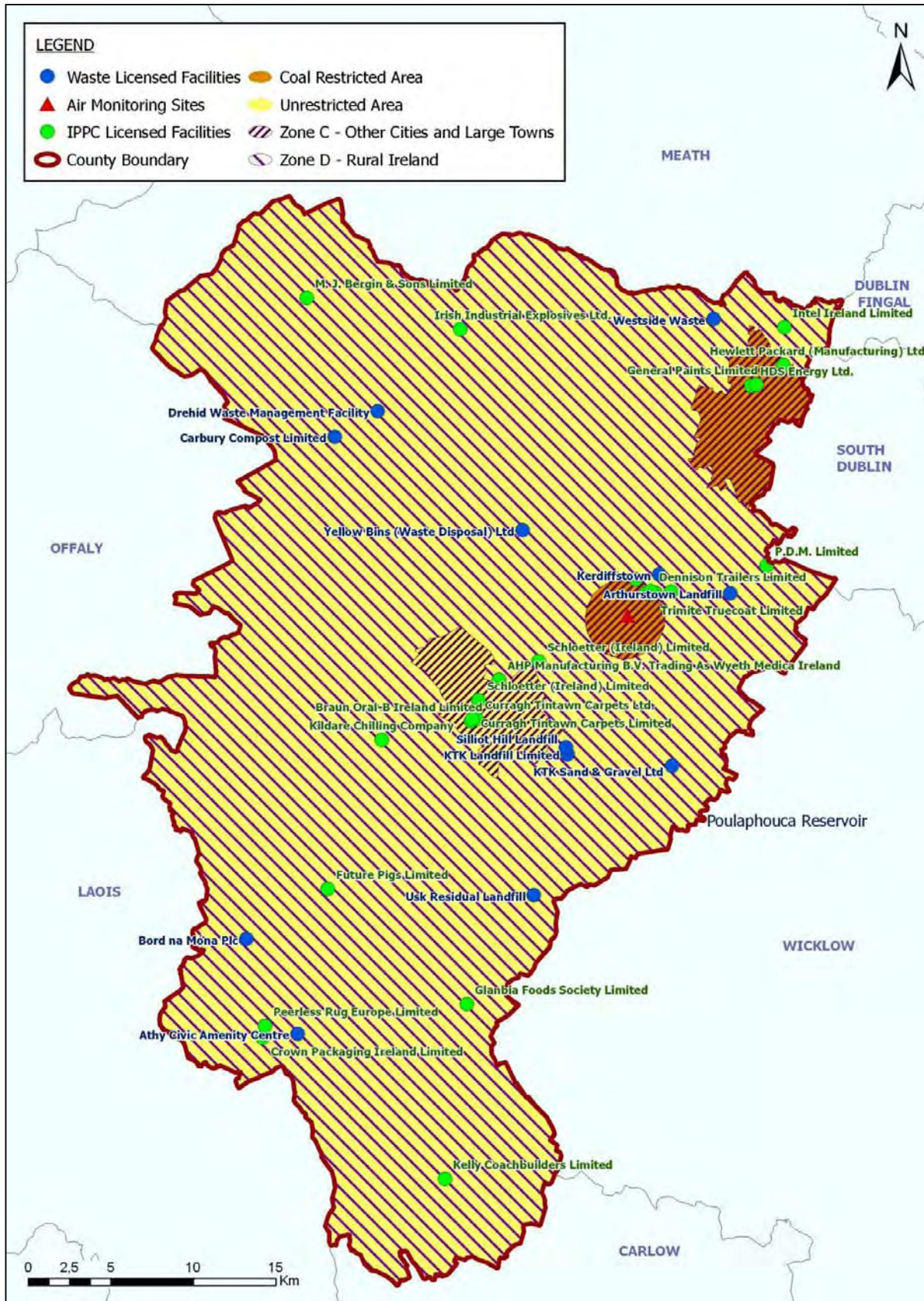


Figure 3.37 Location of IPPC & Waste Licensed Facilities, Air Quality Monitoring Sites etc.
Source: EPA (Various)



Figure 3.38 Noise Mapping
Source: Kildare County Council (2009)

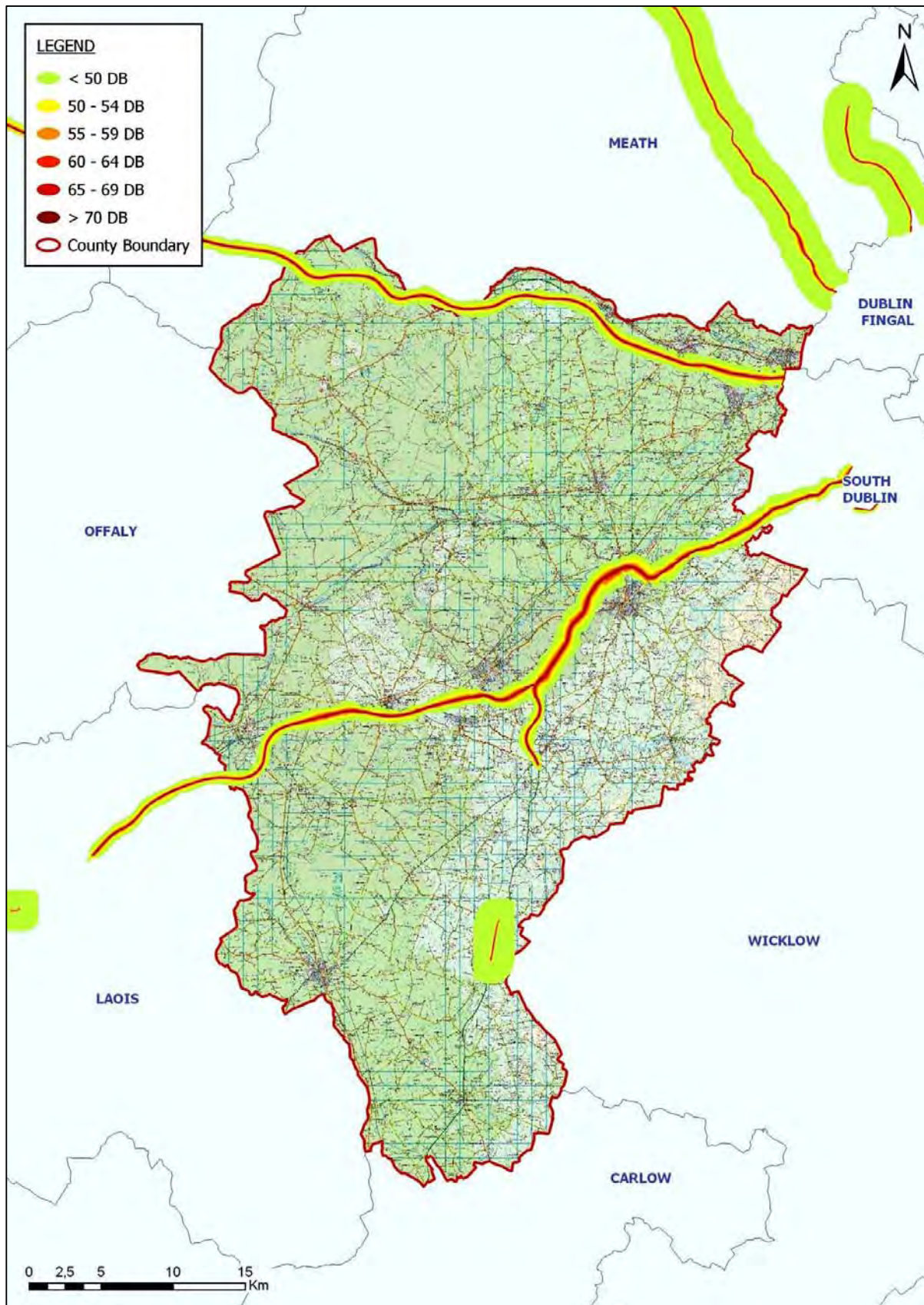


Figure 3.39 Noise Mapping

Source: Kildare County Council (2009)

3.8 Cultural Heritage

3.8.1 Introduction

Heritage, by definition, means inherited properties, inherited characteristics and anything transmitted by past ages and ancestors. It covers everything, from objects and buildings to the environment. Cultural heritage includes physical buildings, structures and objects, complete or in part, which have been left on the landscape by previous and indeed current generations.

Human interaction with the land is evident from the earliest of times up to the present in the County, from agricultural landscapes to archaeological remains to growing urban centres.

Kildare is one of the oldest towns in Ireland. It originated in pre-Christian times when it was the site of a shrine to the Celtic Goddess Brigid. Today it contains many historic buildings and ruins; the legacy of 1500 years of history.

3.8.2 Archaeological Heritage

3.8.2.1 Introduction

Archaeology is the study of past societies through the material remains left by those societies and the evidence of their environment. Archaeological heritage consists of such material remains (whether in the form of sites and monuments or artefacts in the sense of moveable objects) and environmental evidence. As archaeological heritage can be used to gain knowledge and understanding of the past it is of great cultural and scientific importance.

Archaeological sites and monuments vary greatly in form and date; examples include earthworks of different types and periods, (e.g. early historic ringforts and prehistoric burial mounds), megalithic tombs from the Prehistoric period, medieval buildings, urban archaeological deposits and underwater features.

Archaeological sites may have no visible surface features; the surface features of an archaeological site may have decayed completely or been deliberately removed but archaeological deposits and features may survive beneath the surface.

3.8.2.2 Record of Monuments and Places

The County's archaeological heritage is protected under the National Monuments Acts (1930-2004), Natural Cultural Institutions Act 1997 and the

Planning Acts. The Record of Monuments and Places (RMP) is an inventory, put on a statutory basis by amendment to the National Monuments Act 1994, of sites and areas of archaeological significance, numbered and mapped.

The term 'monument' includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. All monuments in existence before 1700 A.D. are automatically considered to be historic monuments within the meaning of the Acts.

There are a large number of recorded monuments in the County. Spatial distribution of monuments listed on the RMP is mapped on Figure 3.40. Entries include Enclosures, Habitation Sites and Castles.

Enclosures include areas defined by an enclosing element and occurring in a variety of shapes and sizes, possessing no diagnostic features which would allow classification within another monument category. These may date to any period from prehistory onwards.

A Habitation Site is a concentration of archaeological features which are indicative of habitation, the remains being insufficient to allow a more specific classification. These may be of any date up to the medieval period (5th-16th centuries AD).

Castles can date from the late 12th to the 16th century AD. Castles in the Plan area include Anglo-Norman masonry castles, hall-houses and tower houses.

3.8.3 Architectural heritage

3.8.3.1 Introduction

The term architectural heritage is defined in the Architectural Heritage (National Inventory) and Historic Monuments Act 1999 as meaning all: structures and buildings together with their settings and attendant grounds, fixtures and fittings; groups of structures and buildings; and, sites which are of technical, historical, archaeological, artistic, cultural, scientific, social, or technical interest.

Instances of built heritage in the County include the Grand Canal and the Royal Canal. Both Canals link the River Shannon with Dublin to the east. The construction of the Grand Canal commenced in 1756. Work commenced on the Royal Canal in 1790 and lasted 27 years before finally reaching the Shannon in 1817.

3.8.3.2 Record of Protected Structures

The Record of Protected Structures (RPS) is legislated for under Section 51 of the Planning and Development Act 2000.

Protected Structures are defined as structures, or parts of structures that are of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social or technical point of view.

In relation to a protected structure or proposed protected structure, the following are encompassed:

- the interior of the structure;
- the land lying within the curtilage³⁹ of the structure;
- any other structures lying within that curtilage and their interiors; and,
- all fixtures and features which form part of the interior or exterior of any structure or structures referred to in subparagraph (i) or (iii).

3.8.3.3 National Inventory of Architectural Heritage

The National Inventory of Architectural Heritage (NIAH) is a state initiative under the administration of the Department of the Environment, Heritage and Local Government and established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999.

The purpose of the NIAH is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the protection and conservation of the built heritage. NIAH surveys provide the basis for the recommendations of the Minister for the Environment, Heritage and Local Government to the planning authorities for the inclusion of particular structures in their Record of Protected Structures (RPS).

³⁹ Curtilage is normally taken to be the parcel of ground immediately associated with the Protected Structure, or in use for the purposes of the structure. Protection extends to the buildings and land lying within the curtilage. While the curtilage sometimes coincides with the present property boundary, it can originally have included lands, features or even buildings now in separate ownership, e.g. the lodge of a former country house, or the garden features located in land subsequently sold off. Such lands are described as being attendant grounds, and the protection extends to them just as if they were still within the curtilage of the Protected Structure.

Structures listed on the NIAH occur in clusters in the main settlements in the County including Athy, Kilcock, Maynooth, Monasterevin, Kildare, Naas and Rathangan. Spatial distribution of structures listed on the NIAH within the County is mapped on Figure 3.41.

3.8.3.4 Architectural Conservation Areas

The Planning and Development Act, 2000 provides the legislative basis for the protection of such areas, known as Architectural Conservation Areas (ACAs). An ACA is a place, area or group of structures or townscape which is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contributes to the appreciation of protected structures, whose character it is an objective to preserve in a development plan. The ACA designation requires that planning permission must be obtained before significant works can be carried out to the exterior of a structure in the ACA which might alter the character of the structure or the ACA.

ACAs enable the protection of the existing character of areas within the settlements listed above throughout the County. This character is a combination of the various layers of development from earliest times to the present. Though often not individually very important, vernacular buildings contribute to the acknowledged distinctive character of many of the County's built up areas. Collectively, if properly used and maintained, they can make a significant impact on the retention and enhancement of that character which is important in maintaining local distinctiveness for both inhabitants and visitors.

Boundaries for Architectural Conservation Areas have been defined for Kilcock, Monasterevin, Prosperous, Rathangan, Maynooth, Moone, Leixlip and Ballitore. An ACA exists in Naas.

3.8.4 Existing Cultural Heritage Problems

Threats to cultural heritage include the cumulative accommodation of large scale development in the County, development which involves material alteration or additions to protected structures, brownfield development and development on sites adjoining protected monuments, places or structures.

3.8.5 Evolution of Cultural Heritage in the absence of the Plan

In the absence of the Plan, the evolution of cultural heritage would be dependent on developments which take place.

Such development would have no guidance as to where to be directed and planning applications would be assessed on an individual basis with cultural heritage protected under a number of strategic actions relating to archaeological and architectural protection.

Beneficial impacts upon the protection of cultural heritage which would be likely to arise as a result of the Plan provisions would not necessarily occur.

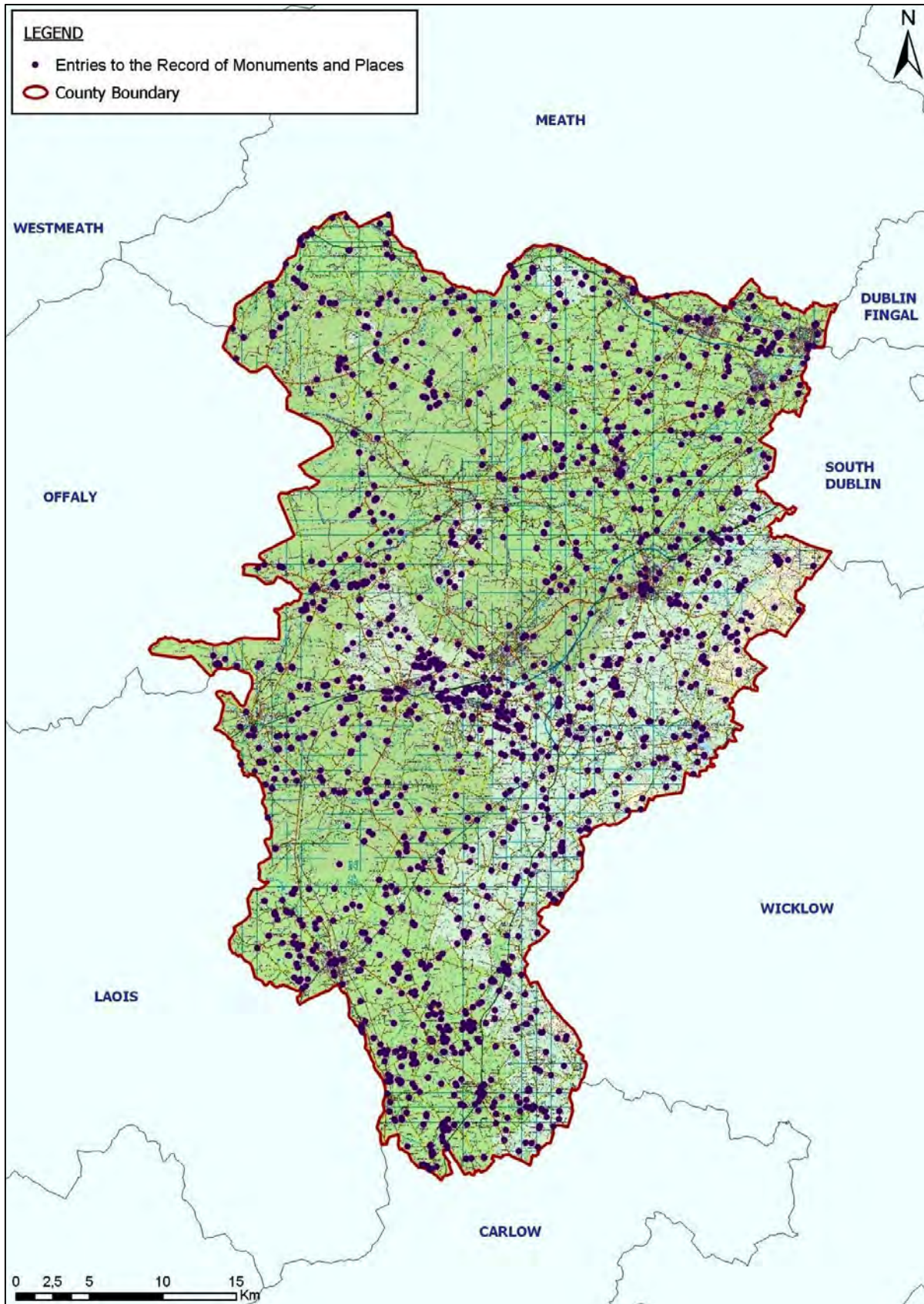


Figure 3.40 Entries to the Record of Monuments and Places
Source: Kildare County Council (Unknown)



Figure 3.41 National Inventory of Architectural Heritage
Source: DEHLG (2003)

3.9 Landscape

3.9.1 Introduction

Landscapes are areas which are perceived by people and are made up of a number of layers:

- landform, which results from geological and geomorphological history;
- land cover, which includes vegetation, water, human settlements;
- human values which are a result of historical, cultural, religious and other understandings and interactions with landform and land cover.

The topography of the County consists of a large, fertile plain broken only by a few small hills such as Dunmurray Hill and the Hill of Allen, with upland areas mainly on the eastern boundary with County Wicklow. The fertile plain forms part of the central lowlands of Ireland and extends throughout most of the County including the unique landscape of the Curragh. Significant areas of bogland are located to the north west of the County. The uplands to the east separate the plains from the Wicklow Mountains and Blessington.

The Royal and Grand Canal as well as the many rivers flowing throughout the County are important landscape features as is Curragh, which represents the largest unenclosed area of arable land of the Country (5,000 acres).

3.9.2 Landscape Character Assessment

Landscape Character Assessment (LCA) attempts to describe landscapes in terms of their character in an objective way. This can be used to inform decision making in relation to the protection of the environment, natural resources and heritage; it can be used to monitor change and can be used to guide development.

A Landscape Character Assessment was prepared for the County by CAAS in 2003 in accordance with the DEHLG's Draft Landscape and Landscape Assessment Guidelines (2000). It classifies the different landscapes of the County in relation to their different characteristics and values and their degree of sensitivity to various kinds of development. The upland areas include the mountainous areas to the east of the County as well as the Chair of Kildare and the hills to the north; the lowland areas examine the low-lying

agricultural lands and the urban area environs of Naas, the river valleys refer to the environs of the two major rivers that run through the County (i.e. Rivers Barrow and Liffey), whilst the water corridor areas refer to the landscape areas along the Grand Canal and the Royal Canal. Transition areas refer to the zone between the upland and lowlands areas.

Upland Areas

1. Eastern Uplands - Oughterard
2. South-eastern Uplands - Corballis Hills
3. Northern Hills – Newtown Hills
4. Chair of Kildare – Red Hill
5. Dunmurry Hill, Allen Hill

Lowland Areas

1. Northern Lowlands – Naas and environs
2. Southern Lowlands
3. North-western Lowlands – Cadamstown and environs
4. Central Undulating Lowlands
5. Western Boglands

Transition Areas

1. Eastern Transition Lands

River Valleys & Water Corridors

1. River Liffey
2. River Barrow
3. Grand Canal
4. Royal Canal

Other Landscape Units

1. The Curragh
2. Pollardstown Fen
3. Allen Remnant Bogs

These Landscape Character Areas are mapped on Figure 3.43.

3.9.3 Scenic Views and Routes

The County contains many sites, areas and vantage points from which views over areas of great natural beauty, local landmarks, historic landscapes and adjoining Counties may be obtained. In addition to scenic views, the County also contains important prospects i.e. prominent landscapes or areas of amenity value or special interest which are visible from the surrounding area.

Figure 3.44 maps the Scenic Views and Scenic Routes as listed in the current Kildare County Development Plan 2005-2011. It includes views and prospects to and from:

- Water Corridors;

- Canals;
- County Waterways;
- Hills; and,
- Scenic Routes.

3.9.4 Existing Landscape Problems

Generalised landscape problems include the cumulative visual impact resulting from developments such as one off houses. Such developments, which individually often do not have significant adverse impacts, have the potential to cumulatively and adversely significantly impact upon sensitive landscapes.

3.9.5 Evolution of Landscape in the absence of the Development Plan

In the absence of a Development Plan, development would be likely to occur on a one-off, dispersed basis. As outlined above, this could have cumulative impacts on the landscape. However, Development Management would continue to safeguard the landscape resources that have been highlighted above.

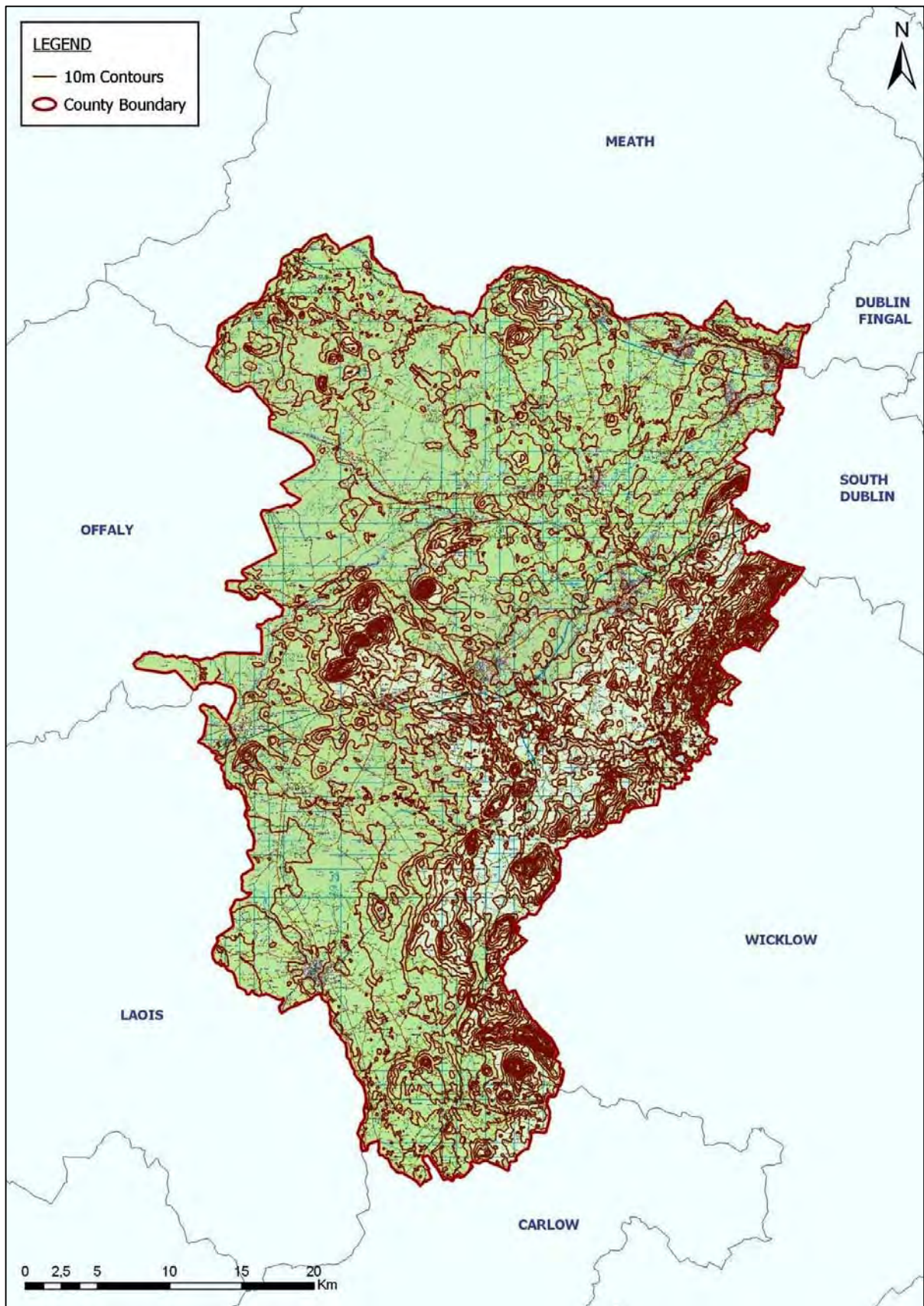


Figure 3.42 Contour Mapping
Source: Kildare County Council (Unknown)

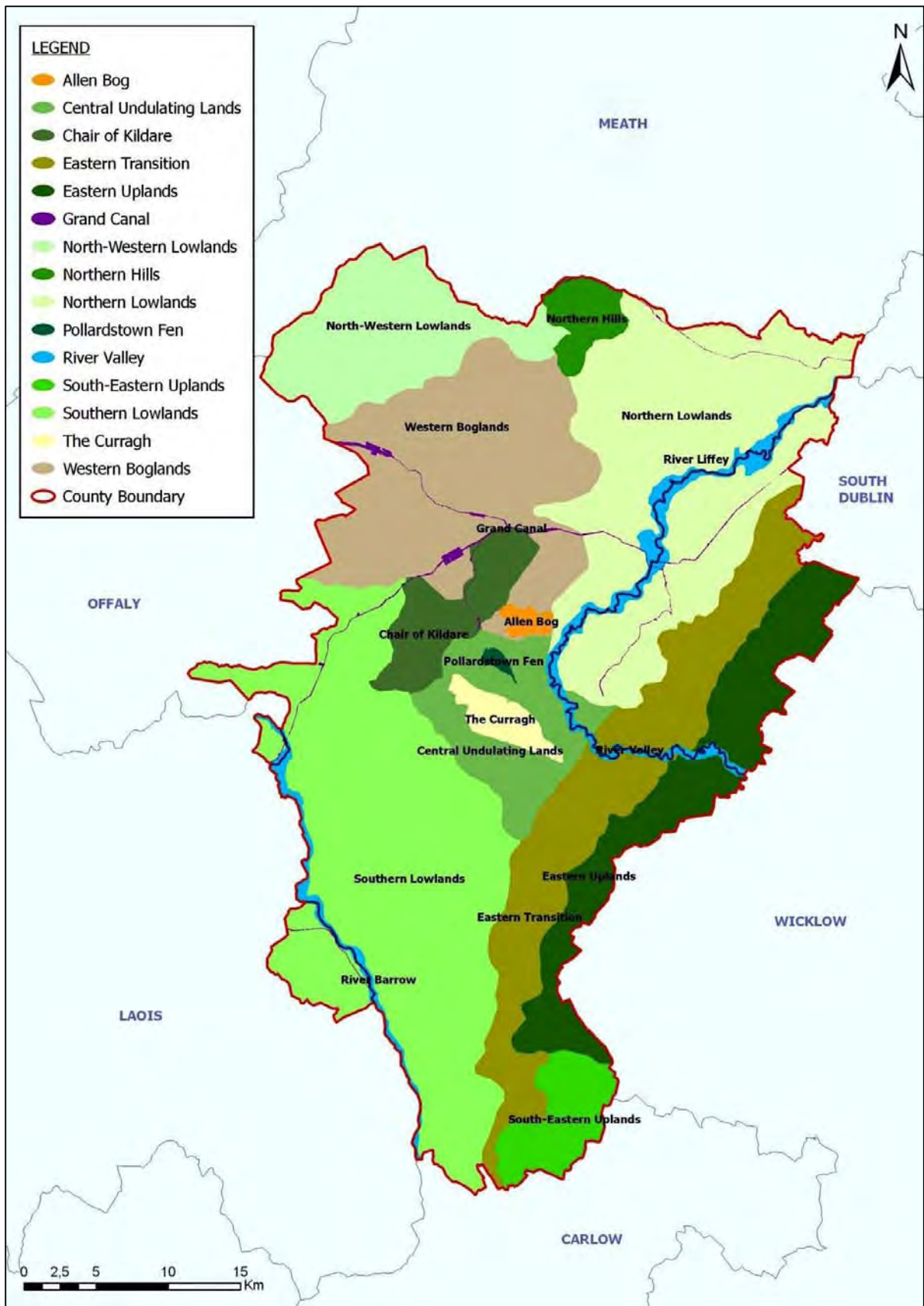


Figure 3.43 Landscape Character Areas
 Source: CAAS (2003)



Figure 3.44 Scenic Views and Roads

Source: Kildare CDP (2005)

3.10 Macro-Environmental Sensitivity Mapping

3.10.1 Introduction

In order to provide preliminary feedback on the alternatives for the draft Plan which were developed and then evaluated for environmental effects (see Sections 6 and 7) and in order to inform the selection of the alternative which was developed for the Draft Plan, a strategic Macro-Environmental Sensitivity Map was compiled for the County (see Figure 3.45).

3.10.2 Factors taken into account & Limitations

This map has been compiled with regard to a number of environmental factors including:

- Landscape Character Area boundaries;
- Ecological Values;
- Land Cover;
- Topography (Contours, Slopes & Ridge Lines);
- Soils;
- Settlement Patterns;
- Existing and Planned water services infrastructure and capacity; and,
- Existing and Planned transport infrastructure and capacity.

It is noted that although the map takes into account existing and planned water services infrastructure and capacity (see Table 3.3 on page 59) it does not take into account the capacity of water bodies within the County to assimilate discharges from waste water treatment plants. In order to communicate the potential sensitivity of river bodies which exist within the County, alongside the Macro-Sensitivity Map, the Water Framework Directive River Basin Districts' Risk Assessment for the River bodies⁴⁰ is provided at Figure 3.46 (for

⁴⁰ It is important to note that the mapping of these Risk Assessments is based on a combination of generalised data which in turn take account of a wide range of factors; some of the mapping is based on upon incomplete data. The mapping also includes factors that are important to the integrity of the river [such as channel morphology] but which have little bearing on pollution or the biological capacity of the river or stream. These factors mean that the mapping of risk factors is, of necessity, a broad-scale generalisation which – in general terms – is likely to

background information, see text under Section 3.5). Most rivers are coloured either red - which means the river is at significant risk of failing to achieve the objectives of the Water Framework Directive by 2015 - or orange - which means the river is probably at significant risk of failing to achieve the objectives of the Water Framework Directive by 2015.

All applications for future development in the County - in each of the sensitivity areas shown on Figure 3.45 - will need to be considered against the availability of both:

- Sufficient existing waste water treatment infrastructure and services; and,
- Sufficient assimilative capacity⁴¹ into which treated effluent will be discharged.

3.10.3 Conclusions

The Macro-Environmental Sensitivity Map illustrates that at a broad, strategic level there is a 'corridor' of more robust environmental conditions that follows the more fertile lowlands of the centre of the county. The north-east of the County has a concentration of high capacity public transport routes, a high density of serviced lands and a low density of ecological and landscape designations.

Environmental sensitivities increase to the south-east on account of uplands and increase towards the north-west on account of bogs and wetlands. There is a lower proximity to and concentrations of quality transport and high capacity water services in these areas.

graphically overstate the extent and significance of risk.

⁴¹ Although not available at the time of publishing this report, new information is expected to be made available from the Eastern River Basin District Project before the end of 2011 on the Status (or health) of waters in County Kildare. This Status data will be based on more detailed monitoring information than the Risk Assessment data and will be more useful for use in the consideration of applications for future development. Early versions of this status mapping are shown in Section 3.5 *Water*.

Figure 3.45 Macro-Environmental Sensitivity Map

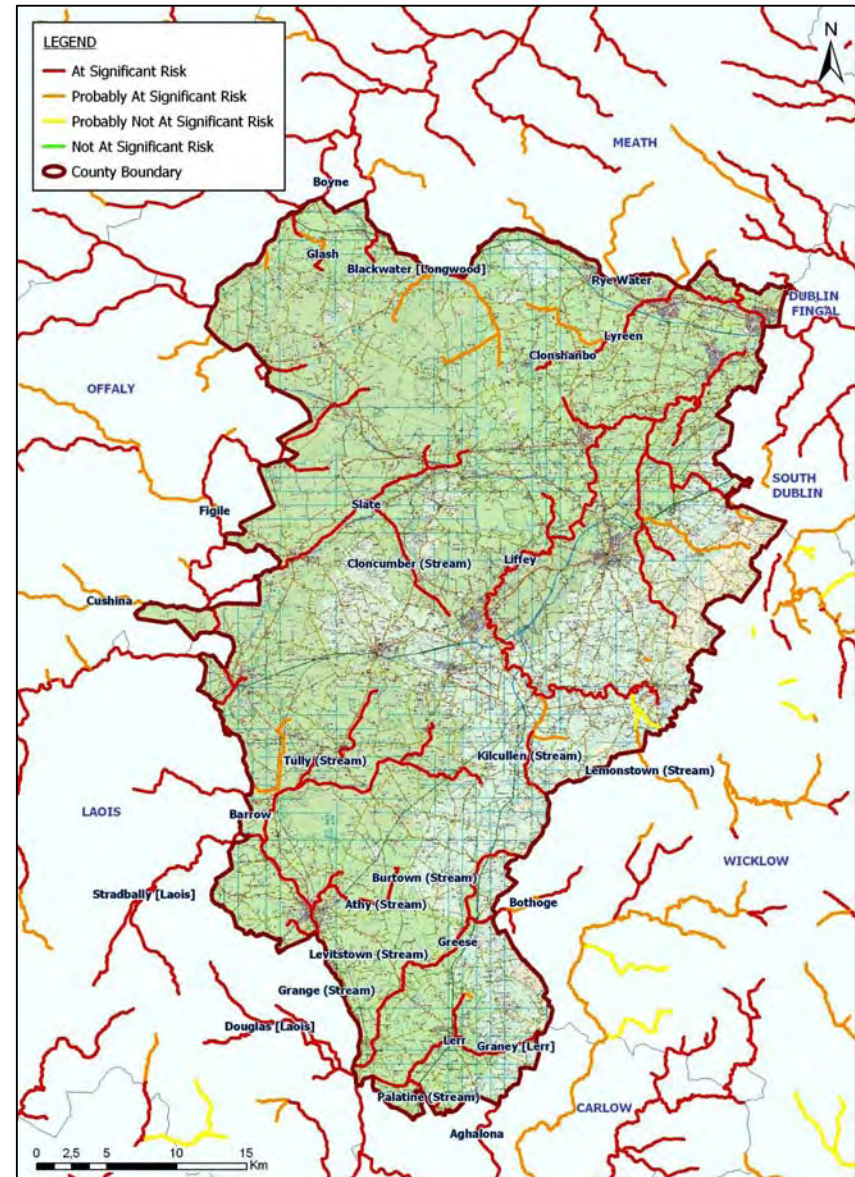
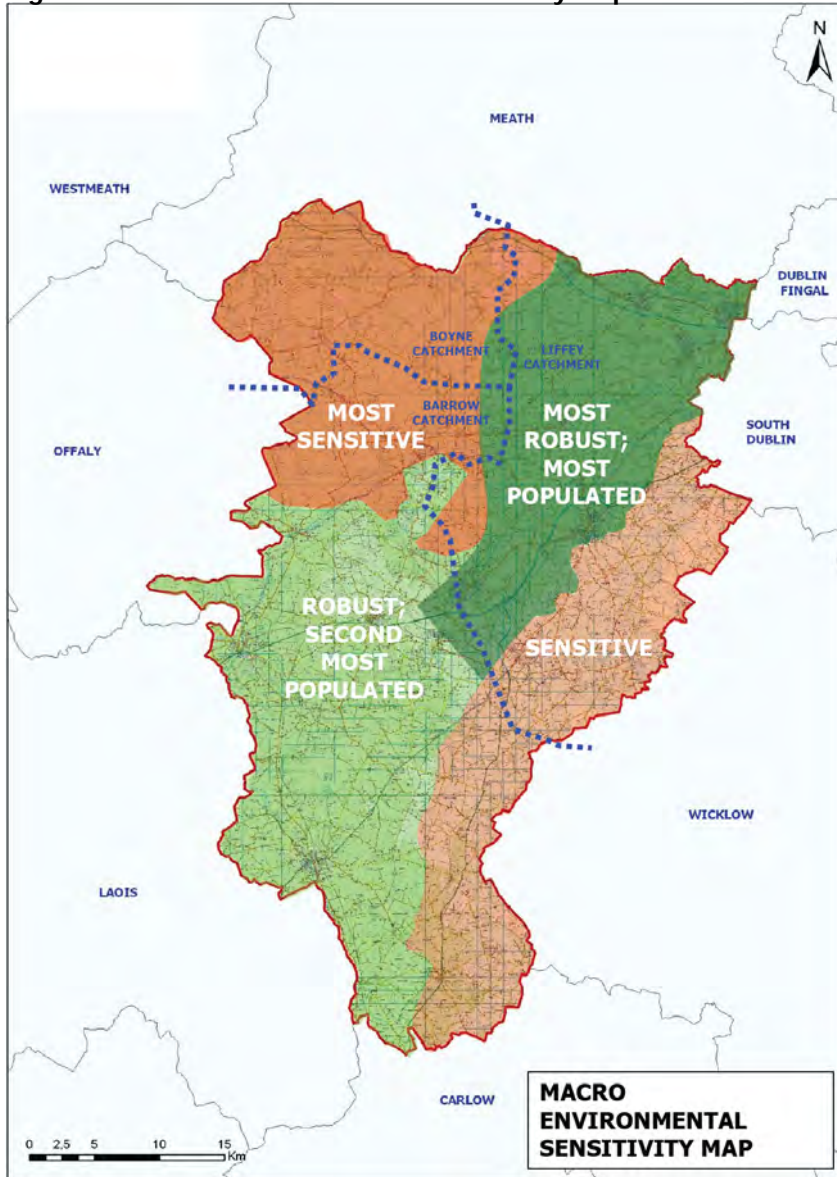


Figure 3.46 Risk Assessment of Rivers

Section 4 Strategic Environmental Objectives

4.1 Introduction

Strategic Environmental Objectives (SEOs) are methodological measures against which the environmental effects of the Plan can be tested. If complied with in full, SEOs would result in an environmentally neutral impact from implementation of the Plan. The SEOs are set out under a range of topics and are used as standards against which the provisions of the Plan can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, if unmitigated.

SEOs are distinct from the objectives of the Plan - although they will often overlap - and are developed from international, national and regional policies which generally govern environmental protection objectives. Such policies include those of various European Directives which have been transposed into Irish law and which are intended to be implemented within the County.

The SEA Directive requires that the evaluation of plans and programmes be focused upon the relevant aspects of the environmental characteristics of areas likely to be significantly affected. In compliance with this requirement, the SEA has focused upon the most relevant aspects of the environmental characteristics within and surrounding the County. SEOs relating to these environmental characteristics have been identified and developed for the SEA. Most attention has been given to environmental components which are likely to be impacted as a result of implementation of the County Development Plan.

A number of SEOs are linked to indicators which can facilitate monitoring the environmental effects of implementing the Plan when adopted, as well as to targets which the Plan can help work towards.

The primary source used in formulating the SEOs was Table 4B of the SEA Guidelines (DEHLG, 2004)⁴². This list has been amended to give affect to objectives that are considered relevant to the Plan. The use of SEOs,

⁴² DEHLG (2004) Implementation of SEA Directive (2001/42/EC): *Guidelines for Regional Authorities and Planning Authorities* Dublin: Government of Ireland.

although not a statutory requirement, does fulfil obligations set out in Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004).

4.2 Biodiversity, Flora and Fauna

4.2.1 International, European and National Strategic Actions

4.2.1.1 UN Convention on Biological Diversity 1992

The United Nations Convention on Biological Diversity 1992 requires the promotion of the conservation and sustainable use of biodiversity.

4.2.1.2 National Biodiversity Plan 2002

The preparation and implementation of Ireland's National Biodiversity Plan 2002⁴³ complies with an obligation under the UN Convention on Biological Diversity. The overall goal of the Plan is to secure the conservation, including where possible the enhancement and sustainable use of biological diversity in Ireland and to contribute to conservation and sustainable use of biodiversity globally. Objectives following on from this goal are to:

- Conserve habitat diversity, including all sites of special biodiversity importance;
- Conserve species diversity;
- Conserve genetic diversity, both wild and domesticated; and
- Contribute to the conservation and sustainable use of biodiversity and to advancing other obligations of the CBD in the EU, regionally and internationally.

⁴³ Department of Arts, Heritage, Gaeltacht and the Islands (2002) *National Biodiversity Plan* Dublin: Government of Ireland

4.2.1.3 Birds Directive 1979

The 1979 European Council Directive on the Conservation of Wild Birds (79/409/EEC), referred to as the Birds Directive, - as well as its amending acts - seeks to: protect, manage and regulate all bird species naturally living in the wild within the European territory of the Member States, including the eggs of these birds, their nests and their habitats; and regulate the exploitation of these species.

Special Protection Areas (SPAs) are provided protection under the Directive and have been designated by the DEHLG due to their conservation value for birds of importance in the European Union.

4.2.1.4 Habitats Directive 1992

The European Council Directive on the Conservation of natural habitats and of wild fauna and flora (92/43/EEC), referred to as the Habitats Directive, aims to ensure the conservation of certain natural habitats and species which are at favourable conservation status. Article 10 of the Habitats Directive recognises the importance of ecological networks as corridors and stepping stones for wildlife, including for migration, dispersal and genetic exchange of species of flora and fauna. The Directive requires that ecological connectivity and areas of ecological value outside the network of designated ecological sites are maintained and it recognises the need for the management of these areas through land use planning and development policies.

Special Areas of Conservation (SACs) are designated and protected under the Habitats Directive 1992 (92/43/EEC) due to their conservation value for habitats and species of importance in the European Union. In Ireland, the habitats and species occurring in both SACs and SPAs are protected from effects of development occurring outside their boundaries under Section 18 "Prohibition of works on lands outside a European site" of the European Communities (Natural Habitats) Regulations 1997. The Regulations require that where a development is proposed to be carried out, on any land that is not within a protected site and is liable to have an adverse impacts on the protected site in question, including direct, cumulative and indirect impacts, a Habitats Directive Assessment, which conforms to an environmental impact assessment, of the likely effects of the proposed development on the site is

undertaken. Depending on the conclusions of this assessment such development may be refused planning permission.

The Habitats Directive seeks to establish Natura 2000, a network of protected areas throughout the EU. SACs together with SPAs - which are designated under the 1979 Birds Directive - form Natura 2000.

4.2.1.5 Freshwater Pearl Mussel Regulations 2009

The freshwater pearl mussel is a bivalve, which is a type of mollusc or snail with a body that is almost completely enclosed between a pair of shells. There are two species in Ireland, one of which is restricted to a small population in the River Nore.

The mussels are only found in well-oxygenated rivers with little mineral or organic content, and with clean gravel and sand riverbeds. Therefore, a large number of activities and factors at catchment level may impact upon the animal itself and/or its habitat.

The European Communities Environmental Objectives (Freshwater Pearl Mussel) Regulations 2009 support the achievement of favourable conservation status for freshwater pearl mussels. The Regulations:

- (a) Set environmental quality objectives for the habitats of certain freshwater pearl mussel populations that are within the boundaries of a site notified in a candidate list of European sites, or designated as a SAC;
- (b) Require the production of sub-basin management plans with programmes of measures to achieve these objectives, and;
- (c) Set out the duties of public authorities in respect of the sub-basin management plans and programmes of measures.

The DEHLG has prepared 27 draft Management Plans for Freshwater Pearl Mussel in accordance with the Water Framework Directive and Habitats Directive. The objective of the plans is to restore the freshwater pearl mussel populations in 27 rivers, or stretches of rivers that are within the boundaries of Special Areas of Conservation.

4.2.1.6 Wildlife Act 1976 and Wildlife (Amendment) Act 2000

The basic designation for wildlife is the Natural Heritage Area (NHA). They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. Under the Wildlife Amendment Act (2000), NHAs are legally protected from damage from the date they are formally proposed for designation.

Proposed NHAs (pNHAs) were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated - designation will proceed on a phased basis over the coming years.

Prior to statutory designation, pNHAs are subject to limited protection, in the form of:

- Rural Environment Protection Scheme (REPS) plans which require conservation of pNHAs and operate for a period of 5 years;
- Forest Service requirement for NPWS approval before they will pay afforestation grants on pNHA lands; and/or,
- Recognition of the ecological value of pNHAs by Planning and Licensing Authorities.

Statutory Nature Reserves are state-owned land, inland waters or foreshore areas forming the habitat of a species or community of flora and fauna of scientific interest or forming part of an ecosystem of scientific interest, which would benefit from protection measures, established under the Wildlife Act, 1976 and the Wildlife (Amendment) Act, 2000. Statutory Nature Reserves are protected under Ministerial order.

4.2.1.7 European Freshwater Directive 1978

Salmonid Waters are designated and protected under the European Communities (Quality of Salmonid Waters) Regulations 1998 (SI No. 293 of 1988) which implements the European Council Directive on the quality of fresh waters needing protection or improvement in order to support fish life (78/659/EEC), referred to as the European Freshwater Directive as amended and codified. Salmonid Water designation imposes an obligation to maintain

specific water quality standards and control pollution.

4.2.2 SEOs, Indicators and Targets

The following SEOs, Indicators and Targets have been identified and developed with regard to the objectives of the above strategic actions and the environmental baseline described in Section 3.

SEO B1:	To ensure compliance with the Habitats Directive with regard to the protection of Natura 2000 Sites and habitats and species listed under Annexes I and II of the Directive
Indicator B1:	Conservation status of habitats and species as assessed under Article 17 ⁴⁴ of the Habitats Directive
Target B1:	Maintenance of favourable conservation status for habitats and species listed under Annexes I and II of the Directive

⁴⁴ Under Article 17 of the Habitats Directive, each member state is obliged to report to the European Commission on the status of listed habitats and species every six years. An example of a listed species which has been identified in Naas is the Otter - no listed habitats have been identified. There are numerous listed species and habitats which occur within and downstream of the County (see Section 3.2).

SEO B2:	To ensure compliance with Article 10 of the Habitats Directive protection of macro-corridors, stepping stones and contiguous areas of habitat ⁴⁵ which are important on a County level for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species
Indicator B2:	Percentage loss of functional connectivity to macro-corridors, stepping stones and contiguous areas of habitat which are important on a County level without remediation as a result of implementation of the Plan – as evidenced from a resurvey of CORINE mapping
Target B2:	No significant macro-corridors, stepping stones and contiguous areas of habitat or parts thereof which are important on a County level and which provide functional connectivity to be lost without remediation as a result of implementation of the Plan

SEO B3:	To sustain existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain
Indicator B3:	Population of the County involved in land management
Target B3:	Sustain the population of the County involved in land management

⁴⁵ Important macro-corridors and contiguous areas of habitat include the County's rivers, lakes, uplands and peatlands. It is recommended that important macro-corridors and contiguous areas of habitat are identified as part of the monitoring programme and that time resources are spent in the monitoring of these rather than in the monitoring of corridors or areas of habitat which are not important at County level.

Note: the impact of implementing the Plan on aquatic biodiversity and flora and fauna is also influenced by both impacts upon the quality of surface water bodies - which relates to SEO W1 - and the provision of appropriate levels of waste water treatment infrastructure - this relates to SEO M1.

4.3 Population and Human Health

4.3.1 Population

In order to promote sustainable development and allow for public transport systems to function more effectively - as promoted by the National Spatial Strategy - it is essential to consolidate the physical growth of settlements within the County.

The strategies provided for by the Plan - which will help determine both the future spatial distribution of population and the nature of development across the County - are evaluated in Sections 7 and 8 of this report.

4.3.2 Human Health

4.3.2.1 Introduction

The impact of implementing the Development Plan on human health is determined by the impacts which the Plan will have upon environmental vectors. Impacts which the Plan might have upon these vectors would be influenced by:

- The extent to which new development is accompanied by appropriate infrastructure - this relates to SEOs M1 and M2;
- Impacts upon the quality of water bodies - these relate to SEOs W1 and W2;
- The extent of development provided by the Plan which would increase flood risk - this relates to SEO W3; and,
- The interaction between human beings and the noise generated by the landuses provided for by the Plan.

4.3.2.2 Emission Limits

Emission limits for discharges to air, soil and water are set with regards to internationally recognised exposure limit values. These are generally set to be many times the safe exposure limit - in order to provide protection. In the event that a land-use plan began to have adverse health effects on surrounding populations it is likely that it would have been identified as being in breach of such emission standards at a very early stage - and long before the manifestation of any adverse health effects in the population. Nonetheless for the sake of consistency with the requirements of the SEA Regulations this section includes an objective, indicator and target for health.

4.3.3 SEOs, Indicators and Targets

The following SEO, Indicator and Target have been identified and developed for the environmental component of human health.

SEO HH1:	To protect human health from hazards or nuisances arising from exposure to incompatible landuses
Indicator HH1:	Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors as identified by the Health Service Executive and Environmental Protection Agency
Target HH1:	No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan

4.4 Soil

4.4.1 Proposal for a Soil Framework Directive

To date, there is no legislation which is specific to the protection of soil resources and soil protection is addressed indirectly and/or within sectoral policies: water, waste, chemicals, industrial pollution prevention, nature protection, pesticides and agriculture.

However, there is currently an EU Thematic Strategy on the protection of soil which includes a proposal for a Soil Framework Directive which proposes common principles for protecting soils across the EU.

Article 5 of the proposed Directive states that, for the purposes of preserving the various functions of soil; sealing, the development of artificial surfaces on top of soil resources, should be limited. The proposed Directive suggests that this may be achieved through rehabilitating brownfield sites, thus reducing the depletion of greenfield sites. The proposed Directive also states soil should be used in a sustainable manner which preserves its capacity to deliver ecological, economic and social services, while maintaining its functions so that future generations can meet their needs.

4.4.2 SEOs, Indicators and Targets

The following SEO, Indicator and Target have been identified and developed with regard to the proposed Soil Directive, the Water Framework Directive and the National Spatial Strategy.

SEO S1:	To prevent pollution and/or contamination of soil
Indicator S1:	Number of instances of pollution and/or contamination of soil
Target S1:	No significant instances pollution and/or contamination of soil

4.5 Water

4.5.1 The Water Framework Directive 2000

4.5.1.1 Introduction

Since 2000, Water Management in the EU has been directed by the Water Framework Directive 2000/60/EC (WFD). The WFD has been transposed into Irish legislation by the European Communities (Water Policy) Regulations 2003 (SI No. 722 of 2003). The WFD requires that all member states implement the necessary measures to prevent deterioration of the status of all waters -

surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of achieving good status by 2015.

4.5.1.2 Quality Standards for Surface Waters

The European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009) is the final major piece of legislation needed to support the WFD and gives statutory effect to Directive 2008/105/EC on environmental quality standards in the field of water policy. The Surface Waters Regulations also give further effect to the WFD, establishing a framework for Community action in the field of water policy and Directive 2006/11/EC on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community.

The Surface Waters Regulations apply to all surface waters and provide, inter alia, for:

- The establishment of legally binding quality objectives for all surface waters and environmental quality standards for pollutants;
- The examination and where appropriate, review of existing discharge authorizations by Public Authorities to ensure that the emission limits laid down in authorisations support compliance with the new water quality objectives/standards;
- The classification of surface water bodies by the EPA for the purposes of the Water Framework Directive;
- The establishment of inventories of priority substances by the EPA, and;
- The drawing up of pollution reduction plans by coordinating local authorities (in consultation with the EPA) to reduce pollution by priority substances and to cease and/or phase out discharges, emissions or losses of priority hazardous substances.

In addition, the Regulations require that a public authority shall not, in the performance of its functions, undertake those functions in a manner that knowingly causes or allows deterioration in the chemical status or ecological status (or ecological potential as the case may be) of a body of surface water.

In order to satisfy the overall WFD objective of 'good status', a surface water body must

achieve the requirements of the good ecological⁴⁶ and chemical⁴⁷ status.

4.5.1.3 Quality Standards and Threshold Values for Ground Water

Detailed provisions to achieve the aims of the WFD for ground water have been presented in a Groundwater Daughter Directive (Directive 2006/118/EC on the protection of groundwater against pollution and deterioration).

This Directive sets up environmental objectives of good groundwater quantitative and chemical status, as well as ensuring a continuity to the 1980 Groundwater Directive (Directive 80/68/EEC on the protection of groundwater against pollution caused by dangerous substances) which is due to be repealed under the WFD by the end of 2013.

Article 3 of the 2006 Directive required that the assessment of the chemical status of groundwater use both quality standards identified in Annex I of the Directive and threshold values to be set by individual member states.

Groundwater quality standards are environmental quality standards expressed as the concentration of a particular pollutant, group of pollutants or indicator of pollution in groundwater, which should not be exceeded in order to protect human health and the environment. Annex I of the Directive sets standards for two pollutants: Nitrates - 50mg/l - and; Active substances in pesticides⁴⁸, including their relevant metabolites, degradation and reaction products - 0,1 µg/l and 0,5 µg/l (total⁴⁹).

⁴⁶ Ecological status comprises: biological quality elements, physiochemical conditions and hydromorphological quality elements. The overall ecological status of the water body is determined by the lowest level of status achieved across all quality elements.

⁴⁷ Chemical status assessment is based on compliance with the standards laid down for priority substances by Directive 2008/105/EC on environmental quality standards in the field of water policy (the Surface Waters Regulations give effect to the environmental standards established by this Directive).

⁴⁸ 'Pesticides' means plant protection products and biocidal products as defined in Article 2 of Directive 91/414/EEC and in Article 2 of Directive 98/8/EC, respectively.

⁴⁹ 'Total' means the sum of all individual pesticides detected and quantified in the monitoring

Irish groundwater threshold values⁵⁰ are included in the European Communities Environmental Objectives (Groundwater) Regulations 2010 (SI No. 9 of 2010).

4.5.2 Flooding

4.5.2.1 EU Floods Directive

European Directive 2007/60/EC on the assessment and management of flood risks aims to reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity. The Directive applies to inland waters as well as all coastal waters across the whole territory of the EU.

The Directive requires Member States to carry out a preliminary assessment by 2011 in order to identify the river basins and associated coastal areas at risk of flooding. For such zones flood risk maps are required to be drawn up by 2013. By 2015 flood risk management plans focused on prevention, protection and preparedness must be established by 2015.

The Directive is to be carried out in coordination with the Water Framework Directive and flood risk management plans and river basin management plans should be coordinated.

4.5.2.2 DEHLG Flood Risk Management Guidelines

In November 2009 the DEHLG issued *The Planning System and Flood Risk Management Guidelines* for Planning Authorities. These are aimed at ensuring a more consistent, rigorous and systematic approach which will fully incorporate flood risk assessment and management into the planning system.

procedure, including their relevant metabolites, degradation and reaction products.

⁵⁰ The WFD requires that threshold values are established by Member States for all pollutants and indicators of pollution which characterise groundwater bodies classified as being at risk of failing to achieve good groundwater chemical status under the WFD. Threshold values are required to be established in a way that, should the monitoring results at a representative monitoring point exceed the thresholds, this will indicate a risk that one or more of the conditions for good groundwater chemical status - with regard to the ability of groundwater to support human uses and with regard to waters used for the abstraction of drinking water - are not being met.

The Guidelines require the planning system to, among other things:

- Avoid development in areas at risk of flooding, particularly flood plains, unless there are proven sustainability grounds that justify appropriate development and where flood risk can be reduced or managed to an acceptable level, without increasing flood risk elsewhere;
- Adopt a sequential approach to flood risk management when assessing the location for new development based on avoidance, reduction and mitigation of flood risk; and,
- Incorporate flood risk assessment into the process of making decisions on planning applications and planning appeals.

4.5.3 SEOs, Indicators and Targets

The following SEOs, Indicators and Targets have been identified and developed with regard to the objectives of the above strategic actions and the environmental baseline described in Section 3.

SEO W1:	To maintain and improve, where possible, the status of surface waters
Indicator W1:	Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009)
Target W1:	To achieve 'good status' ⁵¹ in all bodies of surface waters by 2015 and not to knowingly allow deterioration in the status of any surface water

⁵¹ Good status as defined by the WFD equates to approximately Q4 in the current national scheme of biological classification of rivers, as set out by the EPA. Good status as defined by the WFD equates to approximately mesotrophic in the current trophic classification of lakes, as set out by the EPA.

SEO W2:	To prevent pollution and contamination of ground water
Indicator W2:	Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC
Target W2:	Compliance with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC

SEO W3:	To manage areas that are currently at risk of flooding or are likely to pose a significant flood risk in the future in compliance with The Planning System and Flood Risk Management Guidelines for Planning Authorities and Foods Directive ultimately
Indicator W3:	Number of developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk
Target W3:	Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk in compliance with <i>The Planning System and Flood Risk Management Guidelines</i> for Planning Authorities

establishment of a comprehensive supervisory regime to ensure compliance with specified performance standards.

Section 36 of the Act provides for the making of 6-year Water Services Strategic Plans (WSSPs) in order to:

- to protect human health and the environment;
- to facilitate the provision of sufficient water services for domestic and non-domestic requirements in the area to which the plan relates; and,
- to support proper planning and sustainable development, including sustainable use of water resources.

WSSPs are to be made by Water Services Authorities for their functional areas. The Act allows for two or more Water Services Authorities to jointly make a WSSP in relation to all of their combined functional areas, or parts thereof.

WSSPs are required to include information on the following:

- drinking water quality;
- the prevention or abatement of risk to human health or the environment;
- current and projected need for water services;
- arrangements in place or planned for the provision of water services;
- shortfalls in the provision of water services;
- water conservation measures in place or planned;
- monitoring arrangements;
- asset management planning; and,
- income and expenditure.

Section 36 (9) of the Act allows for the making of regulations prescribing the manner in which any matter is to be set out or addressed in a water services strategic plan, notification or consultation requirements and procedures or associated time limits, prior to and after its making.

4.6 Material Assets

4.6.1 Water Services Act 2007

The Water Services Act 2007 (SI No. 30 of 2007) incorporates a comprehensive review, update and consolidation of all existing water services⁵² legislation, and facilitates the

⁵² Services, including the provision of water intended for human consumption, which provide storage, treatment or distribution of surface water, groundwater or water supplied by a water services authority, or waste water collection, storage, treatment or disposal.

4.6.2 Urban Waste Water Treatment Directive 2001

The treatment of wastewater is governed by the Urban Waste Water Treatment Directive (91/271/EEC) (amended by Directive 98/15/EEC) transposed into Irish law by the Urban Waste Water Treatment Regulations 2001 (SI No. 254 of 2001). The Directive aims to protect the environment from the adverse effects of the wastewater discharges by ensuring that wastewater is appropriately treated before it is discharged to the environment. The Regulations stipulate that sewage treatment facilities are in place in all towns by 2005.

Appropriate treatment is essential in order to meet the requirements of the Water Framework Directive (see Section 4.5.1).

4.6.3 Drinking Water Regulations 2007

The environmental baseline with regard to drinking water demand and supply is identified in Section 3 and measures have been integrated into the County Development Plan in order to help ensure a clean and wholesome water supply.

The European Communities (Drinking Water) Regulations (No. 2) 2007 require the compliance of water intended for human consumption with 48 parameters.

4.6.4 SEOs, Indicators and Target

The following SEOs, Indicators and Targets have been identified and developed with regard to the objectives of the above strategic actions and the environmental baseline described in Section 3.

SEO M1:	To serve new development with adequate and appropriate waste water treatment
Indicator M1i:	Number of new developments granted permission which can be adequately served with waste water treatment over the lifetime of the Plan
Target M1i:	All new developments granted permission to be connected to and adequately served by waste water treatment over the lifetime of the Plan
Indicator M1ii:	Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council
Target M1ii:	For the Council to prepare a Water Services Strategic Plan in compliance with the Water Services Act

SEO M2:	To serve users of public water supplies with drinking water that is both wholesome and clean
Indicator M2i:	Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health
Target M2i:	No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan
Indicator M2ii ⁵³ :	Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council
Target M2ii:	For the Council to prepare a Water Services Strategic Plan in compliance with the Water Services Act

4.7 Air and Climatic Factors

4.7.1 Introduction

The impact of implementing the Plan on air quality and climatic factors will be determined by the impacts which the Plan has upon the traffic levels which relate to SEOs C1 and C2.

Travel is the source of most:

- Noise;
- Air emissions; and,
- Energy use (41.4% oil equivalent of final energy consumption in 2006 was taken up by transport - sourced from Sustainable Energy Ireland's online Energy Statistics Data Bank).

⁵³ Indicator and Target M2ii are the same as Indicator and Target M1ii

Land-use planning contributes to what number and what extent of journeys occur. By addressing journey time through land use planning, increases in greenhouse gases can be minimised. Furthermore, by concentrating populations, greenfield development - and its associated impacts - can be minimised and the cost of service provision can be reduced.

4.7.2 Air Quality

In order to protect human health, vegetation and ecosystems, EU Directives set down air quality standards in Ireland and the other Member States for a wide variety of pollutants. These pollutants are generated through fuel combustion, in space heating, traffic, electricity generation and industry and, in sufficient amounts, could affect the well being of the County's inhabitants. The EU Directives include details regarding how ambient air quality should be monitored, assessed and managed.

The principles to this European approach are set out under the Air Quality Framework Directive 1996 while four daughter Directives lay down limits or thresholds for specific pollutants.

4.7.3 Climatic Factors

In order to reduce greenhouse gas emissions the internationally agreed Kyoto Protocol established emissions reduction targets for developing countries. Ireland's emission target for greenhouse gases is to limit the increase in their combined emissions during the five-year period 2008-2012 to 13 per cent above 1990 levels.

4.7.4 Noise

Noise is unwanted sound. Traffic noise alone is harming today the health of almost one third of Europeans⁵⁴.

The Noise Directive - Directive 2002/49/EC relating to the assessment and management of environmental noise - is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing

⁵⁴ World Health Organization Regional Office for Europe (2003) *Technical meeting on exposure-response relationships of noise on health 19-21 September 2002* Bonn, Germany Bonn: WHO

existing Community policy on noise reduction from source.

The Directive requires competent authorities in Member States to:

- Draw up *strategic noise maps* for major roads, railways, airports and agglomerations, using harmonised noise indicators⁵⁵ and use these maps to assess the number of people which may be impacted upon as a result of excessive noise levels;
- Draw up action plans to reduce noise where necessary and maintain environmental noise quality where it is good; and,
- Inform and consult the public about noise exposure, its effects, and the measures considered to address noise.

The Directive does not set any limit value, nor does it prescribe the measures to be used in the action plans, which remain at the discretion of the competent authorities.

4.7.5 SEOs, Indicators and Targets

The following SEOs, Indicators and Targets have been identified and developed with regard to the objectives of the above strategic actions and the environmental baseline described in Section 3.

It is noted that - in addition to being addressed as part of this assessment - traffic issues will also be addressed by lower-tier plans and at the level of individual projects by the development management process and, for certain projects, by EIA.

SEO C1: To reduce travel related greenhouse emissions to air

Indicator C1i⁵⁶: Percentage of population within the County travelling to work or school by public transport or non-mechanical means

Target C1i: An increase in the percentage of the population travelling to work or school by public transport or non-mechanical means

Indicator C1ii⁵⁷: Average distance travelled to work or school by the population of the County

Target C1ii: A decrease in the average distance travelled to work or school by the population of the County

SEO C2: To encourage modal change from car to more sustainable forms of transport

The use of the SEO C2 provides a qualitative directional measure which is used to evaluate the effects of implementing the Plan.

4.8 Cultural Heritage

4.8.1 Archaeological Heritage

4.8.1.1 Valletta Convention 1992

The European Convention on Protection of the Archaeological Heritage known as the Valletta Convention of 1992. This was ratified by Ireland in 1997 and requires that appropriate consideration be given to archaeological issues at all stages of the planning and development process.

4.8.1.2 National Heritage Plan for Ireland 2002

The core objective of the National Heritage Plan for Ireland 2002⁵⁸ is to protect Ireland's

⁵⁵ [L_{den} (day-evening-night equivalent level) and L_{night} (night equivalent level)]

⁵⁶ As measured by the Central Statistics Office

⁵⁷ As measured by the Central Statistics Office

⁵⁸ Department of Arts, Heritage, Gaeltacht and the Islands (2002) *National Heritage Plan for Ireland* Dublin: Government of Ireland

heritage. In this regard the polluter pays and the precautionary principle are operable.

4.8.1.3 National Monuments Acts

Archaeology in Ireland is protected under the National Monuments Acts 1930 to 2004.

Recorded monuments are protected by inclusion on the list and marked on the map which comprises the Record of Monuments and Places set out County by County under Section 12 of the National Monuments (Amendment) Act, 1994 by the Archaeological Survey of Ireland. The definition includes Zones of Archaeological Potential in towns and all other monuments of archaeological interest which have so far been identified.

Any works at or in relation to a recorded monument requires two months notice to the Department of the Environment, Heritage and Local Government under section 12 of the National Monuments (Amendment) Act, 1994.

Direct impacts on national monuments in State or Local Authority care or subject to a preservation order require the consent of the Minister for the Environment, Heritage and Local Government under Section 14 of the National Monuments Act 1930 as amended by Section 5 of the National Monuments (Amendment) Act 2004.

4.8.2 Architectural Heritage

4.8.2.1 Planning and Development Act 2000

Records of Protected Structures (RPSs) are legislated for under Section 51 of the Planning and Development Act 2000 and include structures which form part of the architectural heritage and which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest.

4.8.2.2 Architectural Heritage and Historic Monuments Act 1999

The National Inventory of Architectural Heritage (NIAH) is a state initiative under the administration of the DEHLG which was established on a statutory basis under the provisions of the Architectural Heritage (National Inventory) and Historic Monuments (Miscellaneous Provisions) Act 1999. Its purpose is to identify, record, and evaluate the post-1700 architectural heritage of Ireland, uniformly and consistently as an aid in the

protection and conservation of the built heritage. It is intended that the NIAH provides the basis for the inclusion of particular structures in RPSs.

4.8.3 SEOs, Indicators and Targets

The following SEOs, Indicators and Targets have been identified and developed with regard to the objectives of the above strategic actions and the environmental baseline described in Section 3.

SEO CH1:	To protect the archaeological heritage of the County including entries to the Record of Monuments and Places and/or their context
Indicator CH1:	Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential - (and their context of the above within the surrounding landscape where relevant) protected
Target CH1:	Protect entries to the Record of Monuments and Places - including Zones of Archaeological Potential - (and their context of the above within the surrounding landscape where relevant)

SEO CH2:	To preserve and protect the special interest and character of the County's architectural heritage
Indicator CH2i:	Percentage of entries to the Record of Protected Structures (and/or their context within the surrounding landscape where relevant) protected
Indicator CH2ii:	Number of additions to the Record of Protected Structures and the number of additional ACAs
Target CH2i:	Protect entries to the Record of Protected Structures (and/or their context within the surrounding landscape where relevant)
Target CH2ii:	Make Additions to the Record of Protected Structures and make additional ACAs, where appropriate

SEO L1:	To avoid significant adverse impacts on the landscape, especially with regard to sensitive landscapes and protected views and scenic routes
Indicator L1:	Number of complaints received from statutory consultees regarding avoidable impacts on the landscape resulting from development which is granted permission under the Plan
Target L1:	No developments permitted which result in avoidable impacts on the landscape resulting from development which is granted permission under the Plan

4.9 Landscape

4.9.1 Introduction

The County's sensitive landscapes and designated scenic views are protected through policies contained in the current County Development Plan for the County's various landscape character areas and protected views and scenic routes.

4.9.2 SEO, Indicator and Target

The following SEO, Indicator and Target have been identified and developed with regard to the objectives of the strategic action mentioned above and the environmental baseline described in Section 3.

Section 5 Context for the County Development Plan

5.1 Legislative Context

Under Section 9 of the Planning and Development Act 2000, every planning authority must make a development plan, setting the framework for all future development in the planning authority's area for the stated period, for the whole functional area of the authority every six years.

The Kildare County Development Plan 2011-2017 has been prepared in accordance with the requirements and provisions of the Planning and Development Act 2000 as amended. It sets out an overall strategy for the proper planning and sustainable development of County Kildare over the period 2011-2017 and beyond to the horizon year of 2022.

The Plan relates to the functional area of Kildare County Council, which is County Kildare, excluding the Town Council areas of Naas and Athy, as these are separate Planning Authorities. The Plan is, however, relevant to the two Town Councils as it sets out an overall vision, strategies, policies and objectives for the County as a whole.

5.2 Structure of the Plan

The Plan is set out in a written statement, with accompanying maps. It comprises 18 Chapters which can be grouped into the following sections as well as a number of appendices:

- Chapters 1 and 2 set out the introduction, strategic context and core strategy for the proper planning and sustainable development of County Kildare.
- Chapters 3-14 set out detailed policies and objectives for settlement, housing, economic development, movement and transport, water, drainage and environmental services, energy and communications, retail, rural development, social and community development, heritage and landscape.

- Chapters 15 and 16 outline urban and rural design guidance to promote quality developments.
- Chapters 17 and 18 incorporate village plans, rural settlement plans and environs plans.
- Chapter 19 sets out development management objectives and standards to be applied to future development proposals in the county. The purpose of these standards and objectives is to guide and assist the formulation of development proposals and to regulate the impact of development on the environment.

5.3 Vision Statement

Through the pre-draft public consultation process a number of key themes emerged for consideration regarding the overall vision for the County over the period 2011-2017. These themes were amalgamated and expressed in the following vision:

“To build on the strengths of the county by facilitating sustainable development, through the provision of high quality employment opportunities and residential developments supported by quality urban and rural environments with physical and social infrastructure to support communities throughout the county.”

The vision is intended to act as a 'prompt' for all strategies, policies and objectives of this Plan.

5.4 Alternatives

Sections 6 and 7 of this report identify, describe and evaluate different alternative development scenarios for the Plan, taking into account the relevant land use strategic actions (see Section 5.5), the SEOs identified in Section 4 as well as the geographical scope of the County.

The evaluation of the alternatives results in the identification of potential environmental

effects. These environmental effects are considered alongside planning - social and economic - effects leading to the emergence of a preferred alternative.

5.5 Interactions with Relevant Planning Policy

5.5.1 Introduction

The Plan sits within a hierarchy of land use forward planning strategic actions. The Plan must comply with higher level strategic actions and will, in turn, guide lower level strategic actions. The following sections identify a number of these strategic actions, further details of which are contained in the Plan.

5.5.2 National Development Plan 2007-2013

The National Development Plan 2007-2013 (NDP) is designed to underpin the development of a dynamic competitive economy over the period 2007 - 2013. It envisages a total investment of €184 billion over 7 years to 'secure the further transformation of our country socially and economically within an environmentally sustainable framework'.

It identifies investment funding for significant projects in sectors such as health services, social housing, education, roads, public transport, rural development, industry, water and waste services. The NDP is designed to strengthen and improve the international competitiveness of the Country so as to support continued, but more balanced, economic and social development in line with the National Spatial Strategy.

5.5.3 National Spatial Strategy 2002-2020

The National Spatial Strategy 2002-2020 (NSS) is a 20-year planning framework for the entire Country to guide policies, programmes and investment. It seeks to promote a better balance of social, economic and physical development between the Regions.

The NSS is based on a hierarchy of settlement; Gateways, Hubs and county towns along with the need to support the role of

smaller towns, villages and diverse rural economies.

The strategy emphasises continued strong growth in the Greater Dublin Area (GDA) but with significant improvement in the regions outside the capital and more particularly in the nine gateway cities and nine hub towns. Kildare has neither a gateway or hub town and as such will have to compete with higher order cities and towns to secure funding for strategic investment opportunities. Notwithstanding this, the GDA is identified for consolidation and in strategic terms the following issues are of particular importance for Kildare:

- Effective integration of land use and transportation;
- Supporting the region's capacity for innovation;
- Facilitating ease of movement of people and goods; and,
- Maintaining a high quality environment.

5.5.4 Sustainable Development: A Strategy for Ireland 1997

This Strategy provides a framework for the achievement of sustainable development at local level and calls on planning authorities to incorporate the principles of sustainability into Development Plans.

5.5.5 Transport 21 & Smarter Travel, A Sustainable Transport Future

Transport 21 is the capital investment framework for the transport system over the period 2006-2015. It addresses the twin challenges of past investment backlogs and continuing growth in transport demand. It comprises of two investment programmes – a National Programme and a Programme for the Greater Dublin Area. County Kildare will benefit from both programmes which aim to increase accessibility, ensure sustainability, expand capacity, increase use of public transport, enhance quality, create a high quality, efficient national road and rail network and to strengthen national, regional and local public transport services.

Smarter Travel, A Sustainable Transport Future is the new transport policy for Ireland

for the period 2009-2020. The policy recognises the vital importance of continued investment in transport to ensure an efficient economy and continued social development, but it also sets out the necessary steps to ensure that people choose more sustainable transport modes such as walking, cycling and public transport.

5.5.6 Regional Planning Guidelines for the Greater Dublin Area

Ireland is divided into eight regional forward planning regions, Dublin, Midlands, Mid East, Mid West, South East, South West, West and Border, each with its own regional planning authority composed of Elected Members selected by the constituent local government councils. Regional planning authorities are required, under the Planning and Development Regulations 2001 to 2009, to draw up Regional Planning Guidelines (RPGs), long term strategic planning frameworks, for their relevant region. RPGs must have regard to the National Spatial Strategy.

County Kildare is located within the Greater Dublin Area for which the RPGs for the Greater Dublin Area 2010-2022 have been prepared.

The Greater Dublin Area incorporates the Dublin Regional Authority and the Mid East Regional Authority being the geographical and administrative areas of Dublin City, Dun Laoghaire-Rathdown, Fingal, South Dublin, Wicklow, Meath and Kildare. The RPGs provide a Strategic Planning Framework for the region providing a link between national policies such as the National Spatial Strategy and the National Development Plan, and plan policies and guidance at the City and County level.

The core principles from the RPGs are:

- o Dublin as the capital will serve a wide range of international, national, regional and local needs.
- o The Dublin and Mid-East Regions will be attractive, vibrant locations for industry, commerce, recreation and tourism and will be a major focus for economic growth within the State. In this regard, Maynooth, Leixlip and Naas have been identified as primary economic growth towns and as part of economic clusters with adjoining designated towns. Athy in south

Kildare is designated as a secondary economic growth centre serving south Kildare.

- o Development in the GDA shall be directly related to investment in integrated high quality public transport services and focused on compact urban form. The key growth centres in the county are located on or in close proximity to quality public transport services comprising, Naas, Newbridge, Maynooth, Leixlip, Celbridge, Kilcock, Kildare, Monasterevin, Kilcullen and Athy.
- o Development within the existing urban footprint of the Metropolitan Area which includes north east Kildare, will be consolidated to achieve a more compact urban form, allowing for the accommodation of a greater population than at present, with a much-enhanced public transport system, with the expansion of the built up areas providing for well designed urban environments linked to high quality public transport networks, enhancing the quality of life for residents and workers alike. The Metropolitan towns of north east Kildare, comprising Maynooth, Leixlip, Celbridge and Kilcock will accommodate 35% of the population and housing target over the period of 2006-2016.
- o Development in the Hinterland Area, will be focused on the high quality integrated growth and consolidation of development in key identified towns to include Kildare, Monasterevin, Kilcullen and Athy, separated from each other by extensive areas of strategic green belt land devoted to agriculture and similar uses. These towns will have high levels of employment activity, higher order shopping and a full range of social services, with good road and bus linkages to other towns and by high quality public transport to Dublin City. They will play a key role in serving the surrounding rural communities and smaller towns and villages.

5.5.7 Lower Tier Land Use Plans

Local Area Plans are prepared by the Council for certain settlements and set out in greater detail the Council's requirements for new development, including such factors as density, layout and design requirements, community facilities, transportation, open space and recreational facilities. These plans must be consistent with the County Development Plan.

The following local plans were adopted during the course of the County Development Plan 2005-2011: Prosperous, Athgarvan, Allenwood, Kilcullen, Derrinturn, Monasterevin, Sallins, Castledermot, Kilcock, Clane, Leixlip, Collinstown and Celbridge.

Development Plans are currently being implemented in the Town Council administrative areas of Naas and Athy.

5.6 Environmental Protection Objectives

The Plan is subject to a number of high level national, international and regional environmental protection policies and objectives, including those which have been identified as Strategic Environmental Objectives in Section 4.

Examples of Environmental Protection Objectives include the aim of the EU Habitats Directive - which is to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of Member States - and the purpose of the Water Framework Directive - which is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater which, among other things, prevents deterioration in the status of all water bodies and protects, enhances and restores all waters with the aim of achieving good status by 2015.

The Plan must be consistent with these objectives and implement them at County level in Kildare.

Section 6 Description of Alternative Development Scenarios for the Plan

6.1 Introduction

One of the critical roles of the SEA is to facilitate an evaluation of the likely environmental consequences of a range of alternative scenarios for accommodating future growth in County Kildare.

These alternative development scenarios must be realistic, capable of implementation, and should represent a range of different approaches within statutory and operational requirements of the County Development Plan. In some cases the preferred scenario will combine elements from the various alternatives considered.

This section identifies and describes different alternative development scenarios, taking into account higher level strategic actions as well as the geographical scope of the County.

The scenarios are evaluated in Section 7 resulting in the identification of potential effects and informing the selection of a preferred alternative for the Plan. The policies and objectives which are required to realise the preferred alternative are evaluated in Section 8.

Mitigation measures attempt to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the preferred alternative have been integrated into the Plan - these are identified in Section 9.

6.2 Excluding the 'Do-Nothing' Scenario

As the current Plan is required to be reviewed and replaced by a new Plan under legislation a 'do-nothing' alternative is not considered, nor is it required to be by the SEA Directive.

Annex I of the SEA Directive specifies that information should be provided in the environmental report on *inter alia* 'the relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or

programme'. Section 3 identifies the evolution of each component of the environment in the absence of implementing the Plan.

6.3 Identification and Description of Alternative Scenarios

6.3.1 Introduction

The following summarises a series of 'Scenarios' which provide alternative visions of how the future development of the County might occur. These are neither predictions nor preferences - instead they offer a range of plausible and internally consistent narratives of the outcome of different planning and development strategies. These provide the basis for the comparative evaluation of the likely environmental effects of each plan, which in turn serves the purpose of identifying which features of plans and policies are likely to be sensitive or robust over the widest range of circumstances.

6.3.2 Alternative Scenario 1: *Dispersed Development Strategy*

The Dispersed Development Strategy (see Figure 6.1) is based on a laissez-faire approach to development, with rural dispersal and limited urban growth. The location and nature of development is completely dependent on market demand, with little consideration of strategic planning or environmental protection. The following are the key elements of this development strategy:

- No adherence to a settlement strategy based on RPGs, Town Plans, LAPs, etc.;
- No creation of critical mass at strategic locations within the County;
- Significant levels of suburbanisation around Leixlip, Maynooth, Celbridge, Kilcock, Naas, Newbridge and other commuter towns;
- Extensive low density greenfield development;
- Uncontrolled development of existing rural settlements and rural housing, particularly in the south of the County;
- Dispersed development in the rural settlements and rural countryside; and,
- Natural Resource enterprises (extractive industries, forestry and wind energy) are developed in an individual basis through out the County.

6.3.3 Alternative Scenario 2: *Structured Development Strategy*

The Structured Development Strategy (see Figure 6.2) follows a strong yet flexible approach to development, based on a well-developed urban structure supported by diverse rural areas. The following are the key elements of this development strategy:

- Emphasis is based on building critical mass in the Metropolitan area (Maynooth, Leixlip, Celbridge, Kilcock) and at key towns and villages along strategic development corridors (Naas, Newbridge, Athy, Kildare, Monasterevin, Kilcullen);

- Emphasis is based on improving public and private transport and other service infrastructure along these strategic development corridors;
- Continued support of the rural area through a sustainable, flexible approach to maintaining the rural economy and population, balanced against responsible environmental protection;
- Reasonable containment of development in the rural areas around the Metropolitan area and at key towns;
- Growth is distributed across the County Settlement structure generally following an adopted settlement strategy and is highly dispersed;
- The metropolitan area and key towns contain the majority of the population growth, infrastructure and enterprise.

6.3.4 Alternative Scenario 3: *Growth in the Metropolitan Area Strategy*

The Growth in the Metropolitan Area Strategy (see Figure 6.3) is based on focusing the vast majority of development in the Metropolitan area, with limited growth dispersed throughout the rest of the County. The following are the key elements of this development strategy:

- Emphasis is based on focusing the vast majority of development in the Metropolitan Area (Maynooth, Leixlip, Celbridge, Kilcock). Upgrade transport and other service infrastructure within this area. Quality of life is the priority;
- Natural growth levels for the key towns (Naas, Newbridge, Athy, Kildare, Monasterevin, Kilcullen) with strict control of development in their hinterlands;
- A hierarchy of rural settlements with limited and controlled growth in higher order settlements and no growth in the remaining settlements;
- Strict control of development in the rural areas outside of the Metropolitan area and the key towns;
- A strong environmental protection policy would be implemented with the identification of various environmental zones within the County; and,

- Natural Resource enterprises (Extractive industries, Forestry, wind energy) are developed in a controlled manner through out the County.

6.3.5 Alternative Scenario 4: *Centred Development Strategy*

The Centred Development Strategy (see Figure 6.4) is based on building strong urban centres and protecting the rural hinterlands. The focus is on achieving critical mass in the Metropolitan Area and at key towns and villages. The following are the key elements of this development strategy:

- Emphasis on achieving critical mass in the Metropolitan Area (Maynooth, Leixlip, Celbridge, Kilcock) through the strategic development of this area of the County;
- Further growth in key towns along strategic development corridors (Naas, Newbridge, Athy, Kildare, Monasterevin, Kilcullen). These settlements will act as focal points for their rural catchments;
- Strict control of development outside of the Metropolitan area and the key towns;
- A strong environmental protection policy would be implemented with the identification of various environmental zones within the County;
- Growth is distributed across the county following an adopted settlement strategy that reflects the RPGs for the Greater Dublin Area;
- Specific areas are designated for natural resource enterprise such as forestry, mineral extraction and wind farms (where viable);
- The south of the county supports rural enterprise based employment with the strengthening of villages and towns as well as some higher-level rural settlements;
- Quality of life is the priority in strong towns and villages; and,
- Rural settlements are planned and set out in a hierarchy in order to evolve into centres capable of providing a range of services and employment to their local population.

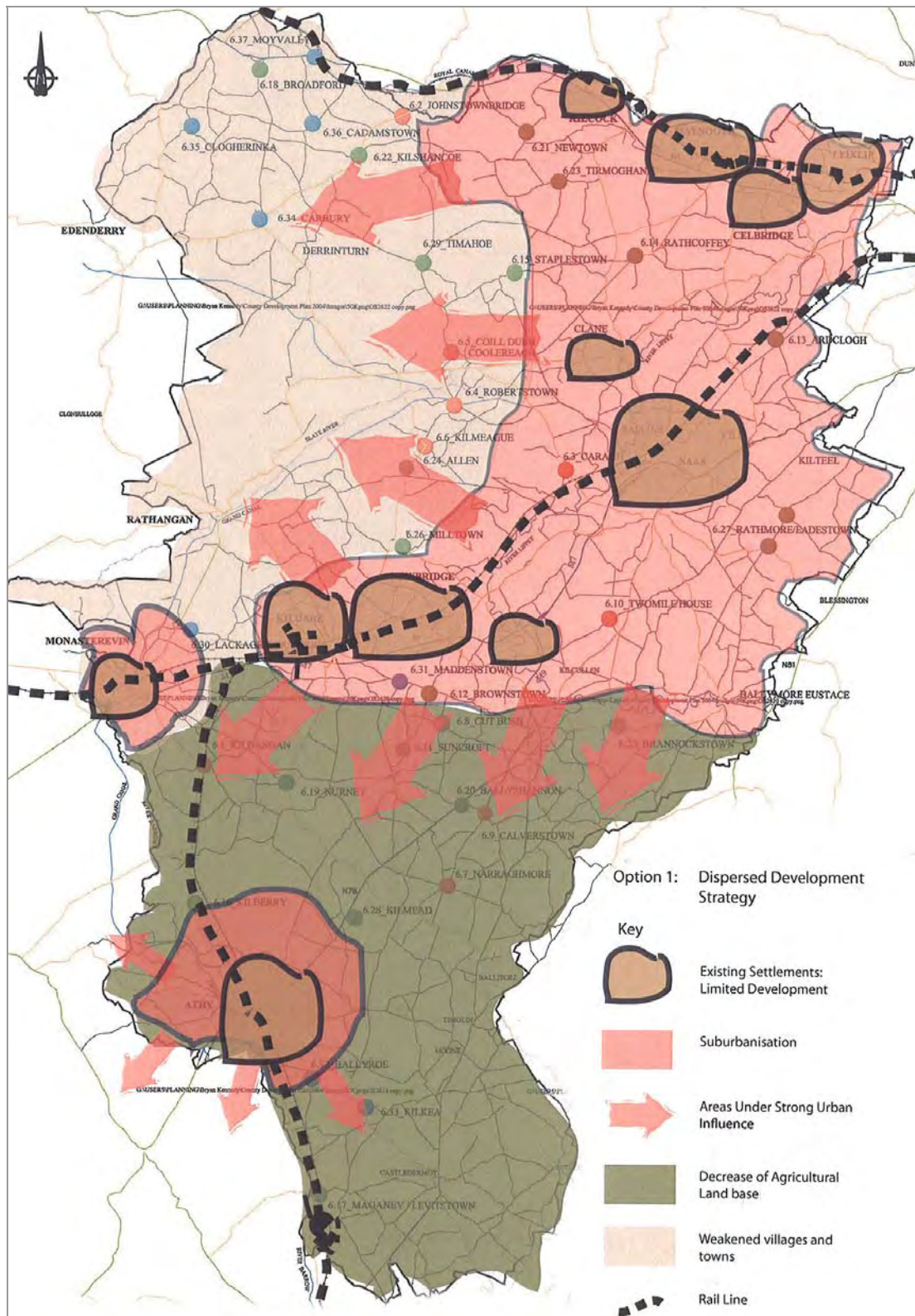


Figure 6.1 Scenario 1: *Dispersed Development Strategy*

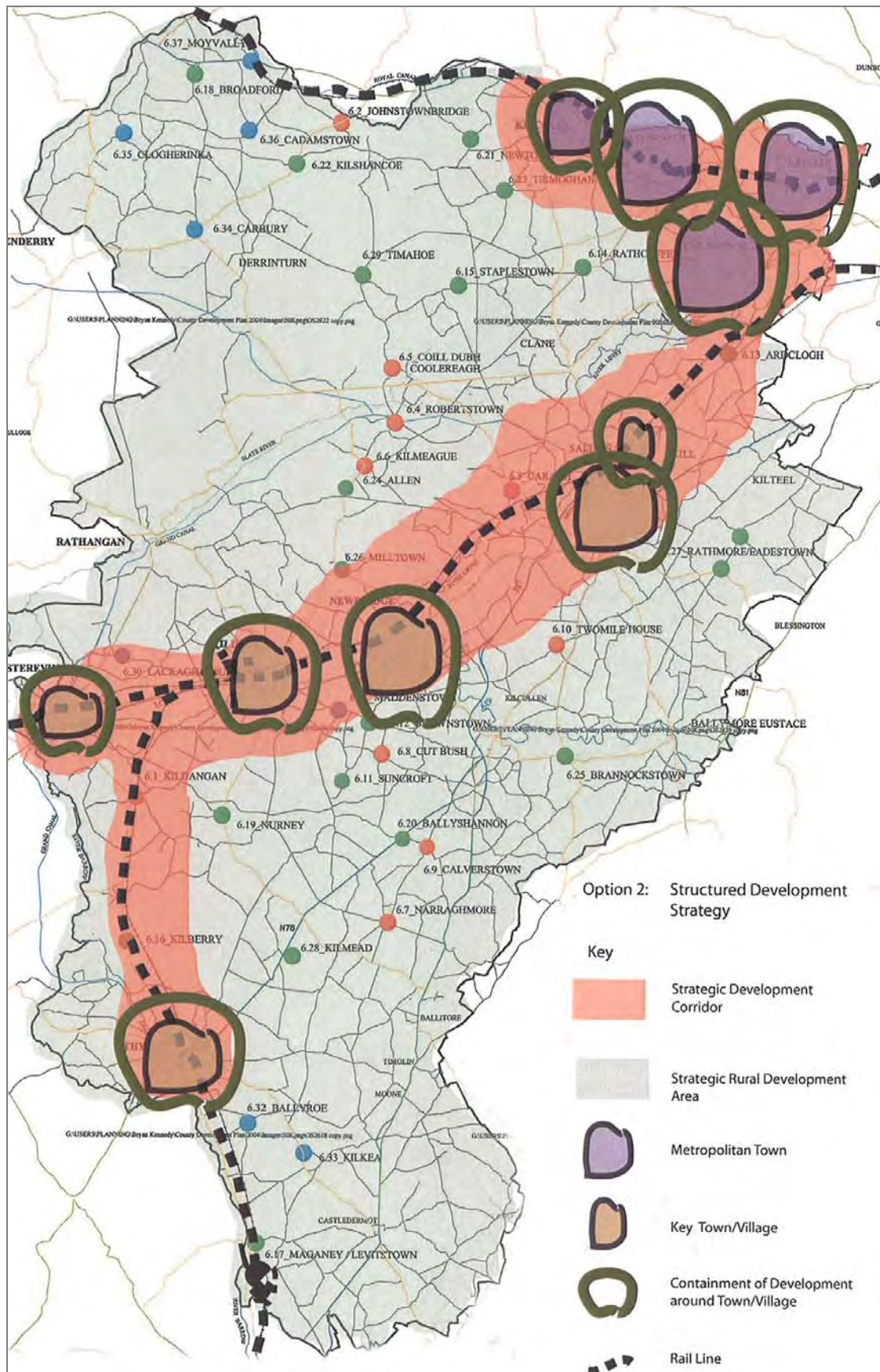


Figure 6.2 Scenario 2: Structured Development Strategy

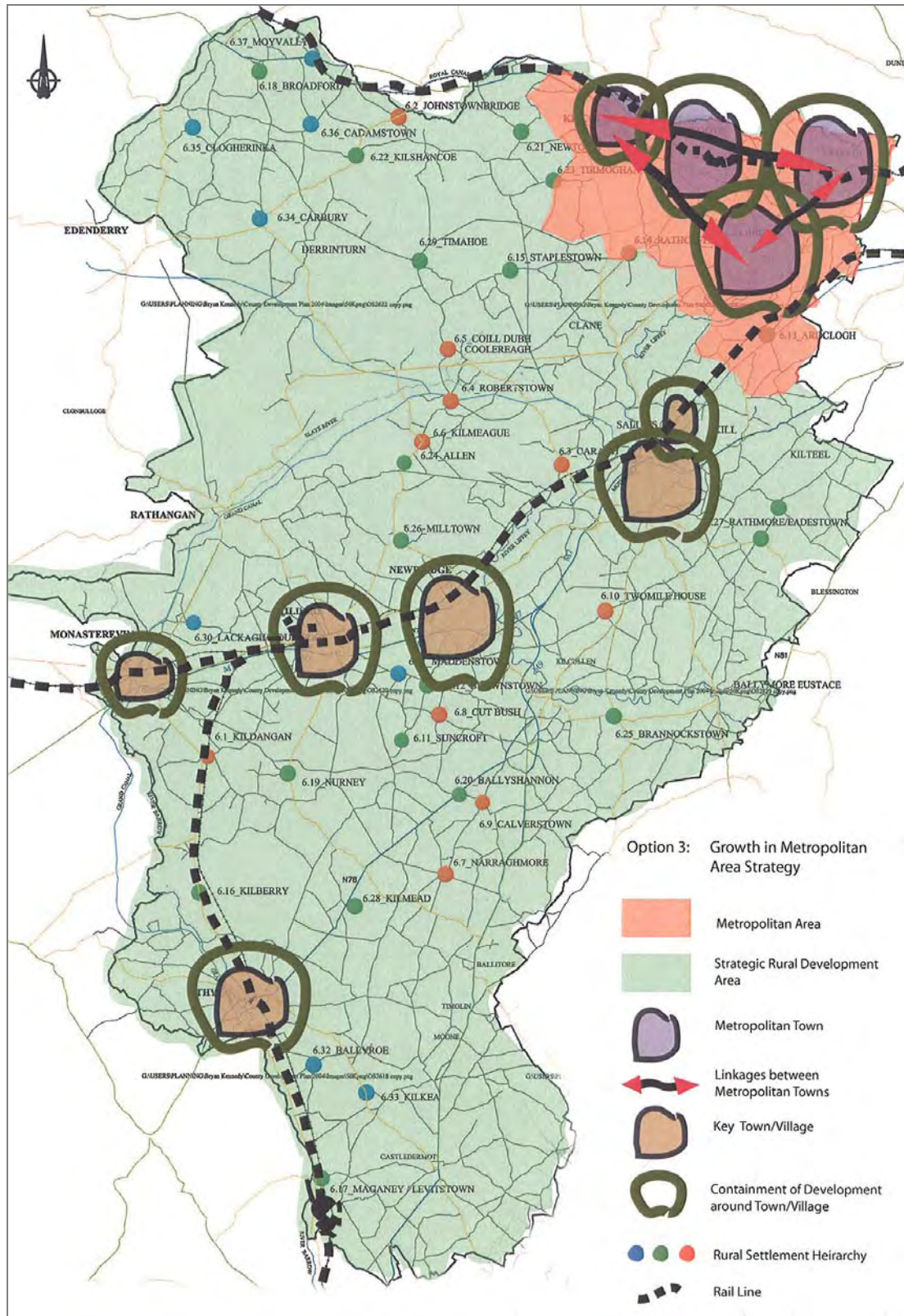


Figure 6.3 Scenario 3: *Growth in the Metropolitan Area Strategy*

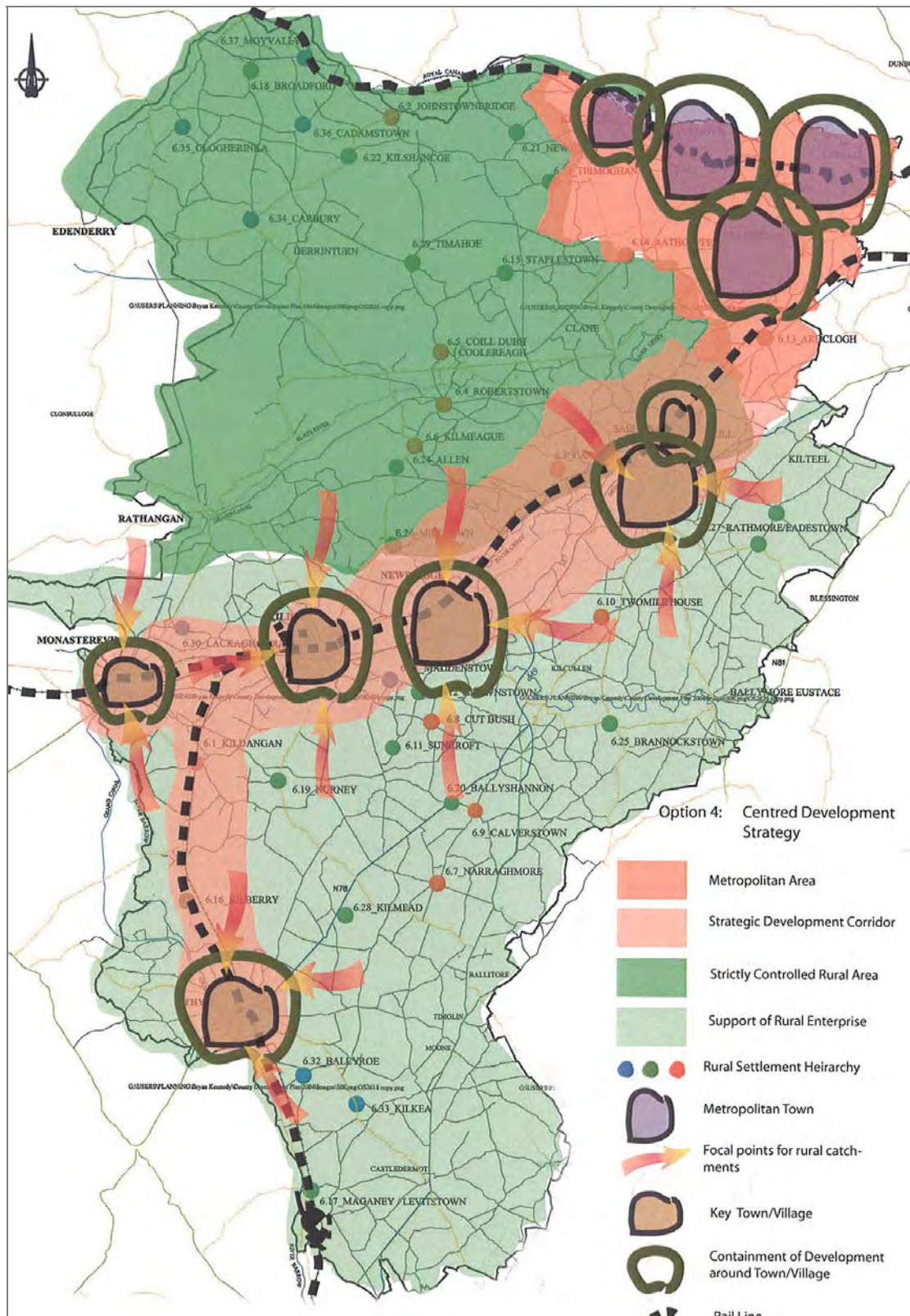


Figure 6.4 Scenario 4: *Centred Development Strategy*

Section 7 Evaluation of Alternative Development Scenarios for the Plan

7.1 Introduction

The objective of this section is to determine the relative merits of three alternative development scenarios for accommodating future growth in County Kildare. This determination sought to understand whether each alternative was likely to improve, conflict with or have a neutral interaction with the receiving environment.

7.2 Methodology

Scenarios are evaluated in a succinct and focused way for environmental effects against both the existing environment which is described and mapped in Section 3 and the Strategic Environmental Objectives (SEOs) which are identified in Section 4.

In order to comply with the SEA Directive Strategic Environmental Objectives have been grouped under relevant parent components such as *water* and *landscape*.

Based on an understanding of the existing and emerging environmental conditions in the County a series of SEOs were identified and developed in order to assess the likely environmental effects which would be caused by implementation of each of the three alternative scenarios described in Section 6. The alternatives are evaluated using compatibility criteria (see Table 7.1) in order to determine how they are likely to affect the status of these SEOs.

Table 7.2 brings together all the SEOs which have been developed from international and national policies which generally govern environmental protection objectives.

The SEOs and the alternative scenarios are arrayed against each other to identify which

interactions - if any - would cause impacts on specific components of the environment.

Where the appraisal identifies a likely conflict with the status of an SEO the relevant SEO code is entered into the conflict column - e.g. B1 which stands for SEO likely to be affected - in this instance 'to ensure compliance with the Habitats Directive with regard to the protection of Natura 2000 Sites and habitats and species listed under Annexes I and II of the Directive'.

The Macro-Environmental Sensitivity Map (see Figure 3.45) was used in order to provide preliminary feedback on the alternatives for the draft Plan which were developed and then evaluated for environmental effects (see Sections 6 and 7). The Macro-Environmental Sensitivity Map and the other maps contained within Section 3 were used to evaluation of the alternatives and to inform the selection of the alternative which was developed for the Draft Plan.

With regard to the treatment and disposal of waste water, limitations in the assimilative capacity of water bodies can be dealt with by engineering solutions. However, the capacity of water bodies to allow abstractions of water for human use without compromising the ability of the water bodies to meet legislative requirements - such as the Water Framework Directive - is limited and cannot be overcome by engineering solutions. Measures contributing to compliance with legislative requirements have been integrated into the Draft Plan (e.g. Water Quality Policy WQ 2: To ensure, through the implementation of the River Basin Management Plans and their associated Programmes of Measures and any other associated legislation, the protection and improvement of all drinking water, surface water and ground waters throughout the County).

Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
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Table 7.1 Criteria for appraising the effect of Alternative Scenarios and County Development Plan provisions on SEOs

SEO Code	SEO
B1	To ensure compliance with the Habitats Directive with regard to the protection of Natura 2000 Sites and habitats and species listed under Annexes I and II of the Directive
B2	To ensure compliance with Article 10 of the Habitats Directive protection of macro-corridors, stepping stones and contiguous areas of habitat which are important on a County level for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species
B3	To sustain existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain
HH1	To protect human health from hazards or nuisances arising from exposure to incompatible landuses
S1	To prevent pollution and/or contamination of soil
W1	To maintain and improve, where possible, the status of surface waters
W2	To prevent pollution and contamination of ground water
W3	To manage areas that are currently at risk of flooding or are likely to pose a significant flood risk in the future in compliance with The Planning System and Flood Risk Management Guidelines for Planning Authorities and Floods Directive ultimately
M1	To serve new development with adequate and appropriate waste water treatment
M2	To serve users of public water supplies with drinking water that is both wholesome and clean
C1	To reduce travel related greenhouse emissions to air
C2	To encourage modal change from car to more sustainable forms of transport
CH1	To protect the archaeological heritage of the County including entries to the Record of Monuments and Places and/or their context
CH2	To preserve and protect the special interest and character of the County's architectural heritage
L1	To avoid significant adverse impacts on the landscape, especially with regard to sensitive landscapes and protected views and scenic routes

Table 7.2 Strategic Environmental Objectives (SEOs)⁵⁹

⁵⁹ Strategic Environmental Objectives (SEOs) are methodological measures which are developed from international, national and regional policies which generally govern environmental protection objectives and against which the environmental effects of the Plan and the alternatives can be tested. The SEOs are used as standards against which the provisions of the Plan can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, if unmitigated against.

7.3 Evaluation of Alternative Scenarios⁶⁰

7.3.1 Alternative Scenario 1: *Dispersed Development Strategy*

7.3.1.1 Environmental Effects

This scenario is likely to lead to significant increases on pressure on environmental resources in rural areas. In the north-east this pressure is likely to take the form of increasing pollution and drawdown of vulnerable groundwater resources⁶¹; increased pollution of surface waters⁶²; loss of biodiversity and ecological corridors – due to uncontrolled suburbanisation⁶³; loss of air quality⁶⁴ due to noise and emissions associated with increased levels of dispersed rural and suburban traffic⁶⁵ – as well as an overall loss of a clear distinction between rural and suburban areas⁶⁶.

In the south of the county the rural environment is likely to deteriorate due to the gradual cessation of long-established land-use practices that sustain the landscape, habitats and cultural heritage of the County's rural areas⁶⁷.

Around urban areas this scenario is less likely to lead to the establishment of cost-effective provision of shared public infrastructure for transportation⁶⁸ or water services⁶⁹ – due to low levels of localised population concentration.

7.3.1.2 Critical Planning Evaluation

- Limited development within existing urban centres with instances of inappropriately scaled and designed developments commonplace in the larger towns
- Low density, greenfield development dominant creating low density extensions to urban areas and loss of identity, with urban centres merging together
- Extensive areas of un-controlled development in the rural settlements and rural housing, particularly in the south of the County, decrease the County's agricultural land base
- Villages and towns with lower population bases due to dispersed nature of development in the rural settlements and rural countryside
- Industrial and employment centres are created at inappropriate locations

7.3.1.3 Planning Effects

- The influence of Dublin City and its environs on growth within the commuter belt is dominant with significant expansion to the footprints of the four metropolitan towns
- The rural area experiences significant changes to its environmental quality, character and landscape
- Strategic development does not take place due to the dispersed nature of development that creates a car dependent population
- Lack of critical mass at strategic locations makes the implementation of both urban and rural physical and social infrastructure economically challenging

⁶⁰ Footnotes like this are used in this section in order to identify instances where interactions between the relevant Scenario and the relevant SEOs occur. The nature of these interactions is identified on Table 7.3.

⁶¹ SEOs W2 & S1

⁶² SEO W1

⁶³ SEOs B1 & B2

⁶⁴ SEO HH1

⁶⁵ SEOs C1 & C2

⁶⁶ SEO L1

⁶⁷ SEOs B3, L1, B1, B2, CH1 & CH2

⁶⁸ SEOs C1 & C2

⁶⁹ SEOs M1 & M2

7.3.2 Alternative Scenario 2: *Structured Development Strategy*

7.3.2.1 Environmental Effects

This scenario is likely to concentrate development, population and demands for infrastructural capacity into the north-eastern part of the county that is most environmentally robust – both on account of the relatively low density of environmental sensitivities as well as the relatively high concentrations in installed infrastructure with spare capacity⁷⁰ – existing and planned. This concentration will contribute to the protection of the more sensitive areas within the County⁷¹.

The central corridor where the majority of the rest of the population and development are likely to concentrate is also both environmentally robust as well as being already well served by road, rail, power and gas corridors.

The strategy lacks high-level strategic vision for the targeted enhancement and protection of rural areas⁷².

7.3.2.2 Critical Planning Evaluation

- Critical mass is achieved in the at key towns and villages along strategic development corridors
- The Metropolitan towns develop strong physical and employment links with Dublin City and its environs
- Rural areas develop in a sustainable manner by balancing the development of rural area with the protection of the rural environment

7.3.2.3 Planning Effects

- Improved public and private transport and other service infrastructure provision is more economically viable in the at key towns and villages along strategic development corridors
- Rural economy and population is maintained and enhanced
- Environmental quality of the rural area is maintained and enhanced

7.3.3 Alternative Scenario 3: *Growth in the Metropolitan Area Strategy*

7.3.3.1 Environmental Effects

This scenario is likely to concentrate development, population and demands for infrastructural capacity into the north-eastern part of the county that is most environmentally robust – both on account of the relatively low density of environmental sensitivities as well as the relatively high concentrations in installed infrastructure with spare capacity⁷³ – existing and planned. This concentration will contribute to the protection of the more sensitive areas within the County⁷⁴.

The central corridor where the majority of the rest of the population and development are likely to concentrate is also both environmentally robust as well as being already well served by road, rail, power and gas corridors.

This strategy also appears to envisage some level of rural development to continue to sustain the future viability of smaller more dispersed rural communities.

The strategy lacks high-level strategic vision for the targeted enhancement and protection of rural areas⁷⁵.

⁷⁰ SEOs M1, M2, C1 & C2

⁷¹ SEOs B1, B2, S1, W1, W2 & L1

⁷² SEOs B3, L1, B1, B2, CH1 & CH2

⁷³ SEOs M1, M2, C1 & C2

⁷⁴ SEOs B1, B2, S1, W1, W2 & L1

⁷⁵ SEOs B3, L1, B1, B2, CH1 & CH2

7.3.3.2 Critical Planning Evaluation

- Four Metropolitan town experience significant increased levels of urbanisation with higher density and higher quality physical and social infrastructure provision
- Industrial and employment centres are created at inappropriate locations
- The counties employment and physical infrastructure links with Dublin City and environs increase.
- Key towns experience medium level of population growth
- The remaining towns and villages experience natural levels of growth with some smaller settlements experiencing population decline
- Environmental quality and character of rural areas is maintained with decreasing levels of population growth outside the designated urban settlements

7.3.3.3 Planning Effects

- Higher density development in the Metropolitan towns requires the implementation of more comprehensive land use and transportation strategies to ensure the efficient use of land and to guide their strategic development
- Rural economy and population base declines
- Environmental quality of the rural area is maintained and enhanced

7.3.4 Alternative Scenario 4: *Centred Development Strategy*

7.3.4.1 Environmental Effects

This scenario is likely to concentrate development, population and demands for infrastructural capacity into the north-eastern part of the county that is most environmentally robust – both on account of the relatively low density of environmental sensitivities as well as the relatively high concentrations in installed infrastructure with spare capacity⁷⁶ – existing and planned. This concentration will contribute to the protection of the more sensitive areas within the County⁷⁷.

The central corridor where the majority of the rest of the population and development are likely to concentrate is also both environmentally robust as well as being already well served by road, rail, power and gas corridors.

Rural Settlements are generally well matched to those areas with lower sensitivities. This strategy also appears to envisage sufficient levels of continued rural development to sustain the future viability of smaller more dispersed rural communities. These are necessary for the continuity of the long established rural land-use patterns that are necessary for the continuity of the landscape, habitats and cultural heritage of the County's rural areas⁷⁸.

This scenario also offers specific and targeted strategies for rural areas that are carefully tailored and targeted to the specific environmental sensitivities and strengths of different rural areas⁷⁹.

7.3.4.2 Critical Planning Evaluation

- Critical mass is achieved in the at key towns and villages in line with the adopted settlement strategy for the County
- The Metropolitan towns develop stronger physical and employment links with Dublin City and its environs
- The population growth rates in the designated rural settlements allow the provision a range of services and employment to their local population
- Rural areas develop in a sustainable manner by balancing the development of rural area with the protection of the rural environment

⁷⁶ SEOs M1, M2, C1 & C2

⁷⁷ SEOs B1, B2, S1, W1, W2 & L1

⁷⁸ SEOs B3, L1, B1, B2, CH1 & CH2

⁷⁹ SEOs B3, L1, B1, B2, CH1 & CH2

7.3.4.3 Planning Effects

- Improved public and private transport and other service infrastructure provision are more economically viable in the Metropolitan towns and key towns;
- More focused planning strategies are required to guide the development of the metropolitan area as a whole;
- The population, economy and environmental quality of the rural area is maintained and enhanced by the implementation of a settlement strategy that allows for the development of a rural population in a sustainable manner and the provision of environmentally reasonable rural enterprises, particularly in the south of the County

7.3.5 Evaluation against SEOs

The table overleaf provides an evaluation of each of the alternative development scenarios for the Plan against the Strategic Environmental Objectives (SEOs).

- Scenario 1 had 6 *probably conflicting* interactions and 13 *potentially conflicting* interactions with SEOs.
- Scenario 2 had 10 *improving* and 6 *probably conflicting* interactions with SEOs.
- Scenario 3 had 10 *improving* and 6 *potentially conflicting* interactions with SEOs.
- Scenario 4 had 10 *improving* and 14 *potentially conflicting* interactions with SEOs.

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	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Potential Conflict with status of SEOs - would be mitigated	Uncertain interaction with status of SEOs	Neutral interaction with status of SEOs	No Likely interaction with status of SEOs
Scenario 1: Dispersed Development		B3 L1 B1 B2 CH1 CH2 (deterioration of long-established land use practices in rural areas)	B1 B2 S1 W1 W2 HH1 C1 C2 L1 (significant increases of pressure on environmental resources in rural areas) C1 C2 M1 M2 (less likely to lead to the establishment of cost effective provision of shared public infrastructure)			
Scenario 2: Structured Development	M1 M2 C1 C2 B1 B2 S1 W1 W2 L1 (concentration of development into north east where there are both relatively lower densities of environmental sensitivities and high concentrations in installed infrastructure with spare capacity - existing and planned)	B3 L1 B1 B2 CH1 CH2 (lacks high level strategic vision for targeted enhancement and protection of rural areas)				
Scenario 3: Growth in the Metropolitan Area	M1 M2 C1 C2 B1 B2 S1 W1 W2 L1 (concentration of development into north east where there are both relatively lower densities of environmental sensitivities and high concentrations in installed infrastructure with spare capacity - existing and planned)		B3 L1 B1 B2 CH1 CH2 (lacks high level strategic vision for targeted enhancement and protection of rural areas however envisages some level of rural development to continue to sustain the future viability of smaller, more dispersed rural communities)			
Scenario 4: Centred Development	M1 M2 C1 C2 B1 B2 S1 W1 W2 L1 (concentration of development into north east where there are both relatively lower densities of environmental sensitivities and high concentrations in installed infrastructure with spare capacity - existing and planned; in addition the central corridor where the majority of the rest of the population and development are likely to concentrate is also both environmentally robust and served well by infrastructure) B3 L1 B1 B2 CH1 CH2 (offers specific and targeted strategies for rural areas that are carefully tailored and targeted to the specific environmental sensitivities and strengths of different rural areas; also envisages sufficient levels of continued rural development to sustain the future viability of smaller, more dispersed rural communities)		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1 (potential conflicts between development and various environmental components will need to be mitigated)			

Table 7.3 Evaluation of Alternative Development Scenarios against SEOs

7.3.6 The Selected Alternative Development Scenario

The Alternatives that were examined were produced and evaluated at an earlier - more embryonic - stage to facilitate the evaluation and selection of a plan - having regard, *inter alia* to environmental consequences.

The Development Plan which emerged from the Plan preparation process and was adopted is Scenario 4 *Centred Development* – this Scenario achieves a good balance between potential environmental impact and conformance with relevant National and Regional planning objectives.

The Settlement Hierarchy Map from the County Development Plan is shown on Figure 7.1.

With the integration of appropriate mitigation measures (including those which are identified in Section 9 of this report) potential adverse environmental effects which could arise as a result of implementing this scenario would be likely to be avoided, reduced or offset.

Alternative Scenario 4 was chosen to be developed for the Development Plan by the plan-making team and adopted by the Elected Members having regard to both:

1. The environmental effects which were identified by the Strategic Environmental Assessment; and,
2. Planning - including social and economic - effects.

7.3.7 Evaluation of Plan Provisions prepared to realise the Selected Alternative

Section 8 evaluates the policies and objectives which have been prepared to realise Scenario 4 (the selected Development Plan Scenario). Some of these provisions are likely to have a range of beneficial effects with regard to the protection of the environment while some are likely to have a range of potential adverse effects which will be mitigated by other provisions which have been integrated into the Plan, including those which have emerged through the SEA process. Some provisions are likely to have a range of both beneficial effects and potential adverse effects which will be mitigated by other provisions within the Plan, including those which have emerged through the SEA process.

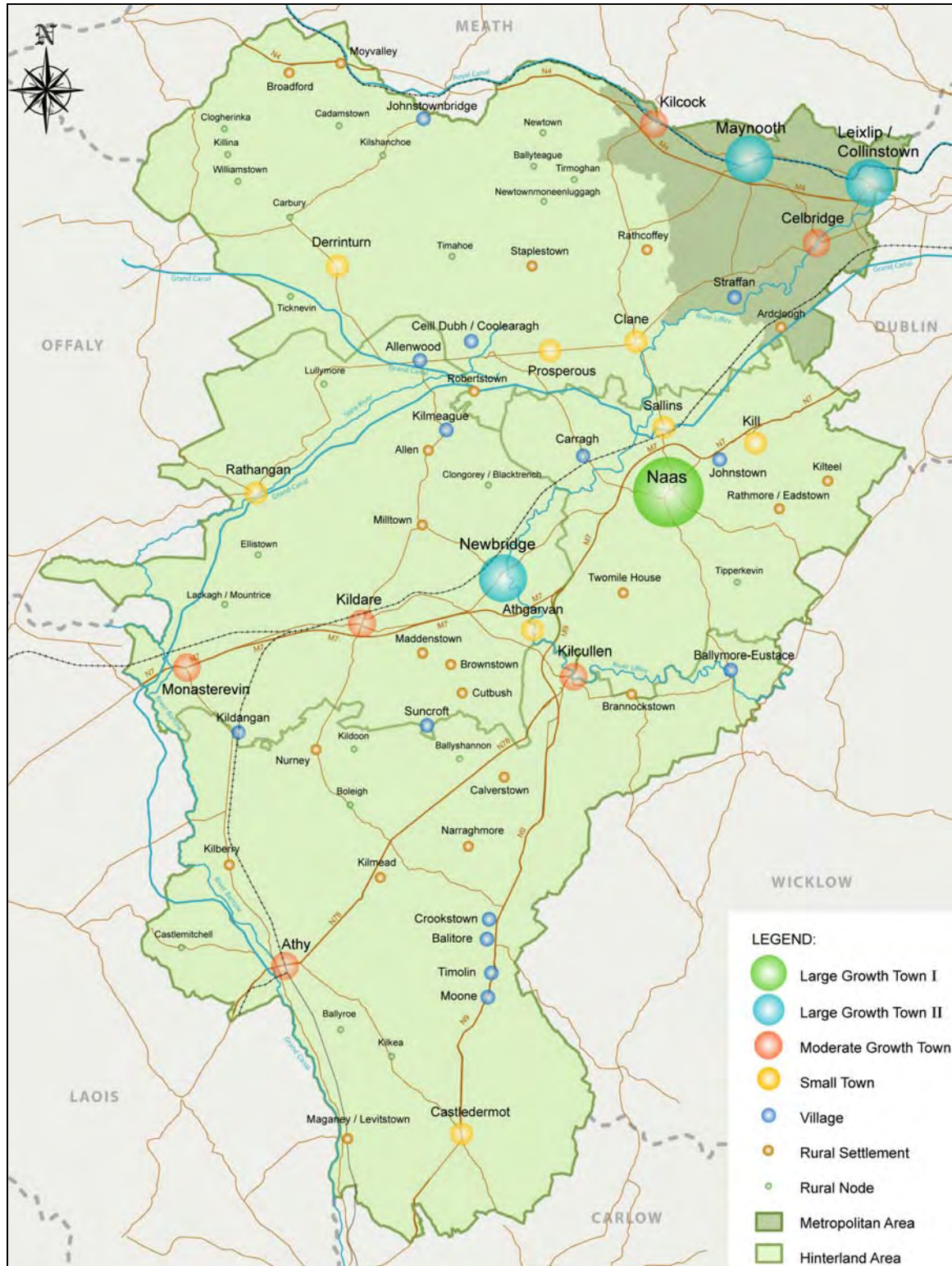


Figure 7.1 Settlement Hierarchy Map from the County Development Plan

Section 8 Evaluation of Plan Provisions

8.1 Methodology

This section evaluates the Plan's policies and objectives. Strategic Environmental Objectives (SEOs) are used for this purpose as outlined under Section 7.2. Use has also been made of the environmental baseline descriptions and the maps of the individual components provided in Section 3.

The interactions between the SEOs and the policies and objectives of the Plan determine the likely significant effects of implementing the Plan. These effects include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

Table 8.1 brings together all the SEOs which have been developed from international, national and regional policies which generally govern environmental protection objectives.

SEO Code	SEO
B1	To ensure compliance with the Habitats Directive with regard to the protection of Natura 2000 Sites and habitats and species listed under Annexes I and II of the Directive
B2	To ensure compliance with Article 10 of the Habitats Directive protection of macro-corridors, stepping stones and contiguous areas of habitat which are important on a County level for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species
B3	To sustain existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain
HH1	To protect human health from hazards or nuisances arising from exposure to incompatible landuses
S1	To prevent pollution and/or contamination of soil
W1	To maintain and improve, where possible, the status of surface waters
W2	To prevent pollution and contamination of ground water
W3	To manage areas that are currently at risk of flooding or are likely to pose a significant flood risk in the future in compliance with The Planning System and Flood Risk Management Guidelines for Planning Authorities and Floods Directive ultimately
M1	To serve new development with adequate and appropriate waste water treatment
M2	To serve users of public water supplies with drinking water that is both wholesome and clean
C1	To reduce travel related greenhouse emissions to air
C2	To encourage modal change from car to more sustainable forms of transport
CH1	To protect the archaeological heritage of the County including entries to the Record of Monuments and Places and/or their context
CH2	To preserve and protect the special interest and character of the County's architectural heritage
L1	To avoid significant adverse impacts on the landscape, especially with regard to sensitive landscapes and protected views and scenic routes

Table 8.1 Strategic Environmental Objectives (SEOs)⁸⁰

⁸⁰ Strategic Environmental Objectives (SEOs) are methodological measures which are developed from international, national and regional policies which generally govern environmental protection objectives and against which the environmental effects of the Plan and the alternatives can be tested. The SEOs are used as standards against which the provisions of the Draft Plan can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, if unmitigated against.

8.2 Determination of Potential Interactions

Certain Plan policies and objectives are evaluated as having a potential conflicting interaction or uncertain interaction with the status of SEOs. The interaction and environmental impacts, if any, which occur will be determined by: the nature and extent of individual projects or multiple projects; lower tier plans and subsequent development; and, site specific environmental factors.

These impacts may be assessed as part of a lower tier environmental assessment and/or by the development management process.

Avoidance of conflict is dependent upon the Council managing permissions in a way which does not conflict with the status of SEOs.

Providing other Plan measures are complied with, unnecessary conflicts with SEOs would be avoided.

Strategic actions which have been used in the assessment when considering cumulative impacts include:

- The National Spatial Strategy 2002-2020;
- The National Development Plan 2007-2013;
- The Regional Planning Guidelines for the Greater Dublin Area;
- River Basin Management Plans for the South Eastern and Eastern River Basin Districts;
- Higher level Environmental Protection Objectives and related Plans which have been identified in Sections 3 and 4 of this report;
- Strategic Actions and related Plans and Programmes which have been identified within Plan provisions; and,
- Lower tier land use plans within the County.

8.3 Chapter 1: Introduction and Strategic Context

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
County Vision						
To build on the strengths of the county by facilitating sustainable development, through the provision of high quality employment opportunities and residential developments supported by quality urban and rural environments with physical and social infrastructure to support communities throughout the county.	B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1					

8.4 Chapter 2: Core Strategy

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
Aim						
To respond in a coherent sustainable, spatial fashion to the challenges facing the county, while building on its strengths and providing a more focused approach to planning for future growth. The Core Strategy facilitates a more consolidated compact urban form; maintenance and improvement of a sustainable economic base; creation of sustainable and integrated communities together with the balancing of our natural and built environment with sustainable and appropriate development.	B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1					

Strategic Policies						
Settlement Strategy						
CS 1: To provide new housing provision in accordance with the County Settlement Hierarchy.	B1 B2 B3		B1 B2			
CS 2: To direct appropriate levels of growth into the designated growth centres and moderate sustainable growth towns.	HH1 S1		HH1 S1			
CS 3: To support rural communities through the identification of lower order centres including small towns, villages and settlements to provide more sustainable development centres in the rural areas.	W1 W2		W1 W2			
CS 4: To deliver sustainable compact urban areas through a plan-led approach.	M1 M2		W3 M1			
	C1 C2		M2 C1 C2			
	CH1 CH2		CH1 CH2			
	L1		L1			
Economic Development						
CS 5: To support the development of the identified strategic growth centres of Maynooth, Leixlip and Naas as focal points for regional critical massing and employment growth.	B1 B2 B3		B1 B2			
CS 6: To encourage and facilitate new employment opportunities within economic clusters and the hinterland towns.	HH1 S1		HH1 S1			
CS 7: To promote and attract economic activity at appropriate locations throughout the county.	W1 W2		W1 W2			
CS 8: To address commuting patterns by building up the local economy to a more sustainable level.	M1 M2		W3 M1			
	C1 C2		M2 C1 C2			
	CH1 CH2		CH1 CH2			
	L1		L1			
Sustainable and Integrated Communities						
CS 9: To promote and facilitate the development of sustainable communities through land use planning, by providing for land uses capable of accommodating employment, community, leisure, recreational and cultural facilities having regard to the quality of the environment including the natural environment, landscape character and the archaeological and architectural heritage.	B1 B2 B3		B1 B2			
CS 10: To ensure that developments are accessible to and meet the needs of all individuals and local community groups.	HH1 S1		HH1 S1			
CS 11: To seek the delivery of physical and community infrastructure in conjunction with high quality residential developments to create quality living environments.	W1 W2		W1 W2			
	M1 M2		W3 M1			
	C1 C2		M2 C1 C2			
	CH1 CH2		CH1 CH2			
	L1		L1			
Balancing the Environment with Sustainable and Appropriate Development						
CS 12: To protect and conserve the natural environment.	B1 B2 B3					
CS 13: To protect and conserve nationally important and EU designated sites.	HH1 S1					
CS 14: To promote and enhance biodiversity throughout the county.	W1 W2					
CS 15: To ensure that the built heritage is appropriately protected through the Record of Protected Structures with policies to support the sensitive reuse and integration of such structures into new development works.	W3 M1					
	M2 C1 C2					
	CH1 CH2					
	L1					

8.5 Chapter 3: Settlement Strategy

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
Aim						
To provide a coherent planning framework for the development of the county, founded on a well developed urban structure supporting diverse rural areas, protecting the rural environment and delivering on a more sustainable living-working environment.	B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Settlement Strategy Policies						
<p>SS 1: To manage the county's settlement pattern in accordance with the population and housing unit allocations set out in the RPGs, the settlement strategy and hierarchy of settlements set out in Table 3.1. To direct growth into the large growth towns, followed by moderate sustainable growth towns and small towns, whilst also recognising the settlement requirements of rural communities.</p> <p>SS 2: To ensure that the zoning of lands is in accordance with the county settlement strategy.</p> <p>SS 3: To phase lands for development where over zoning has taken place. Prioritised phasing will be based on a clear sequential approach with the zoning extending outwards from the town/village core. A strong emphasis will also be placed on encouraging infill opportunities and better use of under utilised lands with options and opportunities for brownfield /regeneration prioritised.</p> <p>SS 4: Where infrastructural deficits within a particular growth area cannot be overcome within the period of this Plan, the growth anticipated for that development centre will be allocated to other serviced towns within that level or to serviced towns within a higher category of the settlement hierarchy. In the mid-term review of this Plan, the Council will have regard to the existing hierarchy of settlements in the County when applying the targeted growth levels.</p> <p>SS 5: To implement through appropriate policies, the principles and guidance set out in the DoEHLG Guidelines 'Sustainable Residential Development in Urban Areas' (May 2009) and accompanying 'Urban Design Manual – A Best Practice Guide' (May 2009) in the preparation and review of town, village and settlement plans.</p>	B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			

Settlement Strategy Objectives						
<p>SO 1: To zone additional lands in the Metropolitan towns, where appropriate, to meet the requirements of the population allocations set out in this Plan. Such zoning shall be in line with the settlement hierarchy set out in the Table 3.3.</p> <p>SO 2: To phase the development of lands within towns and villages, which have an identified surplus of zoned lands. Lands will be phased in a sequential manner with the development of other lands deferred until prioritised lands are substantially developed.</p> <p>SO 3: To facilitate the implementation of the settlement strategy through the prioritisation of key strategic infrastructure in accordance with the Council's Assessment of Needs and subject to the availability of financial resources.</p> <p>SO 4: To ensure that the scale and form of developments envisaged within towns and villages is appropriate to its position within the overall settlement hierarchy set out in Table 3.1 (Settlement Hierarchy). Due regard will be given to the DoEHLG Guidelines 'Sustainable Residential Development in Urban Areas' (May 2009), the accompanying 'Urban Design Manual – A Best Practice Guide' (May 2009) and the Urban Design Guidelines contained within Chapter 15 of this Plan.</p> <p>SO 5: To implement Section 10(8) of the Planning and Development Act 2000 as appropriate which states " there shall be no presumption in law that any land zoned in a particular development plan (including a development plan that has been varied) shall remain so zoned in any subsequent development plan".</p> <p>SO 6: To identify and retain green belt separation areas between the development boundaries of the county's towns and villages in the interest of avoiding coalescence of settlements and to retain their distinctive character and identity.</p> <p>SO 7: To provide a greater degree of co-ordination between large population centres and corresponding growth in employment, public infrastructure, amenities, community facilities, schools, public transport etc. through a plan-led approach.</p> <p>SO 8: To support the development of rural settlements and rural areas in a balanced, sustainable manner, having regard to the overall settlement hierarchy, social, economic and environmental characteristics of their area and their residents and in accordance with the policies and objectives set out elsewhere in Chapters 4, 10 and 17 as may be appropriate..</p> <p>SO 9: To investigate the feasibility of developing lands north of Confey (Leixlip), in conjunction with neighbouring Local Authorities and other Statutory Authorities where the demand for additional zoning is necessary to support the core strategy of this Plan.</p> <p>SO 10: To carry out a strategic Land Use and Transportation Study of north east Kildare including the Metropolitan area towns of Leixlip, Maynooth, Celbridge and Kilcock. The preparation of the study will involve the participation of all the strategic stakeholders, including the National Transportation Authority, adjoining local authorities (i.e. Meath, Fingal and South Dublin County Councils), the Regional Authorities of the Greater Dublin Area, transportation providers, Waterways Ireland, Government Departments and Environmental Agencies.</p> <p>SO 11: To prepare a preliminary monitoring evaluation report on the likely significant environmental effects of implementing the County Development Plan, to coincide with the Manager's report to the Elected Members on the progress achieved in securing Plan objectives within two years of the making of the Plan. (This review is required under Section 15 of the 2000 Planning Act, as amended).</p>	<p>B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			

SO 12: As part of the mid-term review of this Plan (in accordance with Section 15 (2) of the Planning and Development Act 2000, as amended), the implications of the 2011 Census data for the county, the review of the RPGs and any revised national population projections/allocations issued by the DoEHLG will be assessed and consideration given to appropriate revisions to the Settlement Strategy of the Plan.						
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8.6 Chapter 4: Housing

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
Aim						
To facilitate the provision of high quality residential developments at appropriate locations in line with the settlement strategy. To ensure the provision of appropriate densities at suitable locations; to include an appropriate mix of house sizes, types and tenures in order to meet different household needs; and to promote balanced and integrated communities.	B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Housing Policies in Towns / Villages						
General Housing Policies						
HP1: To ensure that sufficient and suitably located land is zoned to satisfy development needs within the period of this Plan and in accordance with the settlement strategy. HP 2: To implement the Kildare County Council Housing Strategy 2011-2017 prepared in accordance with the requirements of Part V of the Planning and Development Act 2000 (as amended). HP3: To have regard to the provisions of the DoEHLG's "Guidelines on Sustainable Residential Development in Urban Areas" and the accompanying "Urban Design Manual", in assessing applications for housing development. HP4: To require diversity in the form, size and type of dwelling within residential schemes.	B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Sustainable Residential Development in Urban Areas						
HP5: To have regard to the DoEHLG Guidelines 'Quality Housing for Sustainable Communities – Design Guidelines' (2007), which provide guidance on the efficient use of land, infrastructure and energy, the design and orientation of dwellings, the optimum use of renewable sources of energy, the use of scarce natural resources in construction and the maintenance and management of dwellings. HP6: To encourage appropriate densities for new housing development in different locations through the local area plan process while recognising the need to protect existing residential communities and the established character of the area. Where appropriate local area plans may incorporate the need for the provision of additional guidance in the form of design briefs for important, sensitive or large scale	B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			

<p>development sites.</p> <p>HP7: To recognise that lower densities in certain towns and villages may be appropriate on serviced land where the demand for the development of single houses in the rural area is particularly high.</p> <p>HP8: To ensure that all new urban development is of a high design quality and supports the achievement of successful urban spaces and sustainable communities.</p> <p>HP9: To require the submission of design statements with applications over 25 residential units in large growth towns/ moderate growth towns and small towns and greater than 10 units for villages and settlements.</p>						
Housing Mix						
<p>HP10: To secure the development of a mix of house types and sizes throughout the county as a whole to meet the needs of the likely future population. A statement of mix may be required for multi unit schemes to demonstrate that the needs of the area are provided for within the scheme. .</p> <p>HP11: To facilitate higher standard of apartments for life long living through the retrofitting and amalgamation of units where appropriate and in accordance with the proper planning and sustainable development of the area.</p> <p>HP 12: To require the submission of a Statement of Housing Mix for rural settlements over 10 units in order to ensure the specific housing needs of the settlement are catered for.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
Special Needs Housing						
<p>HP13: To provide adequate accommodation for Travellers in accordance with the Council's Traveller Accommodation Programme.</p> <p>HP14: To facilitate the provision of purpose built dwellings individually and within mixed schemes for those with special needs, including provision for the needs of the elderly, persons with physical disabilities and persons with learning disabilities and in conjunction with other voluntary bodies and the private sector.</p> <p>HP15: To facilitate the development of appropriately located and designed student accommodation to allow NUI Maynooth to continue to develop as a national and international centre for further education and research.</p> <p>HP16: To ensure the housing mix of new residential schemes takes account of the needs of the elderly in terms of appropriately designed and sized units.</p> <p>HP 17: To provide for and facilitate the provision of accommodation to meet the needs of the elderly and to encourage the provision of a range of housing options for elderly persons in central, convenient and easily accessible locations and to integrate such housing with mainstream housing where possible..</p> <p>HP18: To provide and facilitate the provision of accommodation to meet the needs of those with disabilities through the adaptation of appropriate accommodation.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
Housing in Existing Built Up Areas						
<p>HP19: To encourage the consolidation of existing settlements in the county through well designed, infill developments in existing residential areas, located where there are good connections to public transport and services, and which are compliant with the policies and objectives of this Plan.</p> <p>HP20: To permit backland development generally only where development is carried out in a comprehensive redevelopment of the backland to secure a co-ordinated scheme. Each application will be considered on its merits.</p> <p>HP 21: To facilitate the extension of existing dwelling houses subject to standards outlined in Chapter 19 Development Management Standards.</p> <p>HP 22: To facilitate the provision of a family flat in circumstances where the Planning Authority is satisfied</p>	<p>B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			

<p>that there is a valid case and where the proposal has regard to the standards and requirements outlined in Chapter 19 Development Management. HP 23: To facilitate sub-division of dwellings for exceptionally large houses on relatively extensive sites in urban areas that are well served by public transport and subject to adherence to all relevant Development Management standards set out in Chapter 19.</p>						
<p>Housing Objectives</p>						
<p>HO1: To secure the implementation of the Housing Strategy 2011-2017 including the implementation of its policies and objectives, in particular through the reservation of 20% of land zoned solely for residential use, or a mixture of residential or other uses, to be made available for the provision of social and affordable housing provision. HO 2: To allocate between social and affordable housing on a case by case basis depending on the identified social and affordable needs of the area within which the development is proposed to take place. HO3: To ensure that an appropriate mix of house types and sizes are provided in each residential development as part of the provision of social and affordable housing, where feasible. HO4: To provide adequate accommodation for Travellers in accordance with the Council's Traveller Accommodation Programme for County Kildare. HO5: To identify locations through the zoning of land in local area plans and village plans to cater for the needs of the elderly and promote co-location of other facilities where appropriate. HO 6: To provide additional site specific guidance, including principles and policies, on urban design issues at a local level, through the local area plans as deemed appropriate. HO 7: To carry out a survey of the existing housing stock as part of the review of Town Plans and LAPs and also to require this housing stock survey as part of the preparation of Masterplans and Action Area Plans within the County.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>Rural Housing Aim</p>						
<p>To encourage the sustainable provision of one off rural housing in accordance with the Settlement Strategy and to ensure that development of rural areas takes place in a way that is compatible with the protection of key economic, environmental, natural and cultural heritage resources of the county.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>C1 C2</p>			
<p>Rural Housing Policies</p>						
<p>In order to maintain effective control over the number of one off houses permitted in the county, the Council will facilitate certain categories of applicant in conjunction with the rural policy zones map, subject to the normal siting and design considerations.</p>						
<p>RH 1: To ensure that the planning system guides development to the appropriate locations in rural areas thereby protecting natural and man-made assets in those areas. RH 2: To protect the physical, environmental, natural and heritage resources of the county. RH 3: To implement policies in relation to rural areas to meet the needs of the indigenous rural population and those working in rural areas. RH 4: To manage the development of one off housing in conjunction with the rural housing policy zone map (Map 4.1) and accompanying Schedules of Local Need (Table 4.3). Documentary evidence of compliance with the rural housing policy must be submitted as part of the planning application, including a separate statement by the applicant on the need to reside in the area. Applicants must demonstrate, depending on the location of the site that they comply with one of the categories outlined in Table 4.3.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			

<p>RH 5: To ensure that, notwithstanding compliance with the local need criteria, applicants comply with all other normal siting and design considerations including the following:</p> <ul style="list-style-type: none"> - The location and design of a new dwelling shall take account of and integrate appropriately with its physical surroundings and the natural and cultural heritage of the area. Development shall have regard to Chapter 16, Rural Design Guidelines - The protection of features that contribute to local attractiveness including; landscape features, historic and archaeological landscapes, water bodies, ridges, skylines, topographical features, geological features and important views and prospects. - The capacity of the area to absorb further development. In particular, the following factors will be examined; the extent of existing ribbon development in the area, the degree of existing haphazard or piecemeal development in the area and the degree of existing development on the original landholding. - The ability to provide safe vehicular access to the site. - The ability of a site in an unserviced area to accommodate an on-site waste water disposal system in accordance with the EPA Code of Practice for Wastewater Treatment Systems for single houses (2009), the County Kildare Groundwater Protection Scheme, and any other relevant documents / legislation as may be introduced during the Plan period; - The ability of a site in an unserviced area to accommodate an appropriate on-site surface water management system in accordance with the policies of the Greater Dublin Strategic Drainage Study (2005), in particular those of Sustainable urban Drainage Systems (SuDS); - The need to comply with the requirements of The Planning System and Flood Risk Management Guidelines for Planning Authorities published by the Minister for the Environment, Heritage and Local Government in November 2009. <p>RH 6: To restrict new accesses for one-off dwellings onto regional roads, where the 80km/hr speed limit applies in order to avoid the premature obsolescence of regional roads, (see Chapter 6), through the creation of excessive levels of individual entrances and to secure investment in non-national roads. Where applicants comply with Policy RH 4 and cannot provide access onto a nearby county road and therefore need to access a Regional Road, permission will only be granted to maximise the potential of an existing entrance and the onus will be on applicants to demonstrate that there are no other accesses or suitable sites within the landowner's landholding</p> <p>RH 7: To prohibit residential development on a landholding, where there is a history of development through the speculative sale of sites, notwithstanding the applicant's compliance with the local need criteria.</p> <p>RH 8: To restrict occupancy of the dwelling as a place of permanent residence for a period of seven years to the applicant / occupant who complies with the relevant provisions of the local need criteria.</p> <p>RH 9: To require applicants to demonstrate that they are seeking to build their first home in a rural area in Kildare for their own full time occupation. Applicants will be required to demonstrate that they have not been previously granted permission for a one off rural dwelling in Kildare and have not sold this dwelling or site on to an unrelated third party. Exceptions to this policy may be made in exceptional cases where an applicant is acting on foot of a Court order. Documentary evidence will be required in all instances.</p> <p>RH 10: To recognise that exceptional health circumstances, supported by relevant documentation from a registered medical practitioner may require a person to live in a particular environment or close to family support. Housing in such circumstances will generally be encouraged in areas close to existing services and facilities and in Rural Settlements as opposed to the rural countryside. All planning permissions for such housing granted in rural areas shall be subject to an occupancy condition.</p>						
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<p>RH 11 To control the level of piecemeal and haphazard development of rural areas close to urban centres and settlements having regard to potential impacts on:</p> <ul style="list-style-type: none"> - The orderly and efficient development of newly developing areas on the edges of towns and villages; - The future provision of infrastructure such as roads and electricity lines; and - The potential to undermine the viability of urban public transport due to low density development. <p>RH 12: To discourage ribbon development (defined as five or more houses alongside 250 metres of road frontage). The Council will assess whether a given proposal will exacerbate such ribbon development, having regard to the following:</p> <ul style="list-style-type: none"> - The type of rural area and circumstances of the applicant; - The degree to which the proposal might be considered infill development; - The degree to which existing ribbon development would coalesce as a result of the development; and - Local circumstances, including the planning history of the area and development pressures. <p>Notwithstanding the above, special regard will be given to the circumstances of immediate family members of a landowner on single infill sites in a line of existing cottages with 5 or more houses alongside 250 metres of road frontage.</p> <p>RH 13: To encourage the provision of a recessed cluster form of development. The cluster shall be appropriately set back into the landscape from the public road. Clusters shall not exceed five houses and will be subject to normal, planning, siting, design considerations. Where there is a likelihood of more than one applicant seeking planning permission over a period of time, the Council will engage with the landowner to provide for an appropriate site layout capable of accommodating a recessed cluster development.</p> <p>RH14: To only positively consider family members for backland development. Such applications shall be explicitly supported by other family members with documentary evidence to this effect. The proposed development shall have no negative impact on third parties/neighbouring property owners and viable sites with sufficient independent percolation areas will be required in order to meet technical guidelines. Sufficient screening will be required to screen the house from adjacent homes and this has to be in place prior to occupation of the house. Single storey bungalow type houses only will be allowed in such backland locations to limit visual impact and overlooking.</p> <p>RH15: To strictly control developments which require vehicular access from public roads that were formerly towpaths or from existing towpaths along the Grand Canal and Royal Canal. This is in addition to restrictions relevant to the Canals' designation as Natural Heritage Areas. It is policy to consider housing applications for established families only along roads that were formerly towpaths along the Canals and that such developments will be strictly controlled.</p>						
Refurbishment of Existing Dwellings Policy						
<p>RH 16: To promote the re-use and sensitive restoration of existing dwellings, particularly those of traditional vernacular architecture. Regard should be had to Kildare County Council's "Reusing Farm Buildings – A Kildare Perspective", (2006).</p> <p>RH 17: To encourage the sensitive restoration of a derelict traditional vernacular dwelling as an alternative to the construction of a one-off dwelling elsewhere. The vernacular dwelling must be capable of being suitably restored to habitable accommodation in keeping with its original character. Documentary evidence to this effect, including the submission of a structural survey and photographs must accompany an application. The applicants or proposed occupants will not be required to comply with local need criteria, identified in the Plan (Table 4.3). Normal planning, siting and design considerations will be taken into</p>	<p>B1 B2 B3 HH1 S1 W1 W2 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2</p>			

consideration.						
Replacement of Existing Dwellings Policy						
RH: 18 To accept the replacement of a dwelling other than a vernacular dwelling in circumstances where such a dwelling house exists and is habitable, subject to the following: (a) The structure must last have been used as a dwelling and the internal and external walls and roof must be intact. (b) A report from a suitably qualified competent person shall be submitted to verify that the dwelling is habitable but that replacement of the dwelling is the most sustainable option. (c) Documentary evidence of the most recent date of occupation should be submitted with the application (d) The scale, character and design of the proposed replacement house shall be appropriate to the character of the area and existing development in the vicinity. (e) Normally a condition to demolish the existing dwelling shall be included in any grant of permission. (f) To require applicants to comply with the local need criteria identified in the Plan. Normal planning considerations will be taken into account in the assessment of planning applications for replacement dwellings. (g) Where an applicant/occupant wishes to replace an existing habitable dwelling on the same footprint and of the same floor size as the original dwelling, there will be no requirement to comply with the local need criteria identified in the Plan.	B1 B2 B3 HH1 S1 W1 W2 M1 M2 CH1 CH2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH2			
Replacement of Derelict Dwellings Policy						
RH 19: To facilitate the sensitive replacement of a structurally unsound derelict dwelling as an alternative to the construction of a one off dwelling elsewhere in the countryside. The scale of the replacement dwelling shall have regard to the scale of the existing dwelling to be replaced and site size. Documentary evidence in the form of a structural survey and photographs shall be submitted to accompany the application. The proposed applicant / occupant shall comply with local need criteria identified in the Plan and shall use the dwelling for his/her own occupation and not for resale.	B1 B2 B3 HH1 S1 W1 W2 M1 M2 CH1 CH2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH2			
Housing and Bloodstock Applications Policy						
RH 20: Planning applications for rural dwellings (or other development), which include a commercial bloodstock enterprise element on site, will generally, be favourably considered, where the landholding comprises a minimum of 5ha. All other local need, siting and design considerations will be taken into account in assessing the application.	B3		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Areas Bordering Neighbouring Counties						
Where an applicant wishes to seek permission for a one-off house on family land in County Kildare but is indigenous to a neighbouring county, the Council will consider facilitating such applicants.						
RH 21: To assess applications for one-off housing, in areas bordering neighbouring counties, where the proposed site is located on family land within County Kildare, at a distance of up to 5km from the county boundary and to facilitate applicants who can demonstrate that no suitable family owned site is available in the adjoining county and that all other aspects of rural housing policy including local need ⁸¹ , siting and	B1 B2 B3 HH1 S1 W1 W2 M1 M2		B1 B2 HH1 S1 W1 W2 W3 M1			

⁸¹ Applicants will be required to demonstrate that their local need albeit relevant to the adjoining county, is similar to that required under Table 4.3 (Schedule of Local Need), with appropriate supporting documentation demonstrating same.

design are complied with. The applicant shall also fully demonstrate that they are building their first rural dwelling and that it will be for their permanent place of residence.	CH1 CH2 L1		M2 C1 C2 CH2			
Rural Nodes Policy						
Rural nodes (see Table 4.4) comprise largely unserved areas with limited social and community infrastructure. It is anticipated that such locations can cater for 10-15% population growth over the period of this Plan. Rural nodes are designated for limited development at a sustainable scale for immediate local need through the development of clusters.						
RH 22: To facilitate the following types of applications for housing in the rural nodes: • Individual one-off houses subject to applicants meeting the local need criteria identified in the Plan (refer to Map 4.1 and Table 4.3). • Small scale clusters of dwellings / serviced sites of not more than 5 housing units for applicants / occupants complying with local need criteria (refer to Map 4.1 and Table 4.3), and subject to the provision of appropriate physical infrastructure.. RH 23: To encourage design and layouts to have regard to the design principles outlined in Chapter 16, Rural Design Guidelines. RH 24: To ensure that all new development in the rural nodes, particularly cluster development, contribute to and integrates successfully with the existing settlement and to promote the development of central brownfield sites, if existing, as appropriate. RH 25: To require, in all cases, that special care is taken to protect the architectural and environmental quality identifying the character of the existing settlement form	B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH2			
Specialised Care Facilities Policy						
RH 26: To manage the provision of specialised care facilities, such as care homes, nursing homes etc in rural areas by encouraging applicants to locate in villages and settlements where services/facilities are more readily available and accessible.	C1 C2 B3		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Holiday Homes Policy						
RH 27: To facilitate well located and appropriately scaled holiday home developments in locations that can best accommodate them, such as villages and settlements, where services / facilities are more readily available and accessible RH 28: To restrict tourist accommodation on greenfield sites in the rural countryside. However, some tourist development, by its nature, may require a rural location and in this regard consideration may be given to: - The re-use of redundant farm buildings of vernacular importance for owner run agri-tourism enterprises. It will normally be a condition of permission that housing associated with agri-tourism enterprises should be retained within the farm complex ownership and shall not be sold. - Housing for tourists at golf courses, established equestrian centres, or as part of a major integrated tourism development proposal will only be acceptable in the rural countryside in exceptional circumstances where the proposal is of such strategic significance that it is of benefit on a county, regional or national scale. In such circumstances, all housing shall be retained within the ownership of the tourism enterprise and shall not be sold. RH 29: To require applications for holiday home development in demesne areas to be accompanied by an overall Masterplan for the entire demesne landscape. RH 30: To require planning permission for holiday home and tourist development on unzoned lands to be	B1 B2 B3 HH1 S1 W1 W2 M1 M2 CH1 CH2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH2			

subject to an agreement pursuant to Section 47 of the Planning and Development Act 2000, prohibiting the sale of individual units.						
Rural Housing Objectives						
RO 1: To monitor and map the trends and take up of one off housing in rural areas and rural nodes during the period of the Development Plan as a means of monitoring the effectiveness of rural housing policy. RO 2: To implement the provisions of the Rural Housing Policy through the management of one-off housing in order to protect the physical, environmental, natural and heritage resources of the county, in conjunction with providing for rural housing for those persons who comply with the "Local Need" provision of the plan.	B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			

8.7 Chapter 5: Economic Development Strategy

	Likely to <u>Improve</u> status of SEOs	Probable <u>Conflict</u> with status of SEOs- unlikely to be mitigated	Potential <u>Conflict</u> with status of SEOs- likely to be mitigated	<u>Uncertain</u> interaction with status of SEOs	<u>Neutral</u> Interaction with status of SEOs	<u>No Likely</u> interaction with status of SEOs
Aim						
To provide for the future well being of the residents of the county and the region by facilitating economic development; to promote the growth of employment opportunities in all sectors in accordance with the principles of sustainable development; to achieve a reduction in the unsustainable levels of commuting from the county; providing a greater focus on community building and improving quality of life.	B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
General Economic Development Policies						
ECD 1: To support and facilitate the economic development of the county in accordance with the economic development strategy across a range of sectors while acknowledging in particular the growing importance of the knowledge economy in delivering sustainable employment opportunities. ECD 2: To facilitate the creation of suitably located centres of excellence for knowledge, innovation and creativity based enterprises and ensure the knowledge-based economy has opportunity to grow in the county. ECD 3: To work in conjunction with the county's third level institution NUI Maynooth in the creation and fostering of enterprise and research and development. ECD 4: To co-operate with local and national development agencies to maximise job creation opportunities and to engage with existing and future large scale employers in order to maximise job opportunities in the county. ECD 5: To promote initiatives with relevant agencies to expand training and education that meets the wide range of business skills located in the county. ECD 6: To identify and promote a wide range of locations within the county for different types of enterprise	B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			

<p>from international business and technology parks to small and medium enterprises (SME) and micro enterprise centres.</p> <p>ECD 7: To promote the location of high profile developments at suitable locations, particularly headquarter buildings, the offices of representative bodies and research and development facilities in the county.</p> <p>ECD 8: To facilitate and encourage the development of the alternative energy sector and work with the relevant agencies to support the development of alternative forms of energy where such developments are in accordance with the proper planning and sustainable development of the area.</p> <p>ECD 9: To facilitate the development of agriculture, bloodstock, horticultural and rural related enterprises in the county.</p> <p>ECD 10: To facilitate home-working and innovative forms of working which reduce the need to travel but are subordinate to the main residential use of the dwelling and do not result in a dis-amenity in an area.</p> <p>ECD 11: To encourage the provision of livework units as part of mixed-used developments in appropriate locations (particularly at ground floor level) to provide accommodation for the creative sectors and small businesses and to facilitate home-working, of suitable design and protect the amenities of adjacent residents.</p> <p>ECD 12: To encourage the further development of Clongowes College and farm as a centre of excellence for a range of education and research related uses.</p> <p>ECD 13: To ensure that any development at Clongowes College and farm, has regard to existing educational uses and that such development will respect the existing architectural character and planned layout of Clongowes</p> <p>ECD 14 To continue to work with all the key state agencies and other stakeholders to seek opportunities for employment creation in the county.</p> <p>ECD 15 To promote the sustainable development of the tourism sector in appropriate locations throughout the county, acknowledging that Ireland's largest tourist market i.e. Dublin is highly accessible through the existing commuter transport system.</p>						
Major Accidents Directive Policy						
<p>ECD 16: To comply with the SEVESO II Directive and to reduce the risk and limit the consequences of major industrial accidents by, where appropriate, taking into account the advice of the Health and Safety Authority and the Fire Authority where proposals for new developments are considered.</p> <p>ECD17: To have regard to:</p> <ul style="list-style-type: none"> • The Major Accidents Directive (SEVESO II, 96/82/EC); • Potential adverse impacts on public health and safety; • (HSA) generic land-use planning advice; and • The need to maintain appropriate safe distances between residential areas, areas of public use and areas of natural sensitivity. <p>The specialist advice of the Fire Authority in assessing planning applications for new development or the expansion of existing development involving hazardous substances.</p>	<p>B1 B2 B3 S1 HH1 W1 W2 M1 M2</p>					
General Tourism Policy						
<p>ECD 18: To promote, protect, improve, encourage and facilitate the development of tourism as an important contributor to job creation in the county in accordance with the proper planning and sustainable development of the area.</p> <p>ECD 19: To support the implementation of the Regional Tourism Plan for the East Coast and Midlands, 2008-2010 and to work with key stake holders and agencies with the aim of increasing overseas and domestic visitor numbers.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2</p>			

<p>ECD 20: To direct tourism based development where appropriate, into existing settlements where there is adequate infrastructure to service the development and where it can contribute to the maintenance of essential services.</p> <p>ECD 21: To seek to maintain a clean environment, protect the tourism amenities of the County from insensitive or inappropriate development particularly any development that threatens the tourism resources and tourism employment of the county.</p>	<p>L1</p>		<p>L1</p>			
<p>Tourist Infrastructure Policy</p>						
<p>ECD 22: To promote County Kildare's Cultural, Literary, Historical, genealogical, archaeological and architectural heritage as tourism generating opportunities.</p> <p>ECD 23: To encourage the clustering of and the promotion of additional tourism facilities and services at appropriate locations throughout the county having regard to the proper planning and sustainable development of the area, in order to increase linkages within and reduce leakage from the local economy..</p> <p>ECD 24: To support the development of new tourist facilities or upgrading / extension of existing tourist facilities at tourist sites in accordance with proper planning and sustainable development principles.</p> <p>ECD 25: To ensure that the development of new tourist facilities will be designed to the highest quality with particular emphasis given to quality materials in sensitive locations. energy efficiency, waste management and recycling.</p> <p>ECD 26: To facilitate the erection of standardised signage for tourism facilities and tourist attractions as part of national and regional initiatives.</p> <p>ECD 27: To improve the surrounding road network and to provide adequate car parking and bus parking facilities at all tourist attractions, including scenic areas, subject to the availability of resources and the protection of the environment.</p> <p>ECD 28: To consider suitable sites for caravanning, camping and hostelling, in consultation with Bord Failte, East Coast and Midlands.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>Inland Waterways Tourism Policy</p>						
<p>ECD 29: To maximise opportunities for the use of canals and other waterways including the River Liffey and River Barrow as tourism and recreational amenities. In this regard the Council will co-operate with Waterways Ireland, National Parks and Wildlife Service of the DoEHLG and community groups to develop the infrastructure, quality and amenity of these waterways.</p> <p>ECD 30: To facilitate infrastructure for water based activities such as boating, canoeing, angling, cruising, bathing and other sustainable water based interests.</p> <p>ECD 31: To develop, in conjunction with the relevant authorities, berthing and other ancillary infrastructure at key locations along the canal systems, particularly in areas where tourism is underdeveloped at present.</p> <p>ECD 32: To facilitate Waterways Ireland in the restoration of the Royal Canal.</p> <p>ECD 33: To promote and develop the towpaths along the Grand Canal, the Royal Canal, the Barrow Line and the Corbally Line as a cycleway, in co-operation with Waterways Ireland and neighbouring Local Authorities</p> <p>ECD 34: To encourage walking and recreational facilities, where feasible and where development opportunities arise along riverbanks and lakes. In this regard land adjacent to river banks and lakes will be reserved, where possible, for linear parks for public access and where linear parks are designed and developed provision shall be made for walking and cycling routes.</p> <p>ECD 35: To preserve the undeveloped sections of the Liffey Valley as a resource for tourism and to develop paths and walkways where appropriate subject to environmental and other constraints and considerations.</p>	<p>B1 B2 B3 W1 W2 C1 C2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			

ECD 36: To reserve where feasible, land adjacent to river banks and lakes for public access and to facilitate the creation of linear parks to accommodate walking/cycling routes.						
Sport and Recreation Tourism Policy						
ECD 37: To support the sustainable tourist related development of the Bloodstock and Equine Industries. ECD 38: To recognise the importance of angling and the Golf Industry to tourism in the County. ECD 39: To support the development of appropriate Integrated Tourism / Leisure facilities in Palmerstown Demesne. ECD 40: To recognise the importance of the Kildare Hotel and County Club as a Tourism Facility of National and International significance. The Council will support and encourage further appropriate development of the tourism and recreational facilities in the Kildare Hotel and Country Club. ECD 41: To recognise the sensitive and unique quality of Carton House as a tourism facility of national and international significance and to ensure that its integrity be protected. The Council will support and encourage further appropriate development of the tourism and recreational facilities at Carton House, , having regard to its status as a house and demesne of international heritage importance. ECD 42: To recognise the sensitive and unique quality and importance of Castletown House, its demesne and history as a unique element of heritage, tourism and educational potential, to ensure that the integrity of the house and its demesne as well as its collection of buildings, artefacts, landscapes, views and prospects is fully protected, and to ensure that any future development within or without the demesne and its environs which impacts on it is appropriate to its status as a house and demesne of national and international significance.	B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Events and Festivals Tourism Policy						
ECD 43: To promote festivals and sporting events to increase the cultural and lifestyle profile of the county, and where appropriate to promote the development of new venues to host these events.	B3		B1 B2 W1 W2 W3 M1 M2			HH1 S1 C1 C2 CH1 CH2 L1
Agriculture Based Tourism Policy						
ECD 44: To support agri-tourism initiatives including visitor accommodation and supplementary activities such as organic / farmers' markets, health farms, heritage and nature trails, pony trekking, boating, walking, eco-tourism, open farms and pet farms, ensuring that all built elements are appropriately designed and satisfactorily assimilated into the landscape. ECD 45: To facilitate and encourage the re-use of redundant farm buildings of vernacular importance for appropriate owner run agri-tourism enterprises subject to the proper planning and sustainable development of the area.	B3 L1 CH2 B1 B2 HH1 S1 W1 W2 M1 M2 C1 C2 CH1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Economic Development and Employment Objectives						
EO 1: To ensure that sufficient and suitable land is zoned for employment generating uses through the development plan and local area plans as appropriate. Such land will, normally, be protected from inappropriate development that would prejudice its long term development for employment uses. EO 2: (i) To promote and facilitate the development of regional large scale employment generating developments as a priority in the Primary Economic Growth Centres of Maynooth and Leixlip/Collinstown supported by Celbridge and Kilcock in the Metropolitan area, Naas/Newbridge in the Hinterland area supported by Kilcullen and the Secondary Growth Towns of Athy and Kildare. (ii) To recognise the supporting role of economic clusters (Celbridge and Kilcock to Maynooth and Leixlip)	B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2 CH1 CH2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			

<p>and (Newbridge to Naas) in the delivery of critical mass to delivery regional scale employment opportunities.</p> <p>(iii) To promote the development of the Moderate Sustainable Growth towns of Kildare, Monasterevin and Kilcullen as district employment centres.</p> <p>(iv) To promote small towns and villages as local employment centres where investment can be focused on creating additional employment opportunities that will sustain a local rural hinterland.</p> <p>(v) To promote rural economic development by adopting a policy framework that recognises the need to promote the longterm sustainable social and environmental development of rural areas, and encourages economic diversification and facilitates the growth of rural enterprises.</p> <p>EO 3: To encourage mixed use settlement forms and sustainable centres, in which employment and residency are located in close proximity to each other and strategic multi-modal transport corridors and to arrest long distance commuter trends and congestion.</p> <p>EO 4: To ensure the provision of water, wastewater treatment and waste management facilities to accommodate future economic growth of the county and to reserve capacity in water services infrastructure for employment generating uses.</p> <p>EO 5: To support and promote proposals for SME business development in development centres where existing infrastructural facilities are available or where they can be provided with services and good communications.</p> <p>EO 6: To support start up businesses and small scale industrial enterprises, particularly those that have a creative and innovative dimension.</p> <p>EO 7:: To encourage and facilitate at appropriate locations, small indigenous industries in recognition of their increasing importance in providing local employment and helping to stimulate economic activity within small communities.</p> <p>EO 8: To acquire suitable land, including, where appropriate, disused sites in state ownership, subject to the availability of funding, for creative and innovative entrepreneurial initiatives and the provision of clustered incubator units.</p> <p>EO 9: To support further development of NUI Maynooth as a leading third level research and educational facility and work with NUIM and other third level institutes (e.g. Tallaght and Carlow IT) to develop and improve linkages between the College and high tech / FDI firms in the surrounding sub-region and county in general.</p> <p>EO 10: To ensure high quality living environments in Kildare to retain its indigenous skilled population and to attract high skilled labour.</p> <p>EO 11: To facilitate the development of tourism infrastructure such as accommodation, restaurants, car and coach parking and toilet facilities in the designated hubs throughout the county.</p> <p>EO 12: To work with adjoining local authorities and Tourism bodies to develop the tourism potential of the region.</p> <p>EO 13: It is an objective of the Council to continue to facilitate the upgrade of broadband services throughout the County.</p>						
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8.8 Chapter 6: Movement and Transport

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
Aim						
To promote ease of movement within and access to County Kildare, by integrating sustainable land use planning with a high quality, integrated transport system; to support improvements to road, rail and public transport network, together with cycleway and pedestrian facilities and to provide for the sustainable development of aviation travel within the county in a manner which is consistent with the proper planning and sustainable development of the county.	B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1					
General Transportation Policy						
<p>TP 1: To co-operate with national and regional bodies/agencies to promote and facilitate the implementation of a sustainable transportation strategy for the county and the wider Greater Dublin Area (GDA) as set out in Transport 21 (2006-2015), Department of Transport's "Smarter Travel – A Sustainable Transport Future 2009-2020", the Dublin Transportation Office's strategic document "Platform for Change 2000-2016" and the finalised transportation strategy to be published by the NTA.</p> <p>TP 2: To support sustainable modes of transport and to integrate land use planning and zoning with the provision and development of high quality transportation systems.</p> <p>TP 3: To support the use of available Intelligent Transport Systems (ITS) technology for traffic, public transport and parking management.</p> <p>TP 4: To preserve free from development proposed public transport and road realignment/ improvement lines and associated corridors where such development would prejudice the implementation of the National Roads Authority, County Council plans or public transport providers plans (e.g. Irish Rail).</p> <p>TP 5: To require a Transportation and Mobility Assessment (TMA) for proposed major developments to assess the impacts of the development on the surrounding network (National Roads, Regional Roads etc.) and to provide mitigation measures for any adverse impacts.</p> <p>TP 6: To utilise the provisions of Sections 48(2)(c) and 49 of the Planning and Development Act 2000 as amended to generate financial contributions towards the capital costs of providing strategic and local transport infrastructure and facilities, and public infrastructural services and projects.</p> <p>TP 7: To provide, extend, maintain and improve existing street lighting on the public road/ footpath network throughout the county in accordance with best international practice..</p> <p>TP 8: To seek the provision and extension of comprehensive footpath links to town and village centres and schools where deficits exist and promote permeability throughout towns and villages in the county.</p>	C1 C2 B3		B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1			

<p>National Roads Policy</p> <p>NR 1: To restrict accesses onto national roads along sections where the 100km per hour speed limit applies, in line with National Roads Authority policy.</p> <p>NR 2: To upgrade and improve the national road network in accordance with national transport policy, in co-operation with the National Roads Authority, the Department of Transport and the NTA .</p> <p>NR 3: To identify areas at interchanges which may be required for future upgrading and improvement in the medium to long term and when identified to restrict development within these areas and preserve them free of development for those future improvements and upgrades.</p> <p>NR 4: To ensure that all new developments in proximity to National Routes provide suitable noise protection measures to protect from traffic noise.</p> <p>NR 5: To ensure that all existing and new developments in proximity to national routes are located in such a way as to prevent light from dazzling or distracting road users travelling on the national routes</p> <p>NR 6: To support and facilitate the adequate provision of Motorway Service Stations at appropriate locations in the county and to support alternative services in the absence of National Roads Authority services.</p> <p>NR 7: To identify the future needs of the national route network and co-operate in fulfilling these needs with the National Roads Authority.</p> <p>NR 8: To improve connectivity between the local road network and the national/regional road network.</p> <p>NR 9: To co-operate with other agencies in the provision of additional links between the national road network and public transport especially rail and bus transport including strategic park and ride facilities.</p> <p>NR10: To ensure that the county's national roads system is planned for and managed in an integrated manner enabling sustainable economic development of the county and wider area while encouraging a shift towards more sustainable travel and transport in accordance with the Draft Spatial Planning & National Road Guidelines (DoEHLG, 2010) and as may be amended</p>	<p>C1 C2 B3 HH1</p>		<p>B1 B2 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>			
<p>Regional Roads Policy</p> <p>RR 1: To restrict new accesses onto regional roads where the 80km per hour speed limit currently applies, except where safe access can be provided in the exceptional circumstances outlined below:</p> <ul style="list-style-type: none"> • Developments of strategic, local, regional or national importance, particularly where there is a significant gain to the county through employment creation or other economic benefits. •Where applicants comply with Policy RH4 (Chapter 4) and cannot provide access onto a nearby county road and therefore need to access a Regional Road. In this instance, applicants will only be permitted to maximise the potential of existing entrances. The onus will be on applicants to demonstrate that there are no other accesses or suitable sites within the landowner's landholding. • Where it is proposed to demolish an existing dwelling and replace with a new dwelling, where there is an existing entrance onto the Regional Road. 	<p>C1 C2</p>					<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>
<p>Distributor Roads Policy</p> <p>DR 1: To limit direct access onto distributor roads to a number of strategically located junctions.</p>	<p>C1 C2</p>					<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>

Local Roads Policy						
LR 1: To improve all county roads to an appropriate standard subject to the availability of resources. LR 2: To require housing scheme roads to be provided in accordance with: • Sustainable Residential Development in Urban Areas (2009) and accompanying Best Practice Design Manual (2009) • Architecture 2009-2015 Towards a Sustainable Future: Delivering Quality within the Built Environment (2009), • Manual for Streets published by the Department of Transport, and Communities and Local Government (England and Wales) 2007). and any new Guidance/Standards from DOEHLG.	C1 C2 B3 HH1		B1 B2 S1 W1 W2 W3 M1 M2 CH1 CH2 L1			
Parking Policy The management of parking in the county is important to its efficient economic development.						
PK 1: To manage the provision of on-street parking by encouraging short term business / shopping activity and the needs of residents whilst discouraging long stay on street commuter parking and parking by heavy goods vehicles. PK 2: To seek to ensure that all new private car parking facilities are provided to an appropriate standard and where appropriate, proximate to the development which it serves. PK 3: To seek the provision of designated HGV parking areas within appropriate new industrial developments in the vicinity of towns PK 4: To review all parking standards, in consultation with relevant stakeholders and the general public, during the lifetime of this plan.	C1 C2 HH1		B1 B2 W1 W2 W3 S1 HH1 CH1 L1			M1 M2
Movement and Transport Objectives The Council envisages that the objectives, subject to the availability of finance, will be implemented during the six year plan period. A number of longer term objectives are also included. Where the opportunity arises, objectives shown as long term may be brought forward at an earlier date.						
General Transport Objectives						
GT 1: To prepare a Road Safety plan in line with the National Road Safety Strategy and in consultation with the Road Safety Authority and relevant stakeholders. GT 2: To continue the preparation of Traffic Management Plans for urban areas in the county in conjunction with the NTA, to implement and support the recommendations of these plans and the on-going monitoring and updating of the proposals. GT 3: To improve road, street, town and village signage by undertaking a survey to assess the proliferation, gaps and quality of signage and to develop a policy for the future provision of signage within the county. GT 4: To prepare parking strategies and investigate the appropriate locations for vehicular, bicycle, park and ride facilities within the county. The Council will seek to provide these facilities either on its own or in co-operation with others. The locations of such facilities can be identified where appropriate through the Local Area Plan process or any planning process / mechanisms. GT 5: To provide distributor/relief roads linking the arterial routes in all major towns. GT 6: To seek , where appropriate Ministerial approval to have new distributor roads dedicated as regional roads where linked to the regional road network GT 7: To prepare an integrated transportation strategy for Kildare, based on sustainability and better use of resources, in consultation with the NTA (MSTACK – Movement, Sustainable Transport and Accessibility in County Kildare). GT 8: To ensure all new developments are accessible to sustainable modes of transportation.	C1 C2 B3 HH1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1			

<p>GT 9: To identify car parks and other suitable locations for the provision of appropriate battery charging infrastructure for electrically powered cars/vehicles as a means by which the Council can assist in achieving a reduction in carbon emissions within the county.</p> <p>GT 10: To require all proposed developments to provide appropriate turning areas for emergency and service vehicles.</p> <p>GT 11: To support the enactment of parking by-laws for the sustainable management of parking facilities within the county.</p> <p>GT12: To support a freight strategy in County Kildare following preparation of the NTA Strategy for the Greater Dublin Area.</p> <p>GT13: To facilitate the provision of bus parking in towns such parking facilities would improve access to tourism and heritage facilities. The quantity and appropriate location of bus parking bays shall be determined on a case by case basis.</p>						
Sustainable Travel Objectives						
<p>ST1: To encourage public transport use throughout the county, including rural areas.</p> <p>ST 2: To encourage and facilitate safe walking and cycling routes as a valuable form of transport, as a healthy recreational activity and an alternative to the car.</p> <p>ST 3: To co-operate with the NTA, the Quality Bus Network Office and other appropriate transportation bodies in the implementation of Quality Bus Networks in County Kildare.</p> <p>ST 4: To co-operate with the Department of Transport, the NTA, Iarnród Éireann and other relevant authorities to secure the improvement and further development of the public transport system, including railway stations in the county.</p> <p>ST 5: To provide for safer routes to schools within the county and to encourage walking and cycling as suitable modes of transport as part of the Green School Initiative Programme and other local traffic management improvements.</p> <p>ST 6: To examine existing public transport links within the County with a view to promoting and facilitating improvements where feasible.</p> <p>ST 7: To assist and encourage the development and expansion of rural transport initiatives, in conjunction with other statutory and development agencies.</p> <p>ST 8: To support and encourage the continued development of walking routes throughout the county and to cooperate with relevant organisations and bodies, including walking groups and local communities, in the achievement of this objective.</p> <p>ST 9: To require that all new developments make adequate provision for the safe movement of pedestrians.</p> <p>ST 10: To provide secure cycle parking facilities in towns and at all public service destinations.</p> <p>ST 11: To support the electrification and upgrading including twin tracking of the Maynooth and four tracking of the Kildare rail lines.</p> <p>ST 12: To support the delivery of a new railway station at Collinstown, as envisaged in the Collinstown Local Area Plan 2010.</p> <p>ST 13: To promote and secure the development of a network of safe cycle routes and footpaths reserved exclusively for pedestrians and cyclists on new and existing roads.</p> <p>ST 14: To investigate the role and use of lower speed limits in towns and villages to improve safety for pedestrians and cyclists.</p> <p>ST 15: To consider where appropriate, the use of inset bus stops in certain locations throughout the County.</p>	<p>C1 C2 B3 HH1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>			

<p>ST 16: To continue to maintain and expand the footpath and pedestrian route network in the County to provide for accessibility for pedestrians in accordance with the aims of the European Charter of Pedestrians' Rights (1988)</p> <p>ST 17: To facilitate the construction of cycleways throughout the County and to integrate these cycleways with the DTO cycling policy for the GDA (September 2006) as may be amended.</p>						
<p>Roads Programme Objective The roads programme for the County will be implemented by the Council. Road schemes will be subject to Environmental Impact Assessment where necessary. As part of the overall National Roads Development Programme, it is an objective to carry out a number of specific projects during the plan period. The Council may, at its discretion, introduce roads objectives other than those listed in Table 6.1.</p>						
<p>RP 1: To proceed with development of the third lane in each direction along the M7 / N7 including improvement of interchanges as the need arises.</p> <p>RP 2: To facilitate provision of an additional interchange along the M7 Naas by-pass serving access to Millennium Park.</p> <p>RP 3: To identify an area for the future upgrade and improvement of the M7 Newhall Interchange (Junction 10) and preserve that area free from development.</p> <p>RP 4: To examine the feasibility of the provision of a connection between the M7 and the east side of Newbridge.</p> <p>RP 5: To improve safety and capacity at the M7 Monasterevin Interchange (Junction 14) by providing an upgrade of the interchange.</p> <p>RP 6: To provide for "all vehicle movements" at the M7 (Junction 11)/ M9 Interchange (Junction 1).</p> <p>RP 7: To preserve the N7 Johnstown Interchange (Junction 8) area free from development for the provision of future access to Naas.</p> <p>RP 8: To improve safety and capacity at the M4 Maynooth Interchange (Junction 7) and to investigate the provision of a future connection to the M4, west of Maynooth.</p> <p>RP 9: To build the Southern Distributor Road around Athy. This road will be linked to the M9 link road.</p> <p>RP 10: To identify a route for the Athy Northern Distributor Road and preserve the route free from development.</p> <p>RP 11: To upgrade the section of the N81 National Secondary road (Tallaght/Baltinglass) that is contained in County Kildare.</p> <p>RP 12: To co-operate with adjoining authorities and other public authorities regarding new and / or improved road infrastructure.</p> <p>RP 13: To co-operate with adjoining authorities and other public authorities regarding new and/or improved road infrastructure at towns bordering the county boundary including Blessington, Kilcock, Maynooth and Leixlip.</p> <p>RP 14: To identify and provide a by-pass of Johnstownbridge and Kilshanroe.</p> <p>RP 15: To cooperate with the NRA and other local authorities in providing the Leinster Orbital Route (linking Drogheda, Navan, Trim and Naas) proposed in the 'Regional Planning Guidelines for the Greater Dublin Area and to protect zones along the key radial routes from Dublin where junctions with the proposed Leinster Orbital Route may be constructed in accordance with the NRA Corridor Protection Study and once a route corridor has been identified to preserve this corridor free from development.</p> <p>RP 16: To improve and re-align where necessary the Regional roads set out in Table 6.1</p>	<p>C1 C2 B3</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>			

Longer Term Objectives						
<p>LT 1 To investigate and consider suitable locations for the provision of an inland port in the county.</p> <p>LT 2: To carry out a survey of the existing rail transportation infrastructure in the county including associated railway bridges, in preparation for the electrification of suburban rail under the DART Underground Project, scheduled to be completed in 2015.</p> <p>LT 3: To develop a public transport hub near Naas which will connect road, rail transport and public bus transport.</p> <p>LT 4: To investigate, in co-operation with Iarnród Éireann, the provision of new railway stations in the county and the upgrading / relocation of existing stations, to rectify existing constraints in the network.</p>	C1 C2 B3		<p>B1 B2</p> <p>HH1 S1</p> <p>W1 W2</p> <p>W3 M1</p> <p>M2 CH1</p> <p>CH2 L1</p>			
Aviation Policies						
<p>Kilrush Aerodrome</p> <p>KA 1: That any further development within a 2.7km radius of Kilrush Aerodrome will be governed by limitations as set down by the ICAO in Annex 14, this includes both Inner Horizontal Surface (2Km) and Conical Surface (plus 0.7Km). The planning authority will consult with the Irish Aviation Authority on development within this area.</p> <p>Weston Aerodrome</p> <p>WA 1: To prevent encroachment of development around Weston Aerodrome which may interfere with its safe operation.</p> <p>WA 2: To have regard to the advice of the statutory bodies responsible for the control and safety of operations at Weston Aerodrome, in the context of the proper planning and sustainable development of the area and the protection of amenities.</p> <p>WA 3: To refer any major application for development within 3.6Km of Weston Aerodrome to the IAA.</p> <p>Casement Aerodrome</p> <p>CA 1 To refer significant /major new development within approximately 6km of Casement Aerodrome (or at Killeel) to the Department of Defence.</p>	HH1 B3		<p>B1 B2 S1</p> <p>W1 W2</p> <p>W3 C1 C2</p> <p>M1 M2</p> <p>CH1 CH2</p> <p>L1</p>			
Aviation Policy - General Policies						
<p>GA 1 To consult with the Irish Aviation Authority on all applications for development that exceed 45 metres in height, or where it is considered appropriate.</p> <p>GA 2 To ensure that development in the vicinity of aerodromes does not involve processes that produce atmospheric obscuration or attract bird concentrations, which might interfere with aircraft operations. Proposed landfill sites within a radius of 8km of the centreline of any runway are not generally considered acceptable. Any proposed landfill sites within a radius of 13km from any runway centreline should be notified to the Irish Aviation Authority. Criteria for the Protection of Radio Facilities and Radio Nav aids from Interference.</p> <p>GA 3</p> <p>(i) That industrial processes which involve radio frequency energy, for example induction furnaces, radio frequency heating, radio frequency welding, transmission masts, etc should not cause interference to radio nav aids.</p> <p>(ii) That ESB or Eircom overhead lines near or serving the Aerodrome or Navaid sites should be buried underground for a minimum distance of 100 metres, from the edge of the runway strip or from the radio installations NDB/DME facility, VHF Communications Antennae etc. at the aerodrome, whichever is the greater. Overhead lines beyond 100 metres should approach from a direction broadly perpendicular to the runway centre line and be referred to the Irish Aviation Authority.</p>	HH1 B3		<p>B1 B2 S1</p> <p>W1 W2</p> <p>W3 C1 C2</p> <p>M1 M2</p> <p>CH1 CH2</p> <p>L1</p>			

<p>GA 4 To have regard to the International Standards and Recommended Practices as contained in Annex 14 to the Convention on International Civil Aviation published by the International Civil Aviation Organisation.</p> <p>GA 5 To seek information (including aircraft movement logs) detailing (a) the number of aircraft movements and (b) the type and capacity of aircraft using an aerodrome, in order to allow a full assessment of any significant impact that may arise in relation to a new aerodrome or to an increase or change of use of an existing aerodrome in the interests of public safety.</p> <p>GA 6: To restrict the development of buildings, overhead lines or structures in the Inner Approach Areas of aerodromes</p> <p>GA 7: To consider, in conjunction with relevant agencies and bodies, the introduction of Public Safety Zones in the vicinity of aerodromes within or affecting Kildare by way of variation to this development plan. Note: Public Safety Zones in the vicinity of aerodromes are areas in which development, or certain types of development, may be restricted to provide added safety for persons on the ground. The adoption of Public Safety Zones (in which development is restricted) can have the collateral/added benefit of restricting development in those areas where higher levels of aircraft noise occur. Public Safety Zones (PSZs) are areas to take into account in the preparation of emergency and crash plans in the vicinity of aerodromes. It is important to note that PSZs are not in any way a substitute for the 'Annex 14' requirements.</p>					
<p>Aviation Objectives</p>					
<p>AO 1: To investigate the feasibility of providing an airport in the County, having regard to evolving Government policy relating to the development of an additional airport in the Region. A number of issues shall be considered, including:</p> <ul style="list-style-type: none"> • adequacy of public transport services, • adequacy road infrastructure, • the Aerodrome Reference Code to which such a facility will operate, • extent of flight movements, • noise pollution, • protection of residential amenity • protection of natural and built heritage • protection of the bloodstock industry 		<p>C1 HH1 L1 B3⁸²</p>	<p>B1 B2 CH1 CH2 W1 W2 W3 C2 M1 M2 S1</p>		

⁸² The development of an airport in the County would have to be accompanied by significant amounts of infrastructure - including supporting public and private transport infrastructure and services and water services. Significant amounts of greenfield lands, away from existing settlements would be required with residual impacts likely on the landscape. Airport runway, taxi areas and aprons typically produce significant surface water contamination due to de-icing procedures thus the location of any airport will require careful prior observance of the significance and vulnerability of local receiving waters. This may have significant implications for the assimilative capacity of water bodies which are used by local settlements. Potential conflicts would arise between the project and ecology. The operation of an airport would generate significant amounts of greenhouse gas emissions and energy usage and would result in significant noise emissions which would be likely to interact with human health. Such a project would be required to undergo Environmental Impact Assessment through which both the need for the project and alternatives for its location would have to be thoroughly examined. Consideration would have to be given to flight paths utilised by flights to and from existing airports.

8.9 Chapter 7: Water, Drainage and Environmental Services

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
Aim						
To develop, protect, improve and extend water, waste water and flood alleviation and environmental services throughout the county and to prioritise the provision of water services infrastructure to complement the overall strategy for economic and population growth and to achieve improved environmental protection.	B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2		B1 B2 HH1 S1 W1 W2 W3 CH1 CH2 L1			C1 C2
Water Supply Policy						
WS 1: To secure priorities outlined in the Water Services Investment Programme - Assessment of Needs 2010 to 2012, subject to availability of finance. WS 2: To ensure that all villages and settlements are provided with an adequate water supply within the limits of cost effectiveness and the availability of finance. WS 3: To upgrade the existing water supply network infrastructure with the aim of improving the supply and quality of drinking water and reducing the level of unaccounted for water. WS 4: To promote conservation of water resources and where possible effect a reduction in the overall demand for treated water. WS 5: To promote water conservation measures within the county by requiring, where appropriate the installation of water meters in all new residential units and commercial development and in units where planning permission is required for an extension. WS 6: To protect groundwater resources having regard to the County Kildare Groundwater Protection Scheme. WS 7: To promote the proper management of Group Water Schemes in accordance with the Rural Water Strategic Plan. WS 8: To have regard to the requirements of the Habitats Directive, in all proposed projects or plans. WS 9: To co-operate with adjoining authorities and other public authorities regarding the servicing of towns bordering or in proximity to the county boundary including Enfield, Kilcock and Maynooth	B1 B2 B3 HH1 S1 W1 W2 M1 M2		B1 B2 HH1 S1 W1 W2 W3 CH1 CH2 L1			C1 C2
Water Quality Policy						
WQ 1: To co-operate with the EPA and other authorities, in the continued implementation of the EU Water Framework Directive and assist and co-operate with the lead authorities for the Eastern River Basin District and the South Eastern River Basin District. WQ 2: To ensure, through the implementation of the River Basin Management Plans and their associated Programmes of Measures and any other associated legislation, the protection and improvement of all drinking water, surface water and ground waters throughout the county.	B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2					C1 C2 CH1 CH2 L1

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<p>WQ 3: To work, in co-operation with relevant organisations and major stakeholders, to ensure a co-ordinated approach to the protection and improvement of the county's water resources.</p> <p>WQ 4: To continue efforts to improve water quality under the Local Government (Water Pollution) Act 1977, (as amended); and by implementing the measures outlined under the Nitrates Directive (91/676/EEC) and complying with the requirements of the Surface Water Legislation Environmental Objectives (Surface Waters) Regulations 2009 and other relevant Regulations.</p> <p>WQ 5: To promote public awareness of water quality issues and the measures required to protect both surface water and groundwater bodies.</p>						
<p>Wastewater Policy</p>						
<p>WW 1: To secure priorities outlined in the Water Services Investment Programme - Assessment of Needs 2010 to 2012, subject to availability of finance.</p> <p>WW 2: On completion of the upgrade of Osberstown Waste Water Treatment Plant to 130,000 P.E., to reserve and allocate 20,000 P.E. of total capacity to development that yields long term sustainable employment (excluding construction phase).</p> <p>WW 3: On completion of the upgrade of Leixlip Waste Water Treatment Plant to 150,000 P.E., to reserve and allocate 30,000 P.E. of total capacity to development that yields long term sustainable employment (excluding construction phase).</p> <p>WW 4: To seek to ensure that all towns and villages are provided with an adequate waste water treatment plant within the limits of cost effectiveness and availability of finance.</p> <p>WW 5: To ensure that the siting of all waste water systems will have regard to the County Kildare Groundwater Protection Scheme.</p> <p>WW 6: To ensure that all wastewater developments will have regard to the policies as expressed in the Greater Dublin Strategic Drainage Study.</p> <p>WW 7: To co-operate with adjoining authorities and other public authorities regarding the servicing of towns bordering or in proximity to the county boundary including Enfield, Kilcock and Maynooth'.</p> <p>WW 8: To implement the relevant recommendations set out in 'Urban Waste Water Discharges in Ireland for Population Equivalents Greater than 500 Persons – A Report for the Years 2006-2007' (EPA 2009).</p> <p>WW 9: To take into account cumulative discharges from other developments within the catchment when assessing developments that discharge to a watercourse</p> <p>WW 10: To provide or facilitate the provision of only one main municipal treatment plant in each settlement.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 M1 M2</p>		<p>B1 B2 HH1 S1 W1 W2 W3 CH1 CH2 L1</p>			<p>C1 C2</p>
<p>Surface Water and Flood Alleviation Policies</p>						
<p>SW1: To have regard to "The Planning System and Flood Risk Management – Guidelines for Planning Authorities" (2009) in the carrying out of functions during the period of this Plan.</p> <p>SW 2: To seek to avoid inappropriate development in areas at risk of flooding</p> <p>SW 3: To ensure new development does not increase flood risk elsewhere, including that which may arise from surface water run off.</p> <p>SW 4: To ensure effective management of residual risks for development permitted on floodplains.</p> <p>SW 5: To have regard to the recommendations of the Liffey Catchment Flood Risk Assessment and Management Study, the Barrow Catchment Flood Risk Assessment Management Report, the Eastern River Basin District Catchment Flood Risk Assessment and Management Study and the South Eastern River Basin District Catchment Flood Risk Assessment and Management Study, and to ensure that any development adjacent to these watercourses or their tributaries take cognisance of these reports / studies.</p> <p>SW 6: To ensure that all developments have regard to the surface water management policies in the Greater Dublin Strategic Drainage Study (GSDSDS).</p>	<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2</p>		<p>B1 B2</p>			<p>C1 C2 HH1 S1 W1 W2 W3 CH1 CH2 L1</p>

<p>SW 7: To liaise with the Office of Public Works (OPW) in delivering on the recommendations and programme of works set out in the Kildare County Council Water Services Flood Alleviation Capital Programme 2009 – 2013.</p> <p>SW 8: To ensure that all towns, villages and settlements are provided with adequate flood alleviation measures within the limits of cost effectiveness and availability of finance.</p> <p>SW 9: To ensure that the flood objectives stated for each village, rural settlement and environs plans are implemented.</p> <p>SW 10: To ensure that flood risk management is incorporated into the preparation of Local Area Plans in accordance with 'The Planning System and Flood Risk Management - Guidelines for Planning Authorities (2009)'.</p> <p>SW 11: To ensure that the Justification Test for Development Management is applied to proposals for development in areas at a high or moderate risk of flooding where the development being proposed is vulnerable to flooding and would generally be inappropriate as set out in Table 3.2 of the 'The Planning System and Flood Risk Management - Guidelines for Planning Authorities (2009)'.</p> <p>SW 12: To seek to ensure that development will not interfere with or interrupt existing surface water drainage systems.</p> <p>SW 13: To ensure that development adjacent to watercourses is set back from the edge of the watercourse to allow access for channel clearing/ maintenance. A set back of at least 10 metres is generally required depending on the width of the watercourse unless otherwise required.</p> <p>SW 14: To ensure that development consisting of construction of embankments, wide bridge piers, or similar structures will not normally be permitted in or across flood plains or river channels.</p> <p>SW 15: To ensure that the reasonable requirements of Inland Fisheries Ireland are adhered to in construction of flood alleviation measures in County Kildare. This includes, but is not limited to:</p> <ul style="list-style-type: none"> • Allowance for dry weather flow conditions to be reflected in channel cross sections. • Appropriate programming of any "in stream works" to comply with the requirements of Inland Fisheries Ireland. • Flood alleviation measures shall only be implemented where they comply with The Planning System and Flood Risk Management Guidelines (2009) and the requirements of the Habitats Directive and other environmental considerations. <p>SW 16: To ensure that all new developments are designed and constructed to meet minimum flood design standards. (Refer Chapter 19, Development Management Standards).</p> <p>SW17: To comply with (i) the Arterial Drainage Act, 1945 and in particular section 50 which sets out the requirements on all bodies to gain permission from the Office of Public Works for culverting water courses and bridges across watercourses and section 47 of the Act which states that any person planning to erect or alter a weir must first get consent from the Commissioners or all the affected landowners (ESB is exempt from this requirement) and (ii) section 9 of the Arterial Drainage (Amendment) Act 1995 which relates to modification or relocation of watercourse, embankment or other works.</p> <p>SW18: To recognise the important role of bogland and other wetland areas in flooding patterns. Development in these areas shall therefore be subject of a Flood Risk Assessment in accordance with the Planning System and Flood Risk Management Planning Guidelines (2009).</p> <p>SW19: To require development proposals which may affect canals and their associated infrastructure to prepare a Flood Risk Assessment in accordance with the Planning System and Flood Risk Management Guidelines (2009) and any requirements of Waterways Ireland.</p>						
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<p>SW20: To ensure development proposals in rural areas (excluding one-off rural housing) demonstrate compliance with the following:</p> <ul style="list-style-type: none"> • The ability of a site in an unserviced area to accommodate an on-site waste water disposal system in accordance with the County Kildare Groundwater Protection Scheme, and any other relevant documents / legislation as may be introduced during the Plan period. • The ability of a site in an unserviced area to accommodate an appropriate on-site surface water management system in accordance with the policies of the Greater Dublin Strategic Drainage Study (2005), in particular those of Sustainable urban Drainage Systems (SuDS) • The need to comply with the requirements of The Planning System and Flood Risk Management Guidelines for Planning Authorities published by the Minister for the Environment, Heritage and Local Government in November 2009 						
<p>Water and Drainage Objectives</p>						
<p>WDO 1: To improve the provision of water and drainage services, having regard to best practice in new developments and in those areas of the county where deficiencies exist at present.</p> <p>WDO 2: To protect, improve and conserve the county's wastewater resources.</p> <p>WDO 3: To facilitate the provision of necessary water infrastructure in a sustainable manner.</p> <p>WDO 4: To improve water quality in the county in accordance with current European and National legislation.</p> <p>WDO 5: To continually monitor and review the water quality standards of Kildare County Council in light of European Communities (Drinking Water) Regulations 2007 (SI 278 of 2007), as may be amended and to ensure continuing compliance.</p> <p>WDO 6: To improve and expand the water supply to all areas in accordance with the Water Strategy and the Water Services Investment Programme for County Kildare.</p> <p>WDO 7: To liaise with the relevant agencies / Government Departments in the identification of a suitable site within the Metropolitan area of the Greater Dublin Area for the provision of a Regional Water Treatment Plant and the development of plant and network connections in accordance with the Regional Planning Guidelines for the Greater Dublin Area 2010-2022.</p> <p>WDO 8: To acknowledge the strategic policy recommendations in relation to flood risk identified in the Regional Planning Guidelines for the Greater Dublin Area 2010-2022.</p> <p>WDO 9: To seek to manage the risks to people and property through the implementation of flood relief schemes as per the Water Services Flood Alleviation Capital Programme 2009-2013 as may be amended during the period of this Plan.</p> <p>WDO 10: To continue to undertake works under the Arterial Drainage Programme as prioritised and as may be amended over the period of this Plan.</p> <p>WDO 11: To liaise with adjoining Local Authorities and all relevant departments and agencies in the alleviation of flood risk in the county.</p> <p>WDO 12: To promote rain water harvesting in all developments and in particular in larger schemes.</p> <p>WDO 13: To continue to implement the bye-laws for the Management of Water Supplies and the Conservation Of Drinking Water adopted by the Council in 2007.</p> <p>WDO 14: To progress the delivery of projects listed in the Capital Programme 2010 – 2012, subject to the availability of funding including the projects listed in Table 7.2.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2</p>		<p>B1 B2 HH1 S1 W1 W2 W3 CH1 CH2 L1</p>			<p>C1 C2</p>

<p>Aim</p> <p>To conform to European, National and Regional policies in relation to the provision of waste management and to protect and enhance water, air and noise quality.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 W3 C1 C2 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M2 CH1 CH2 L1</p>			
<p>Waste Management Policy</p> <p>WM 1: To have regard in the assessment of planning applications for waste management facilities inter alia, to the Waste Management Plan for County Kildare then prevailing, Waste Management Act 1996, EU Landfill Directive, EPA Landfill Manuals, EU Packaging and Packaging Waste Directive and DoEHLG policy statements viz. 'Changing Our Ways' and 'Preventing and Recycling Waste- Delivering Change' and 'Taking Stock and Moving Forward.'</p> <p>WM 2: To require the submission of either a certificate of exemption or a valid planning permission for a Waste Facility Permit application, in accordance with the Waste Management (Facility Permit and Registration) Regulations 2007 as amended.</p> <p>WM 3: To provide each town, village or settlement, subject to the availability of finance with appropriate recycling facilities in the form of a kerbside collection, civic site and bring-bank recycling facilities.</p> <p>WM 4: To encourage waste prevention, minimisation, reuse, recycling and recovery as methods of managing waste. Where waste management is not being carried out properly, the Waste Management Act, 1996 to 2008 will be used as a means of ensuring specific national policies and regulations are adhered to.</p> <p>WM 5: To ensure that recycling facilities (i.e. bottle banks, bring centres etc) in close proximity to large scale residential developments are in accordance with the following: Any bring bank facility shall include receptacles for glass, cans and textiles. All applications for bring bank facilities will be assessed on a case by case basis having regard to the following: (xiii) Proximity to residential areas (xiv) An area of at least 10m by 4m in size (xv) Truck access and clearance heights (xvi) A hard standing area (xvii) A vehicle set down area only with no permanent parking provision. (xviii) Suitable lighting, noise mitigation, screening and/or landscaping as considered necessary by the council</p> <p>WM 6: To promote and facilitate communities to become involved in environmental awareness activities and community-based recycling initiatives or environmental management initiatives, which will lead to local sustainable waste management practices.</p> <p>WM 7: To ensure the provision of residual landfill in County Kildare either directly by the Council or in co-operation or partnership with other local authorities and the private sector, is subject to the specific requirements of the County Kildare Waste Management Plan.</p> <p>WM 8: To strictly control the raising of land for the purpose of private housing in the interests of pollution control, drainage, flood alleviation and amenity.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 W3 C1 C2 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M2 CH1 CH2 L1</p>			

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<p>WM 9 To require that all intensive agricultural waste, organic waste, municipal sludge and industrial sludge recovered through landspreading, be carried out under an accepted Nutrient Management Plan which must demonstrate nutrient uptake and capacity in spreadlands, sufficient storage facilities, compliance with relevant legislation including the Nitrates Regulations 2009, Waste Management Act 1996-2008, Sludge Management Plan for Kildare, River Basin Management Plans, the Kildare County Councils Sludge Protocol and any future revisions/replacements of these documents.</p> <p>WM 10: To prepare an inventory of legacy landfill sites at which waste disposal and recovery took place between 1977 and 1997 and carry out a risk assessment of these sites.</p>						
Litter Policy						
<p>L 1: To strongly enforce the provisions of the Litter Pollution Act 1997, by prosecuting offenders, where applicable.</p> <p>L 2: To implement the strategic actions of the Litter Management Plan 2008-2011.</p>	<p>HH1 CH1 CH2 L1</p>					<p>B1 B2 B3 S1 W1 W2 W3 C1 C2 M1 M2</p>
Pollution Control – Water, Air and Noise Policy						
<p>PC 1: To preserve and maintain water, air and noise quality in the county in accordance with good practice and relevant legislation.</p> <p>PC 2: To promote and support the ban on the marketing, sale and distribution of bituminous coal in Naas, Celbridge and Leixlip.</p> <p>PC 3: To enforce where applicable the provisions of the Environmental Noise Regulations 2006.</p> <p>PC 4: To ensure that noise levels caused by new and existing developments throughout the county do not exceed normally accepted standards and that new developments shall incorporate measures to ensure compliance with the Environmental Noise Regulations 2006 and any subsequent revision of these Regulations.</p> <p>PC 5: To regulate and control activities likely to give rise to excessive noise (other than those activities which require regulation by the Environmental Protection Agency).</p> <p>PC 6: To require activities likely to give rise to excessive noise to install noise mitigation measures and monitors.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 M1 M2</p>					<p>W3 C1 C2 CH1 CH2 L1</p>
Environmental Services Objectives						
<p>EN 1: To promote environmental protection through education.</p> <p>EN 2: To facilitate the implementation of the County Kildare Waste Management Plan 2005-2010 and any subsequent revisions thereof during the period of the plan.</p> <p>EN 3: To investigate the possibility of the provision of a recycling facility in the north of the County and to seek new markets for recycling in existing centres.</p> <p>EN 4: To facilitate the implementation of the Kildare Noise Action Plan 2009 and Litter Management Plan 2008-2011 and any subsequent amendments during the period of this Plan.</p> <p>EN 5: To continue the monitoring of effluent and to include food service establishments in this monitoring.</p> <p>EN 6: To continue to monitor air quality at selected locations throughout the County in co-operation with the Health Services Executive and the Environmental Protection Agency.</p> <p>EN 7: To ensure that septic tanks and proprietary wastewater treatment systems comply in full with the requirements of the Environmental Protection Agency Code of Practice 2009, the Department of the Environment, Heritage and Local Government Circular January 2010, and any subsequent revisions thereof during the period of the plan.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 W3 C1 C2 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M2 CH1 CH2 L1</p>			

<p>EN 8: To require new developments connect to the public foul sewer where feasible for both trade and domestic effluent and to discourage discharge of treated effluent to groundwater, particularly in areas of high groundwater vulnerability.</p> <p>EN 9: To require the submission of Annual Environmental Reports (which require ongoing monitoring of specified environmental parameters) on specified developments through the planning process.</p> <p>EN 10: To investigate and develop best practice guidelines in relation to design, location and size of bin storage areas in apartment or higher density housing schemes.</p>						
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8.10 Chapter 8: Energy and Communications

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
<p>Aim</p> <p>To encourage and support energy and communications efficiency and to achieve a reasonable balance between responding to central Government policy on renewable energy and communications and enabling resources to be harnessed in a manner consistent with the proper planning and sustainable development of the area.</p>	B3 C1 C2		B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1			
<p>General Energy Policy</p> <p>ER 1: To support infrastructural renewal and development of electricity and gas networks in the county, subject to amenity requirements.</p> <p>ER 2: To support regional, national and international initiatives for limiting emissions of greenhouse gases through energy efficiency and the development of renewable energy sources which make use of the natural resources in an environmentally acceptable manner.</p> <p>ER 3: To adopt and maintain energy conservation measures within the Council's own developments and to encourage developers to adopt measures to enhance energy conservation through building design.</p> <p>ER 4: To have regard to the requirements of the service providers in the provision of strategic infrastructure whilst also seeking to ensure that development, particularly the location of high tension power lines, is controlled, particularly adjoining existing dwellings, except where no other alternative can be shown to exist.</p> <p>ER 5: To require services, including electricity, telephone and TV cabling to be located underground, where feasible.</p> <p>ER 6: To seek the co-ordinated delivery of infrastructure and services to support sustainable communities.</p> <p>ER 7: To provide energy conservation and efficiency measures and facilitate innovative building techniques that promote energy efficiency and use of renewable energy sources in accordance with national policy and guidelines.</p>	B3 C1 C2		B1 B2 HH1 S1 W1 W2 W3 M2 CH1 CH2 L1			M1

<p>ER 8: To support and encourage the sustainable development of renewable energy auto production units (the production of energy primarily for on site usage) for existing and proposed developments in line with relevant design criteria, amenity and heritage considerations and the proper planning and sustainable development of the area.</p>					
Wind Policy					
<p>WE 1: To have regard to the Department of Environment, Heritage and Local Government Guidelines for Planning Authorities on Wind Energy Development (2006) in assessing all planning applications for wind farms.</p> <p>WE 2: To encourage the development of wind energy in suitable locations in an environmentally sustainable manner and in accordance with Government policy.</p> <p>WE 3: To ensure that the assessment of wind energy development proposals will have regard to:</p> <ul style="list-style-type: none"> • the sensitivity of the landscape; • the visual impact on protected views, prospects, scenic routes, as well as local visual impacts; • the impacts on nature conservation designations, archaeological areas and historic structures, public rights of way and walking routes; • local environmental impacts, including noise and shadow flicker; • the visual and environmental impacts of associated development such as access roads, plant and grid connections; • the scale, size and layout of the project, any cumulative effects due to other projects; • the impact of the proposed development on protected bird and mammal species. 	<p>B3</p>		<p>B1 B2 HH1 S1 W1 W2 M2 CH1 CH2 L1</p>		<p>W3 M1 C1 C2</p>
Hydro Policy					
<p>HD 1: To seek to ensure that proposals for hydro energy installations including micro-hydro schemes, have regard to the free passage of fish and other water based amenity activities. The Council will have regard to the recommendations of Inland Fisheries Ireland in relation to the protection of fisheries resources, and the Department of Communications, Energy and Natural Resources in assessing proposals.</p> <p>HD 2: To seek to ensure that, in sensitive landscapes, powerlines connecting the hydro unit to the national grid will be laid underground.</p> <p>HD 3: To ensure that the assessment of hydro energy development proposals will have regard to:</p> <ul style="list-style-type: none"> • The sensitivity of the landscape • The visual impact on protected views, prospects, scenic routes as well as local visual impacts • The impacts on nature conservation designations, archaeological areas and historic structures, public rights of way and walking routes 	<p>B3</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M2 CH1</p>		<p>M1 CH2</p>
Solar Policy					
<p>SE 1: To encourage use of passive solar design principles for residential building(s).</p> <p>SE 2: To support and encourage the installation of solar collectors and panels for the production of heat or electricity in residential and commercial buildings, in line with relevant design criteria.</p>			<p>CH2</p>		<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>

Bio-Energy Policy						
BE 1: To facilitate the development of projects that convert biomass to energy subject to proper planning considerations.	B3		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
BE 2: To locate biomass installations in areas that do not affect residential or visual amenity and which are served by public roads with sufficient capacity to accommodate increased traffic flows.						
BE 3: To promote domestic biological treatment including composting of kitchen and garden waste.						
BE 4: To support proposals for the production of bio fuels through the growth of energy crops in an environmentally sustainable manner.						
Waste to Energy Policy						
EW 1: To facilitate and support sustainable small scale waste to energy proposals in suitable locations subject to national and regional policy, normal siting, design, environmental and planning considerations.	B3		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Small Scale Renewable Energy Policy						
RE 1: To adopt a positive approach to renewable energy proposals, having regard to the proper planning and sustainable development of the area including environmental and landscape impacts and impacts on protected or designated heritage areas/structures.	B3		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Energy Supply Facilities Policy						
SP1 To encourage the provision of energy supply facilities in association with the appropriate service providers in order to ensure satisfactory levels of supply and to minimise constraints for development.	B3		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Transmission Networks Policy						
TN 1: To ensure that in the assessment of planning applications involving the siting of electricity power lines and other overhead cables, considers in full, the impacts of such development on the landscape, nature conservation, archaeology and residential and visual amenity.	B3		B1 B2 HH1 S1 W1 W2 W3 M2 CH1 CH2 L1			M1 C1 C2
TN 2: In all new development to seek the undergrounding of all electricity, telephone and tv cables wherever possible and specifically in areas of sensitivity, in the interest of visual amenity. Provision should be made for the unobtrusive siting of transformer stations, pumping stations and other necessary service buildings. Pole mounted equipment (such as transformers) will not be permitted.						
TN 3: To recognise the development of secure and reliable electricity transmission infrastructure as a key factor for supporting economic development and attracting investment to the area and to support the infrastructural renewal and development of electricity networks in the county.						

Telecommunications Policies						
<p>TL 1: To support national policy for the provision of new and innovative telecommunications infrastructure and to recognise that the development of such infrastructure is a key component of future economic prosperity.</p> <p>TL 2: To promote and facilitate the provision of an appropriate telecommunications infrastructure, including broadband connectivity and other technologies within the county.</p> <p>TL 3: To co-operate and co-ordinate with relevant bodies regarding the laying of key infrastructural services within towns and villages.</p> <p>TL 4: To co-operate with telecommunication service providers in the development of the service, having regard to proper planning and sustainable development.</p> <p>TL 5: To have regard to the provisions of the Telecommunications Antennae and Support Structures Guidelines for Planning Authorities (1996) and to such other publications and material as may be relevant during the period of the Plan.</p> <p>TL 6: To achieve a balance between facilitating the provision of telecommunications infrastructure in the interests of social and economic progress, and sustaining residential amenity and environmental quality.</p> <p>TL 7: To ensure that the location of telecommunications structures should minimise and/or mitigate any adverse impacts on communities, public rights of way and the built or natural environment.</p> <p>TL 8: To minimise the number of masts and their visual impact on the environment, by continuing to facilitate appropriate development in a clustered manner, where feasible respecting the scale, character and sensitivities of the local landscape, whilst recognising the need for economic activity within the county. It will be a requirement for applicants to satisfy the Planning Authority that a reasonable effort has been made to share installations. In situations where it is not possible to share a support structure, applicants should be encouraged to share a site or to locate adjacently so that masts and antennae may be clustered.</p> <p>TL 9: To minimise the provision of overground masts and antennae within the following areas:</p> <ul style="list-style-type: none"> o Areas of high amenity / sensitive landscape areas (refer Chapter 14) o Areas within or adjoining the curtilage of protected structures o On or within the setting of archaeological sites. <p>TL 10: To generally restrict planning permission for telecommunications infrastructure and support structures to a temporary period of not more than five years.</p> <p>TL 11: To discourage the development of individual telecommunications support structures and antennae for private use.</p> <p>TL 12 To require all telecommunications services to be placed underground and that any works carried out on footpaths make provision for future services.</p>	B3		<p>B1 B2</p> <p>HH1 S1</p> <p>W1 W2</p> <p>W3 M2</p> <p>CH1 CH2</p> <p>L1</p>			M1 C1 C2
Broadband Policy						
<p>BR 1: To assist in the provision of information and communication technologies throughout the county.</p> <p>BR 2: To co-operate with Department of Communications, Energy and Natural Resources and public and private agencies where appropriate, in improving high quality broadband infrastructure throughout the county.</p> <p>BR 3: To facilitate the delivery of a high capacity Information and Communications Technology (ICT) infrastructure and broadband network and digital broadcasting throughout the county.</p>	B3		<p>B1 B2</p> <p>HH1 S1</p> <p>W1 W2</p> <p>W3 M2</p> <p>CH1 CH2</p> <p>L1</p>			M1 C1 C2

Energy Objectives					
<p>ENO 1: To examine the possibility of designating appropriate area of the county as being suitable for the production of wind energy.</p> <p>ENO2 To seek to achieve the objectives of the Building Energy Rating system insofar as it relates to public buildings in the control of the Local Authority and to support and encourage all other public and non-public buildings in achieving their energy rating requirements.</p> <p>ENO3 To support the statutory providers of national grid infrastructure by safeguarding strategic corridors (where strategic route corridors have been identified) from encroachment by other developments that might compromise the provision of energy networks.</p> <p>ENO 4: To prepare and implement an Energy Strategy, as a support to a structured response to energy cost changes and to work with Central Government to reduce market volatility. This could then assist Community Stakeholders and the Renewable Energy Sector to cooperate in developing appropriate projects of sufficient scale with a stable demand and thereby attract employment investment.</p>	B3		<p>B1 B2 HH1 S1 W1 W2 W3 M2 CH1 CH2 L1</p>		M1 C1 C2
Communications Objectives					
<p>CO 1: To promote and facilitate the provision of an appropriate telecommunications infrastructure, including broadband connectivity and other technologies within the county.</p> <p>CO 2: To seek to provide public WiFi zones in and around all public buildings.</p> <p>CO3: To support the provision of the National Broadband Scheme insofar as it relates to the county and to co-operate with the Department of Communications, Energy and Natural Resources in any future additions to the scheme.</p>	B3		<p>B1 B2 HH1 S1 W1 W2 W3 M2 CH1 CH2 L1</p>		M1 C1 C2

8.11 Chapter 9: Retail

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	<u>Uncertain</u> interaction with status of SEOs	<u>Neutral</u> Interaction with status of SEOs	<u>No Likely</u> interaction with status of SEOs
<p>Aim</p> <p>To continue to sustain and improve the retail profile and competitiveness of County Kildare within the retail economy of the Greater Dublin Area and beyond, through harnessing the assets and potential of centres at all levels of the County Retail Hierarchy.</p>	C1 C2 B3		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			

Strategic Policies - County Retail Hierarchy, Sequential Approach and Core Retail Areas						
<p>R 1 To guide major retail development in accordance with the framework provided by the County Retail Hierarchy (Table 9.1) to enable an efficient, equitable and sustainable distribution of floorspace throughout the county.</p> <p>R 2 To guide retail development where practical and viable in accordance with the framework provided by the Sequential Approach to enable the vitality and viability of existing town, village and district centres to be sustained and strengthened.</p> <p>R 3 To define the Core Retail Area within the development/local area plan of the county's main centres to provide guidance on the application of the Sequential Approach.</p> <p>R4 To consider including a specific zoning for Multiple Retailers, for individual retail stores in excess of 1,100 sqm net retail floorspace. Where appropriate, application of this policy will be considered as part of the LAP process. This policy will assist in locating new multiple developments on appropriate sites that will optimise their significant power to direct retail activity into locations that achieve town strengthening objectives.</p>	<p>C1 C2 B3 B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
Retail Policies for Towns and Settlements in Kildare						
<p>Hinterland Area: Twin County Town Centre – Naas</p> <p>R 5: To promote and encourage major enhancement and expansion of retail floorspace and town centre functions, in the Hinterland Area Twin County Town of Naas, to reflect its role as a major town centre and further develop its competitiveness and importance as a key centre in the GDA.</p>	<p>C1 C2 B3 B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>Hinterland Area: Twin County Town Centre - Newbridge</p> <p>R 6 To support and implement appropriate development of lands for the future expansion of Newbridge Town Centre.</p> <p>R7 To provide the framework for a more integrated approach to the planning of the town centre through the forthcoming Local Area Plan, with the Edward Street/Main Street North/Charlotte Street/Eyre Street area being a particular focus for achieving greater linkage and commercial synergy. .</p> <p>R8 To continue to enhance the profile of Newbridge through strategic environmental enhancement, the creation of spaces and places of interest and the introduction of public art.</p> <p>R9 To identify locations for retail provision as appropriate within existing and expanding residential areas in future local area plans during the period of this Plan.</p>	<p>C1 C2 B3 B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>Metropolitan Area: Major Town Centre – Leixlip, including Collinstown</p> <p>R10 To assist in the promotion and expansion of Leixlip, including Collinstown, as the Level 2 Major Town Centre in the Metropolitan Area of North East Kildare over the next twenty years to ensure that the retail needs of this area of the county, consistent with regional retail policy, are fully met and enable it to grow into one of the key retail centres within the GDA.</p>	<p>C1 C2 B3 B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			

<p>R11 To prepare a Masterplan for the lands at Collinstown in accordance with the details outlined in the Collinstown LAP 2010. The development of these lands shall be phased over a 20-year period. The Masterplan shall be prepared prior to the commencement of any development and shall have regard to the strategic retail policies for the towns within the Metropolitan area as outlined in this Plan and the specific objectives relating to retail development within the Local Area Plans for Leixlip, Maynooth, Kilcock and Celbridge. In the interests of sustainability and as part of this Masterplan, a new railway station to link Maynooth and Kilcock centres to the area shall be delivered as part of Phase 1 of the overall development of the lands at Collinstown and a Transport Hub shall be located adjacent to the train station to ensure sustainable integrated planning.</p> <p>R12 To work with development interests/landowners, other key stakeholders including local organisations, businesses and people in the development of the detailed masterplan for the area zoned Major Town Centre in the 2010 Collinstown Local Area Plan.</p> <p>R13 To work with national and regional bodies to ensure that the strategic infrastructure is programmed and implemented to enable the phased development strategy for the new Level 2 Metropolitan Area Major Town Centre to be progressed.</p> <p>R14 To encourage and facilitate sustaining and enhancing the retail and services offer of Leixlip Town Centre and harnessing the potential of its heritage asset.</p>						
<p>Metropolitan Area: Town Centres – Celbridge, Kilcock and Maynooth</p> <p>R 15 To encourage the development of the retail and service role of Celbridge, Kilcock and Maynooth as self sustaining main centres in the Metropolitan Area of the county and GDA.</p> <p>R 16 To promote and progress the delivery of the integrated expansion of Celbridge Town Centre while taking account of its Georgian streetscape and historic setting and to facilitate town centre consolidation through the re-use and regeneration of backlands and other key lands and buildings around the town centre..</p> <p>R 17 To encourage and facilitate the regeneration of land and buildings in the Kilcock Core Retail Area and other Town Centre zoned lands and to facilitate the provision of retail warehousing to the north west of the town.</p> <p>R 18 To secure the continued consolidation of Maynooth Town Centre through progressing implementation of the Harbour Action Area Plan and the regeneration of backland areas in the town centre.</p> <p>R 19 To investigate the need for any additional retail provision as appropriate within existing and expanding residential areas in future local area plans during the period of this Plan.</p>	<p>C1 C2 B3 B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			

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<p>Hinterland Area: Sub County Town Centres – Athy, Clane and Kildare</p> <p>R 20 To promote and encourage major enhancement and expansion of the retail offer and town centre functions of Athy, Clane and Kildare Town to sustain and enhance their importance as Sub County Town Centres within the Central and South Sub Areas of the county.</p> <p>R 21 To work with Athy Town Council in delivering the policy objectives of the County Strategy in order that it delivers its vision and potential as the mechanism for redressing high shopping expenditure leakage from its catchment area and the south of the county as a whole.</p> <p>R22: To progress the redevelopment/ regeneration of town centre sites and any expansion of Clane's main food and comparison offer should be in the town centre or appropriate edge of centre locations.</p> <p>R23: To confirm in the emerging Kildare Town Local Area Plan the priority of strengthening the retail core of the town through identifying appropriate and effective linkages with the Kildare Village Outlet Centre. The LAP shall identify key town and edge of centre sites as the locations for the consolidation and expansion of the retail and town centre functions of Kildare Town Centre and the inappropriateness of out of centre locations for new main convenience and mainstream comparison floorspace.</p> <p>R 24 To encourage and facilitate the expansion of the Kildare Village Outlet Centre in accordance with the guidance in the Retail Planning guidelines and achieve greater linkage and commercial synergy with Kildare Town Centre and the offers and attractions of Naas and Newbridge.</p> <p>R 25 To investigate the need for any additional retail provision as appropriate within existing and expanding residential areas in future development plan / local area plans during the period of this Plan</p> <p>R 26 To identify and zone suitable locations for retail warehouse development in Kildare Town in the emerging Local Area Plan</p>	<p>C1 C2 B3 B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>	<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>	
<p>Hinterland Area: Town Centres – Kilcullen, Monasterevin and Sallins</p> <p>R 27 To encourage the growth and development of retail and other town centre services/functions in Kilcullen, Monasterevin and Sallins to enable them to grow into more self sustaining towns in the county's settlement and retail hierarchies</p> <p>R 28 To investigate the need for any additional retail provision as appropriate within existing and expanding residential areas in future local area plans during the period of this Plan.</p> <p>R 29 To consolidate and expand Kilcullen, Monasterevin and Sallins town centres through mixed use retail-led regeneration.</p> <p>R 30 To develop and build on the tourism potential of Kilcullen and Monasterevin's heritage and natural environments and that of Sallins' location on the Grand Canal as part of an integrated strategy for raising their profiles and identities.</p>	<p>C1 C2 B3 B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>	<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>	
<p>Metropolitan Area: Village Centre – Straffan</p> <p>R 31 To monitor the sustainability of local shopping and services provision in Straffan and encourage applications for retail and tourism related development that serve to consolidate and enhance the quality of the Village Centre.</p>	<p>C1 C2 B3 B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>	<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>	

<p>Hinterland Area: Small Town Centres</p> <p>R 32 To facilitate and encourage the provision of shops and services to consolidate and strengthen the role of Tier 1 Level 4 Small Town Centres in meeting the needs of their existing and expanding populations and those of their rural hinterlands.</p> <p>R 33 To respond positively to applications for retail and other town centre developments in Castledermot, Prosperous and Rathangan, where they serve to consolidate the town centres and respect and enhance the existing built fabric.</p>	<p>C1 C2 B3 B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>Hinterland Area: Village Centres</p> <p>R 34 To facilitate the local provision of shops and services in Tier 2 Level 4 Village Centres to meet the needs of existing and expanding populations.</p> <p>R 35 To positively respond to and encourage applications for small retail developments in designated Village Centres, particularly those that will facilitate the re-use and regeneration of existing land and buildings, in the interests of consolidating and reinforcing the traditional heart of the centres.</p>	<p>C1 C2 B3 B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>General Retail Policies</p> <p>In addition to specific policies, a number of general policies are defined to shape retailing in the county over the period of the County Development Plan and beyond. The foundations and detail of these policies are provided in the County Retail Strategy, the paragraphs below summarise the context that underpins them.</p>						
<p>Corner Shops and Smaller Villages/Crossroads</p> <p>R 36 To retain, encourage and facilitate the retail role of corner shops and small villages around the county.</p> <p>R 37 To encourage and facilitate preservation of retail and other services within established rural centres.</p>	<p>C1 C2 B3 B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>Enhancement of Towns and Villages</p> <p>R38 To encourage and facilitate the enhancement and environmental improvement of the county's towns and villages.</p> <p>R39 To pursue all avenues of funding to secure resources for the enhancement, renewal and regeneration of the public realm of the county's towns and villages.</p> <p>R40 To ensure that the best quality of design is achieved for all new retail development and that design respects and enhances the specific characteristics of the different towns and villages in the county in terms of design, scale and external finishes.</p> <p>R 41 To protect and enhance the amenities and character of town centres in accordance with the principles of proper planning and sustainable development. The Council will encourage the further improvement and development of commercial, service, social and cultural functions which town centres perform while ensuring the protection of architectural quality of streetscapes. This will apply to skyline, shop fronts and advertising structures.</p>	<p>C1 C2 B3 B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			

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<p>New District and Neighbourhood Centres R42 To investigate the need for any additional retail provision as appropriate within existing and expanding residential areas in future local area plans during the period of this Plan and having regard to the possible impact on town centres.</p>	<p>C1 C2 B3 B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1⁸³</p>			
<p>Retail Warehouse Parks R 43 To prohibit mainstream and discount convenience retail developments in retail parks. R 44 To prohibit mainstream comparison floorspace or retailers in retail parks.</p>	<p>C1 C2</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			<p>B3</p>
<p>Retail Development in Business Parks and Employment Areas R 45 To ensure that the level of retail and local services provision in existing and new major employment areas sustains and enhances their attraction as locations for investment. R 46 To provide the land use and retail planning framework to ensure that the mixed use strategies for new employment areas respond to the wider context of need and demand in related expanding residential areas and individual main centres in the interests of ensuring that these locations are attractive to new residents, workers and employers. R 47 To limit the level of shopping and local services provision in existing industrial estates or parks. Standalone mainstream and discount convenience or comparison floorspace will not be permitted in existing employment areas unless it is proven to be part of the wholesale retail market sector.</p>	<p>C1 C2</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			<p>B3</p>
<p>Re-Use and Regeneration of Derelict and Underutilised Land and Buildings R 48 To identify obsolete and potential renewal areas and to encourage and facilitate the re-use and regeneration of derelict land and buildings in the county's main towns and villages. The Council will use its statutory powers, where appropriate, to facilitate this and consider such buildings and lands for inclusion in the Register of Derelict Sites. R 49 To work with landowners and development interests to pursue the potential of suitable, available and viable land and buildings for retail and other town centre uses.</p>	<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			<p>B3</p>
<p>Retailing in Tourism and Leisure R50: To encourage and facilitate the development of retailing in the tourism and leisure sectors subject to protecting tourism and leisure amenities from insensitive and inappropriate development. R51: To encourage and facilitate the delivery of tourism related retail developments and initiatives, subject to compliance with County Retail Strategy objectives and assessment criteria.</p>			<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			<p>B3</p>

⁸³ Note that Development Plans and Local Area Plans - for areas the population of which are less than 10,000 persons - are required under the SEA Regulations (S1 No. 436 of 2004) to undergo screening for the need to undertake SEA; all other such plans are required to undergo SEA.

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<p>Casual Trading R 52 To prosecute in situations where the Casual Trading Act 1995 is being contravened. R 53 To take cognisance of the proper and sustainable development of the county's towns and villages, including the preservation and improvement of amenities; the safety and convenience of pedestrians; the traffic likely to be generated by Casual Trading and the promotion of tourism.</p>	<p>C1 C2 HH1</p>				<p>B1 B2 B3 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>
<p>Non Retail Uses in Core Retail Areas and Other Main Streets R 54 To refuse planning applications for Amusement/Gaming Arcades as they are considered to be an undesirable use and potentially detrimental to the business and commercial environment of the county. R 55 To discourage where possible within its statutory powers the introduction of non retail and lower grade retail uses e.g. Head Shops in Retail Areas and other streets in the interests of maintaining and sustaining the retail attraction of the county's centres.</p>	<p>C1 C2</p>				<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 1</p>
<p>Innovation in the County's Retail Offer R 56 To encourage and facilitate innovation in the county's retail offer and attraction. R 57 To review and monitor retail trends that could have an influence on the performance of the sector within Kildare and pursue harnessing new concepts and formats in the county's retail structure. R 58 Applicants for retail planning consents will be required to confirm their proposed hours of opening and 24 hour opening of shops will only be permitted where it can be clearly demonstrated that there will be no negative impact on the residential amenity of neighbouring areas. Proposed hours of opening for various uses may also be rescribed in LAPs.</p>	<p>C1 C2</p>				<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>
<p>Criteria for Assessing Retail Proposals R 59: To assess all applications for large retail development in accordance with the criteria set out above and in Section 19.10 of Chapter 19, Development Management Standards of this Plan.</p>	<p>B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1 CH1 CH2 S1</p>				
<p>Retail Objectives</p>					
<p>RTO 1: To ensure that the retail needs of the county's residents are met as fully as possible within Kildare, taking cognisance of the Regional Retail Hierarchy set out in the GDA and County Retail Strategy, to enable the reduction in the requirement to travel to meet these needs and in the interests of achieving greater social inclusion and accessibility to shopping and services across all sectors of the community. RTO 2: To reinforce the retail hierarchy which assists in defining the county's settlement structure and provides clear guidance on where major new retail floorspace would be acceptable. RTO3: To ensure an efficient, equitable and sustainable spatial distribution of main centres across the county in the interests of the proper planning and sustainable development of the area. RTO 4: To continue to address leakage of retail expenditure from Kildare through securing the development of the appropriate quality and quantum of additional convenience, comparison and bulky goods floorspace in centres across the county. RTO5: To sustain and enhance the increase in comparison expenditure inflows to the county and its attraction as a retail destination in the GDA and beyond through delivering a quality and quantum of retail offer in the existing and newly designated main centres in the County Retail Hierarchy. RTO 6: To reinforce the heart of town and village centres as the priority location for new retail development, with quality of design and integration/linkage being fundamental prerequisites.</p>	<p>C1 C2 B3 B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>		

<p>RTO 7: To align, as far as practicable, new retail development with existing and proposed public transport infrastructure and services and encourage access by foot and bicycle to reduce the dominance of access by private car.</p> <p>RTO 8: To encourage and facilitate the preservation and enhancement of the retail and services role of both individual villages and village/settlement clusters around the county.</p> <p>RTO 9: To encourage and facilitate the re-use and regeneration of derelict land and buildings for retail and other town centre uses, with due cognisance to the Sequential Approach.</p> <p>RTO10: To promote tourism in Kildare and to facilitate the provision of tourism infrastructure.</p> <p>RTO 11: To encourage and facilitate innovation and diversification in the county's retail profile and offer.</p> <p>RTO12: To support existing retail facilities and to facilitate the provision of new facilities as appropriate where such proposals are in accordance with the RPPGDA, the Draft Kildare County Retail Strategy and the proper planning and sustainable development of the area.</p>						
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8.12 Chapter 10: Rural Development

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
Aim						
<p>To support the provision of a high quality rural environment; encourage diversification and improved competitiveness of the rural economy; sustain the livelihood of rural communities and promote the development of the wider rural economy, all within the context of the sustainable management of land and resources.</p>	B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1		C1 C2			
Rural Development Policy						
<p>RRD 1: To support the implementation of the National Rural Development Programme 2007-2013.</p> <p>RRD 2: To liaise and co-operate with statutory, local development, sectoral community / voluntary agencies and groups to develop economic, social and cultural benefits for the rural community.</p> <p>RRD 3: To support and facilitate the work of Teagasc and other farming/local bodies within the county in the promotion of the rural economy, including agriculture development, rural diversification and in the development of initiatives to support farming, create inclusive rural communities and improve access and services in rural areas.</p> <p>RRD 4: To encourage the sustainable and suitable re-use of farm buildings in the county and to ensure that such works, where relevant, have regard to Re-using Farm Buildings – A Kildare Perspective produced by Kildare County Council in 2006.</p>	CH1 CH2 L1 B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			

<p>RRD 5: To require new buildings and structures:</p> <ul style="list-style-type: none"> • To be sited as unobtrusively as possible • To be clustered to form a distinct and unified feature in the landscape • To utilise suitable materials and colours • To utilise native species in screen planting in order to integrate development into the landscape <p>RRD 6: To encourage expansion and employment in local enterprises and industries such as agriculture, horticulture, forestry, peatlands, food crafts, tourism and energy.</p> <p>RRD 7: To encourage the development of alternative rural based small scale enterprises. The Council will consider the use, nature and scale of developments when assessing such applications. In addition, the Council will also consider the requirement to locate such developments in rural areas.</p> <p>RRD 8: To encourage the conservation and promotion of bio-diversity in all rural development activities.</p> <p>RRD 9: To support the development of renewable energy production including energy crops in rural areas where it is considered appropriate.</p> <p>RRD 10: To promote the provision of broadband and other communications infrastructure in rural areas of the county.</p> <p>RRD 11: Apart from rural housing as provided for in Chapter 4, there are other landuses which may be considered in the rural countryside. Where an area is not within an identifiable settlement, and is not otherwise zoned as part of this Plan, or of any of the town development plans, the use of such land shall be deemed to be primarily agricultural</p> <p>RRD 12: To support the improvement of existing community and recreational facilities in rural areas subject to compliance with the relevant environmental and planning criteria.</p> <p>RRD 13: To ensure that applicants comply with all other normal siting and design considerations including the following:</p> <ul style="list-style-type: none"> • The ability of a site in an unserved area to accommodate an on-site waste water disposal system in accordance with the County Kildare Groundwater Protection Scheme, and any other relevant documents / legislation as may be introduced during the Plan period. • The ability of a site in an unserved area to accommodate an appropriate on-site surface water management system in accordance with the policies of the Greater Dublin Strategic Drainage Study (2005), in particular those of Sustainable urban Drainage Systems (SuDS). • The need to comply with the requirements of “The Planning System and Flood Risk Management Guidelines for Planning Authorities” published by the Minister for the Environment, Heritage and Local Government in November 2009. 						
Agriculture Policy						
<p>AG 1: To support agricultural development and encourage the continuation of agriculture as a contributory means of maintaining population in the rural area.</p> <p>AG 2: To encourage the development of environmentally sustainable agricultural practices, to ensure that development does not impinge on the visual amenity of the countryside and that watercourses, wildlife habitats and areas of ecological importance are protected from the threat of pollution.</p> <p>AG 3: To ensure that all agricultural activities comply with legislation on water quality, such as the Phosphorous Regulations, Water Framework Directive and Nitrates Directive.</p> <p>AG 4: To support agricultural activities which encourage bio-diversity as identified in the County Biodiversity Plan (adopted November 2008) and the National Biodiversity Plan (2010).</p> <p>AG 5: To support local employment and training opportunities, particularly where existing farm income is in decline and requires alternative skills and enterprises.</p>	<p>CH1 CH2 L1 B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			

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<p>AG6: To support those who live and work in rural areas and who wish to remain on the land-holding. Favourable consideration will be given to on-farm based diversification, which is complementary to existing agricultural practices, is operated as part of the farm holding and is intended to supplement existing farm income.</p> <p>Examples of such diversification includes:</p> <ul style="list-style-type: none"> • Specialist farming practices e.g. horticulture, equine facilities, poultry, mushroom growing and specialised animal breeding; • Farm enterprises such as processing, co-ops, farm supply stores and agri-business; • Production of organic and speciality foods to meet the increase in demand for such products; • Conversion of redundant farm buildings of vernacular importance for appropriate owner-run enterprises, such as agri-tourism. 						
Horticulture Policy						
<p>HT 1: To encourage the development of environmentally sustainable horticultural practices, to ensure that development does not impinge on the visual amenity of the countryside and that watercourses, wildlife habitats and areas of ecological importance are protected from the threat of pollution.</p> <p>HT 2: To support the horticulture and nursery stock industry as a means of diversifying agriculture and contributing to maintaining population in the rural area.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>C1 C2</p>			
Equine Industry Policy						
<p>EQ 1: To encourage the expansion of the bloodstock industry by protecting the environment and amenity value of rural areas, from encroachment by urban sprawl and incompatible development.</p> <p>EQ 2: To support equine related activities e.g. farriers, bloodstock sales etc. of an appropriate size and at suitable locations.</p> <p>EQ 3: To ensure that equine based developments are located on suitable and viable landholdings and are subject to normal planning, siting and design considerations.</p> <p>EQ 4: To protect the Curragh, Punchestown and Naas racecourses from any development that would interfere with their amenity qualities while, at the same time, promoting the enhancement of facilities for racegoers.</p> <p>EQ 5: To recognise and support the development of the Irish sport horse industry in the county, including breeding, competing and training.</p> <p>EQ 6: To support the relevant equine bodies/organisations in the county in the pursuit of their objective to maintain the Irish dominant position of the equine industry in world's international markets.</p> <p>EQ 7: To support the role of Goff's facility at Kill as a horse sales facility, which plays an important role in the economic and social development of the equine industry at national, regional and county level.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
Forestry Policy						
<p>FT 1: To encourage the development of a well managed sustainable forestry sector in a manner that maximises its contribution to national economic and social well being and which is compatible with the protection of the environment.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 W3 M2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M2 C1 C2 L1</p>			<p>CH1 CH2 M1</p>

<p>FT 2: To support the Forest Service of the Department of Agriculture, Fisheries and Food in:</p> <ul style="list-style-type: none"> • Implementing Sustainable Forest Management (SFM), with a view to ensuring that all timber produced in the county is from sustainably managed forests. • Implementing the suite of guidelines published by the Forestry Service to ensure that the environmental aspects of Sustainable Forest Management are achieved. • Implementing the guidance outlined in the National Indicative Forestry Statement (2008). • Promoting research and development in forestry and forest products. <p>FT 3: To increase quality planting and promote the planting of diverse species.</p> <p>FT 4: To encourage forestry and forestry related development, as a means of diversifying from traditional farming activity.</p> <p>FT5 To promote forestry development of appropriate scale and character while ensuring that such development does not have a negative impact on the countryside, (including public access/rights of way and recreational facilities) or cause pollution or degradation of wildlife habitats, natural waters or areas of ecological importance.</p> <p>FT6: To encourage the improved management of woodlands and to promote the Native Woodland Scheme under the ND P2007-2013 which aims to protect and enhance existing native woodlands and to increase the total native woodland cover where appropriate, in forms that respect and enhance local character and local biodiversity.</p> <p>FT 7: To ensure that buffer zones or exclusion zones are applied to aquatic zones and sites of archaeological importance respectively as deemed appropriate by the planning authority.</p> <p>FT 8: To require the repair of any road damaged occurring due to forestry work, by the forestry company responsible.</p> <p>FT 9: To actively partake in the Neighbour Wood Scheme (Dept Communications, Energy and Natural Resources) and to identify areas at a local level that are suitable for woodland which are accessible and attractive to the local community.</p> <p>FT 10: To require all applications for new forestry developments to have regard to the policies and objectives for the landscape character areas of the county outlined in Chapter 14 of the Plan.</p> <p>FT 11: To encourage private forestry developers to provide access through their forests for walking routes, mountain bike trails, bridle paths plus other non-noise generating activities as part of an integrated development.</p>						
Boglands Policy						
<p>BL 1: To ensure that a balanced approach is taken to the development of the county's peat resources and the restoration of cutaway bogs, in order to minimise the negative impact on biodiversity and the archaeological and cultural heritage of the county.</p> <p>BL 2: To seek a balance between maximising the peat extraction potential of the county, whilst ensuring protection and conservation of bogland habitats. Limiting extraction to those bogland areas currently under development will help to minimise impacts by localising effects and thus protect the bog landscape character areas within the county.</p> <p>BL 3: To take a balanced approach to the re-development of cutaway bogs. Large portions of cutaway bog should be developed as areas for wildlife, biodiversity, conservation and their amenity value, whilst other portions can be utilised for economic uses such as grassland, forestry and wind energy, subject to all planning and environmental considerations being met.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 W3 M2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M2 C1 C2 L1</p>			<p>CH1 CH2 M1</p>

<p>BL 4: To liaise with Bord na Mona, the Irish Peatland Conservation Council, Coillte, National Parks and Wildlife Service of the Department of the Environment, Heritage and Local Government, to ensure the sustainable use of cutaway bogland, with due consideration given to their ecological and amenity value.</p> <p>BL 5: To seek a Hydrological Report which will also incorporate a Flood Risk Assessment in accordance with the Planning Guidelines "The Planning System and Flood Risk Management (2009)" for significant developments within boglands so as to ensure that the quality of developments on ground water and surface water is assessed and mitigation measures identified. This assessment should address the issue of ground and slope stability.</p> <p>BL 6: To support the development of the peatlands within the county for appropriate alternative uses, subject to environmental considerations and nature designations.</p>						
Objectives to support rural development						
<p>RDO 1: To continue to support rural development within the county as a contributory means of sustaining the rural economy.</p> <p>RDO 2: To ensure that all planning applications for one off enterprises in rural areas have regard to the criteria listed at Table 10.4 of the Plan.</p> <p>RDO 3: To support rural employment initiatives within the county where environmental impact and trip attraction are minimal and where supported by the necessary physical and communications infrastructure.</p> <p>RDO 4: To ensure that all new developments and practices do not undermine rural ecosystems, landscapes and conservation areas and are conducted in a manner consistent with the protection of the local environment and in line with national legislation and relevant guidelines.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
Extractive Industry						
Aim						
<p>To ensure that adequate supplies of aggregates are available to meet the future needs of the county and region in line with the principles of sustainable development and environmental management.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>					
Policy						
<p>EI 1: To have regard to the Quarries and Ancillary Activities Guidelines for Planning Authorities (2004) published by the DoEHLG or as may be amended from time to time.</p> <p>EI 2: To continue to regulate the exploitation of natural resources of the county including the extraction of sand, gravel and rock.</p> <p>EI 3: To facilitate the sourcing of aggregates for and the operation of, the extractive industry in suitable locations subject to the protection of landscape, environment, road network, heritage, visual quality and amenity of the area.</p> <p>EI 4: To ensure that extraction activities address key environmental, amenity, traffic and social impacts and details of rehabilitation. In the assessment of planning applications for new development, intensification of use or diversification of activity, the Council will have regard to the nature of the proposal, the scale of activity proposed, the impact on the adjoining road network, the effect on the environment including important groundwater and aquifer sources, natural drainage patterns and surface water systems and the likely effects that any proposed extractive industry may have on the existing landscape and amenities of the county including public rights of way and walking routes.</p>	<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			

<p> EI 5: To ensure that development for aggregate extraction, processing and associated concrete production does not significantly impact the following: <ul style="list-style-type: none"> • Special Areas of Conservation (SACs) • Special Protection Areas (SPAs) • Natural Heritage Areas (NHAs) • Other areas of importance for the conservation of flora and fauna • Areas of significant archaeological potential • In the vicinity of a recorded monument • Sensitive landscape areas as identified at Chapter 14 of the Development Plan. • Scenic views and prospects • Protected Structures • Established rights of way and walking routes. EI 6: To consult with the Geological Survey of Ireland (GSI), with regard to any developments likely to have an impact on County Geological Sites listed in the Development Plan (Chapter 12). EI 7: To require submission of an Appropriate Assessment under Article 6 of the Habitats Directive where any quarry / sand and gravel extraction is likely to have an impact on a Natura 2000 site (see Chapter 14). EI 8: To require relevant planning applications to be accompanied by an Environmental Impact Statement. An Ecological Impact Assessment (EcIA), may also be required for sub threshold development to evaluate the existence of any protected species/habitats on site. EI 9: To require to a detailed landscaping plan to be submitted with all planning applications indicating proposed screening for the operational life of the site. The predominant use of native plant species in the proposed landscaping plan is encouraged. EI 10: To require detailed landscaping and quarry restoration plans to be submitted with each application. Habitats and species surveying shall be carried out and shall influence the restoration plan for the site. EI 11: To ensure that the full cost of road improvements (including during operations and at time of closure), which are necessary for the quarrying of sand and gravel, shall be borne by the industry itself and that the industry shall also contribute to the recreation and amenity of the county. EI 12: To ensure that all existing workings are rehabilitated to suitable land uses and that all future extraction activities allow for the rehabilitation of pits and proper land use management. EI 13: To require, where permission is granted for quarrying / sand and gravel extraction, the submission by the developer, of a bond for the satisfactory completion and restoration of the site. EI 14: To consider, in certain circumstances, granting planning permission for quarrying / sand and gravel extraction for a temporary period. Such period to be decided by the planning authority, depending on the merits of the application. EI 15: To protect and safeguard the county's natural aggregate resources from inappropriate development, by seeking to prevent incompatible land uses that could be located elsewhere, from being located in the vicinity of the resource, since the extraction of minerals and aggregates is resource based. </p>						
<p>Objectives</p>						
<p> EO 1: To support regional policy for the adequate supplies of aggregates resources to ensure continued growth of the county and region. EO 2: To ensure that the extractive industry will minimise and/or mitigate any adverse visual and/or environmental impacts on the built or natural environment through adherence to the EPA publication Environment Management in the Extractive Industry (Non-scheduled minerals) 2006 and any subsequent revisions and the requirements of the Programme of Measures from the River Basin Management Plans. </p>	<p> B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1 </p>		<p> B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 </p>			

EO 3: To carry out a survey and examination of both existing pit areas and potential sand and gravel deposits in the county, subject to the availability of financial resources. It is intended that this survey will be carried out in conjunction with the Geological Survey of Ireland (GSI) and that it will assess the interactions between the development of these resources and future land uses.			L1			
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8.13 Chapter 11: Social, Community and Cultural Development

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
Aim						
To ensure that County Kildare is attractive place to live and work by building strong inclusive communities that have a sense of place and belonging, with the provision of accessible social and community facilities.	C1 C2 B3		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Policies						
<p>Community Services and Facilities</p> <p>C1: To ensure that sufficient lands are zoned to cater for social and community needs.</p> <p>C2: To actively promote the provision of community, educational, social and recreational facilities in tandem with future housing development. In certain large mixed use schemes the frontloading of such infrastructure may be required prior to the commencement of development. In this regard, applicants will be required to submit a Social Infrastructure Assessment (SIA) for the following: residential schemes on zoned land which are greater than 50 units, for residential schemes on zoned lands in Village Plans (refer to Chapter 17) which are greater than 10 units, for residential schemes on unzoned land which are greater than 10 units or where deemed necessary by the planning authority. The suitability and scale of proposed developments will be assessed against the level of social infrastructure in towns/villages/settlements. The Planning Authority will seek to ensure that unsustainable levels of population growth do not take place in the absence of adequate levels of social infrastructure.</p> <p>C 3: To carry out a review of the SIA process to assist in the implementation of policy C2 above.</p> <p>C4: To encourage the shared use of educational and community facilities for community and non-school purposes where possible so as to maximise the sustainable use of such infrastructure and promote community cohesion.</p> <p>C5: To assess the suitable provision of nursing homes, crèches and other commercially run community facilities and amenities at appropriate locations, during the review of Local Area Plans and Village Plans.</p>	C1 C2 B3		B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1			

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<p>Social Inclusion and Community Development</p> <p>SC1 To promote equality of access to services and facilities and assist in the removal of barriers to full participation in society.</p> <p>SC2 To support and encourage the establishment of consultative structures, particularly those associated with the County Development Board, which enhance and enable communities to engage in policy making.</p> <p>SC3: To ensure that all arts and cultural facilities in the ownership and management of the Council are accessible to the wider community and to promote the role of these facilities as focal points for the community.</p> <p>SC 4: To support and encourage communities in the restoration and rehabilitation of community halls / centres, thereby facilitating a greater level of social and community inclusion. Assistance in the form of funding would be subject to budget allocations.</p>	<p>C1 C2 B3</p>					<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>
<p>Young People and Children</p> <p>YPC1 To consider the needs of children and young people, including those with disabilities and additional needs, in the provision of indoor and outdoor recreational facilities (refer to Chapter 14 for more policies on recreation and amenity).</p>	<p>C1 C2 B3</p>		<p>B1 B2 W1 CH1 CH2 L1</p>			<p>HH1 S1 W2 W3 M1 M2</p>
<p>People with Disabilities</p> <p>PD 1 To ensure that all buildings, public and open spaces, recreational and amenity areas are accessible for people with disabilities, having regard to the Building Regulations, the objectives of 'Building for Everyone' (National Disability Authority) and 'Access for the Disabled' (No. 1 to 3) (National Rehabilitation Board).</p> <p>PD 2 To ensure that parking spaces provided for people with disabilities are appropriately indicated and are located in a manner which has regard to dismounting, safety of driver and passengers, inappropriate obstructions etc.</p> <p>PD 3 To ensure that all footpaths and public areas are accessible and safe for people with disabilities and/or reduced mobility etc.</p> <p>PD 4 To provide for the needs of people with visual difficulties in the design of pedestrian facilities by assessing the options available and choosing the most appropriate design to implement on a case by case basis.</p>	<p>C1 C2 B3</p>		<p>CH1 CH2</p>			<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 L1</p>
<p>Older People</p> <p>OP1: To facilitate the provision of continuing care facilities for the elderly, such as: own homes (designed to meet the needs of elderly people), sheltered housing, day-care facilities, nursing homes and specialised care units (e.g. dementia specific units) at appropriate locations throughout the county.</p> <p>OP2: To cater for the diversity of older people's needs by promoting adaptability and flexibility in the design of homes, and the promotion of appropriate commercial and community facilities in population centres with higher proportions of older people.</p> <p>OP 3: To provide for a mixed urban/rural setting for nursing homes in the county and to site residential care facilities for the elderly in accordance with the following:</p> <p>(i) Facilities should be located close to community and social facilities required by occupants (e.g. shops, post office, community centres, etc) thereby ensuring that older people can remain part of existing communities.</p> <p>(ii) Facilities should be easily accessible for residents, employees, visitors and service providers. Such facilities will generally be acceptable in villages and rural settlements to cater for local demand. A mobility strategy shall be provided detailing connections to town and village centres for residents,</p>	<p>C1 C2 B3</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			

<p>employees and visitors. (iii) Located within an environment that is suitable for their stated purpose, integrating within the wider community while providing a safe environment for residents. (iv) Located in an area which can benefit from the creation of strong links between the care for the elderly facilities and the local community including activities linked to other community groups. OP4: To require the design and layout of residential care facilities for the elderly to comply with all relevant standards set out in the 'National Quality Standards for Residential Care Settings for Older People in Ireland' published by the Health Information and Quality Authority (February 2009) or the relevant standards for any subsequent national guidelines. Relevant standards are contained within Chapter 19 Development Management Standards.</p>						
<p>Local Development/Community Groups LDG1 To continue to co-operate with statutory bodies, in particular the County Development Board, and other agencies including the voluntary sector, residents, business and environment groups to counter disadvantage and social exclusion, to secure improvements in the quality of community facilities and to promote equality of access to public and social services for all members of the community</p>	C1 C2 B3		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
<p>Arts and Culture in the Community AC1 To develop and improve the physical infrastructure of cultural facilities countywide. AC2 To ensure that all arts and cultural facilities in the ownership and management of the Council are accessible to the wider community and to promote the role of these facilities as focal points for the community. AC3 To continue the physical enhancement programme of arts spaces in libraries, including visual arts and gallery performance and workshop facilities AC 4: To support the existing Heritage Centres by the promotion of further heritage services within the county. AC 5: To develop Kildare Town as a tourism centre within the County and seek the development of a museum in Kildare Town. This museum may be a branch of the National Museum of Ireland and should be centrally located. AC6: To support the provision of a performing arts space in North Kildare.</p>	C1 C2 B3		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
<p>Library Services LB 1 To provide and improve access to library services and provide an integrated approach to the delivery of library, arts, archives and local studies services. LB 2 To provide and improve access for the disabled in both proposed and existing library accommodation.</p>	C1 C2 B3		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
<p>School Facilities ED 1 To co-operate with the Department of Education and Skills, the Vocational Educational Committee for County Kildare and School Management Boards in the identification of sites for school facilities. ED 2 To promote, in conjunction with the relevant authorities, the provision of improved third level facilities within the county.</p>	C1 C2 B3		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			

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<p>Childcare and Pre-School Facilities CPF1 To ensure the provision of childcare facilities in accordance with the 'Childcare Facilities: Guidelines for Planning Authorities' (DoEHLG) and the 'Child Care (Pre-School Services) Regulations 1996 and 1997' , 'Ready, Steady, Play! A National Play Policy' (2004) and any other relevant statutory guidelines which may issue during the life of this Plan. CPF2 To facilitate and encourage the provision of childcare facilities, including community crèche facilities, of an appropriate type and scale, at appropriate locations throughout the county. CPF3 To assess, in conjunction with the Kildare County Childcare Committee, the continuing needs around childcare and related facilities and review progress on provision during the mid term review of this Plan.</p>	<p>C1 C2 B3</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>Health Services HS1 To support and co-operate with promoters or operators of public and private health care facilities by facilitating and encouraging the provision of improved health care facilities in appropriate location,. HS2 To facilitate the integration of appropriate healthcare facilities within new and existing communities. HS3 To support the provision of 'one stop' primary care medical centres and GP practices particularly along public transport routes and at locations easily accessible to members of the wider community. HS 4: To support the provision of after-care facilities for vulnerable groups (such as the elderly, people undergoing addiction treatment, disabilities, etc) within appropriately located and designed Primary Health Centres in order to improve social inclusion across the county.</p>	<p>C1 C2 B3</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>Burial Grounds BG1: To protect the cultural heritage of historical burial grounds within the county and to encourage their management and maintenance in accordance with conservation principles. BG2: To provide or assist in the provision of burial grounds and extensions to existing burial grounds at appropriate locations throughout the county.</p>	<p>C1 C2 B3</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>Objectives</p>						
<p>SCO1: To facilitate the provision of new education and other community facilities within existing towns and villages through the reservation / zoning of land for such uses SCO2: To facilitate the provision of childcare facilities at appropriate locations and to identify appropriate sites for such uses, where deemed appropriate, under the Local Area Plan process. SCO3: To assess the suitability and demand for care facilities for the elderly as part of the review of Local Area Plans and to facilitate the use of appropriate sites within towns and villages for such uses. SCO4: To develop open spaces throughout the county which will encourage a range of recreational and amenity activities that will cater for both active and passive recreation. SCO5: To carry out an audit of leisure facilities and to facilitate local community groups / sporting organisations in the development of sport and recreational facilities, in particular, through land use zoning within the local area plan process as appropriate.</p>	<p>C1 C2 B3</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			

<p>SCO6: To improve the provision for children's play across the county. The provision of such facilities should have regard to the appropriateness of the location, the suitability of the building, the relationship to adjoining uses, the requirement for car parking and the amenity of adjacent uses.</p> <p>SCO7: To develop a partnership approach in funding and developing play opportunities throughout the County and in accordance with any forthcoming Council's Play Policy.</p> <p>SCO8: To improve library provision and services to all settlements / areas in which population and / or demands have increased, subject to the availability of resources and finance.</p> <p>SCO9: To improve fire service provision where required to all settlements / areas in which population and / or demands have increased, subject to the availability of resources and finance.</p> <p>SCO10: To provide or assist in the provision of burial grounds and extension to existing burial grounds, by reservation of land at suitable locations and provision of local authority burial grounds, where feasible.</p> <p>SCO 11: To explore the feasibility of the provision of a regional-type burial ground, Including crematoria and a natural wood cemetery (subject to a site specific feasibility study), at two locations as follows: (i) North-east of the county (ii) Centre of the county</p> <p>SCO 12: To investigate the feasibility of developing lands adjacent to Bodinstown cemetery to facilitate an extension to the existing graveyard.</p>						
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8.14 Chapter 12: Architectural and Archaeological Heritage

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
Aim						
To protect, conserve and manage the archaeological and architectural heritage of the county and to encourage sensitive sustainable development so as to ensure its survival and maintenance for future generations.	CH1 CH2 L1 B2					B1 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2
Protected Structures Policy						
<p>PS 1: To conserve and protect buildings, structures and sites contained on the Record of Protected Structures of special architectural, historic, archaeological, artistic, cultural, scientific, social or technical interest.</p> <p>PS 2: To protect the curtilage of protected structures or proposed protected structures and to refuse planning permission for inappropriate development within the curtilage or attendant grounds of a protected structure which would adversely impact on the special character of the protected structure including cause loss of or damage to the special character of the protected structure and loss of or damage to, any structures of architectural heritage value merit within the curtilage of the protected structure. Any proposed development within the curtilage and/or attendant grounds must demonstrate that it is part of an overall strategy for the future conservation of the entire built heritage complex and contributes positively to that aim.</p> <p>PS 3: To require that new works will not obscure views of principal elevations of protected structures.</p> <p>PS 4: To support the re-development of Clongowes Wood College to ensure the continued and enhanced educational use of this protected structure. Any proposed development within the curtilage and/or attendant grounds must demonstrate that it is part of an overall strategy for the future conservation of the entire complex including the structures, demesne and/or attendant grounds.</p> <p>PS 5: To maintain the views from Castletown House to the River Liffey and to maintain views along paths within the curtilage of the House.</p> <p>PS 6: To maintain the views to and from Carton House and within Carton Demesne.</p> <p>PS 7: To promote best practice and the use of skilled specialist practitioners in the conservation of, and any works to, protected structures. Method statements should make reference to the DoEHLG's Advice Series on how best to repair and maintain historic buildings. As outlined in the DoEHLG's Architectural Heritage Protection Guidelines, a method statement is a useful tool to explain the rationale for the phasing of works. The statement could summarise the principal impacts on the character and special interest of the structure or site and describe how it is proposed to minimise these impacts. It may also describe how the works have been designed or specified to have regard to the character of the architectural heritage'</p>	CH1 CH2 L1 B2					B1 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2

<p>PS 8: To encourage high quality design in relation to planning applications that are made for the construction of extensions or new buildings affecting protected structures or older buildings of architectural merit not included in the RPS.</p> <p>PS 9: To favourably consider the change of use of any structure included on the Record of Protected Structures provided such a change of use does not adversely impact on its intrinsic character.</p> <p>PS 10: To actively encourage uses that are compatible with the character of protected structures. In certain cases, the Planning Authority may relax site zoning restrictions / development standards in order to secure the preservation and restoration of the structure.</p> <p>PS 11: To promote the maintenance and appropriate reuse of buildings of architectural, cultural, historic and aesthetic merit which make a positive contribution to the character, appearance and quality of the streetscape or landscape and the sustainable development of the county. Any necessary works should be carried out in accordance with best conservation practice.</p> <p>PS 12: To promote the retention of original or early building fabric including timber sash windows, stonework, brickwork, joinery, render and slate. Likewise the Council will encourage the re-instatement of historically correct traditional features.</p> <p>PS 13: To retain where practicable a protected structure which has been damaged by fire, and to retain those elements of that structure that have survived (either in whole or in part) and that contribute to its special interest.</p> <p>PS 14: To refuse planning permission for the demolition of any protected structure unless the Council is satisfied that exceptional circumstances exist. The demolition of a protected structure with the retention of its façade will likewise not generally be permitted.</p> <p>PS 15: To require an architectural heritage assessment report, as described in Appendix B of the DoEHLG Architectural Heritage Protection, Guidelines for Planning Authorities, 2004, in all applications involving a protected structure.</p> <p>PS 16: To protect and retain important elements of the built heritage including historic gardens, stone walls, landscapes and demesnes, and curtilage features.</p> <p>PS 17: To encourage appropriate change of use and reuse of industrial buildings, provided such a change does not seriously impact on the intrinsic character of the structure and that all works are carried out in accordance with best conservation practice.</p>						
<p>Vernacular Architecture Policy</p>						
<p>VA 1: To encourage the protection, retention, appreciation and appropriate revitalisation of the vernacular heritage of the county.</p> <p>VA 2: To resist the demolition of vernacular architecture, in particular thatched cottages and farmhouses and to encourage their sensitive reuse having regard to the intrinsic character of the structure.</p> <p>VA 3: To have regard to guidance in "The Thatched Houses of Kildare" and "Reusing Farm Buildings, A Kildare Perspective" published by Kildare County Council in assessing planning applications relating to thatched cottages and traditional farm buildings.</p> <p>VA 4: To preserve the character and setting (e.g. gates and gate piers, courtyards etc.) of vernacular buildings where deemed appropriate by the planning authority.</p> <p>VA 5: To protect (through the use of ACAs, the RPS and in the normal course of development management) vernacular buildings where they contribute to the character of areas and/or where they are rare examples of a structure type.</p> <p>VA 6: To ensure that both new build, and extensions to vernacular buildings are of an appropriate design and do not detract from the building's character.</p>	<p>CH1 CH2 L1 B2</p>					<p>B1 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2</p>

<p>VA 7: To seek the repair and retention of traditional timber and/or rendered shop fronts and pub fronts, including those that may not be protected structures.</p>					
<p>Architectural Conservation Areas (ACAs) Policy</p>					
<p>ACA 1 To investigate the designation of further ACAs at appropriate locations throughout the county to include Celbridge, Kildare Town, Johnstown, Ballymore Eustace, Kilcullen, Brannockstown , Rathmore, Clane and Newbridge. ACA 2 To ensure that any development, modifications, alterations, or extensions within an ACA are sited and designed appropriately, and are not detrimental to the character of the structure or to its setting or the general character of the ACA</p>	<p>CH1 CH2 L1</p>				<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2</p>
<p>Archaeological Heritage Policy</p>					
<p>AH 1: To have regard to the Record of Monuments and Places (RMP), and the Urban Archaeological Survey, when assessing planning applications for development. No development shall be permitted in the vicinity of a recorded feature, where it detracts from the setting of the feature or which is injurious to its cultural or educational value. AH 2: To seek to protect and preserve archaeological sites, which have been identified subsequent to the publication of the Record of Monuments and Places (RMP). AH 3: To ensure that development in the vicinity of a site of archaeological interest is not detrimental to the character of the archaeological site or its setting by reason of its location, scale, bulk or detailing and to ensure that such proposed developments, are subject to an archaeological assessment. Such an assessment will seek to ensure that the development can be designed in such a way as to avoid or minimise any potential effects on the archaeological heritage. AH 4: To protect historic burial grounds within the county and encourage their maintenance in accordance with conservation principles in co-operation with the Historic Monuments Advisory Committee and National Monuments Section of the Department of Environment, Heritage and Local Government (DoEHLG). AH 5: To ensure that disturbance, removal and alteration of the line of town defences are suitably safeguarded within the historic towns and settlements of County Kildare. AH 6: To retain where possible the existing street layout, historic building lines and traditional plot widths where these derive from medieval or earlier origins AH 7: To promote and support in partnership with National Monuments Section of the Department of Environment, Heritage and Local Government (DoEHLG), the concept of Archaeological Landscapes where areas contain several Recorded Monuments. AH 8: To encourage, where practicable, the provision of public access to sites identified in the Record of Monuments and Places under the direct ownership, guardianship or control of the Council and/or the State. AH 9: To encourage the provision of signage to publicly accessible recorded monuments.</p>	<p>CH1 L1 B2</p>				<p>B1 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH2</p>
<p>Country Houses and Demesnes Policy</p>					
<p>CH 1. To promote appreciation of the landscape and historical importance of traditional and historic gardens, demesnes and parks within Kildare in general, and particularly where they constitute an important setting to a protected structure. CH 2. To have regard to the historic gardens and designed landscape sites in County Kildare identified in the National Inventory of Architectural Heritage. CH 3. To encourage conservation, renewal, and improvement which enhances the character and the setting of parks, gardens, and demesnes of historic interest within the county.</p>	<p>CH1 CH2 L1 B2</p>				<p>B1 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2</p>

<p>CH 4. To cooperate with owners in the protection, promotion and enhancement of heritage gardens and parks in the County, to support public awareness, enjoyment of and access to these sites and to seek the cooperation and assistance of other interested parties, including Government Departments and state agencies, in this regard.</p> <p>CH 5. To designate Architectural Conservation Areas where considered appropriate to preserve the character of a designed landscape.</p> <p>CH 6. To preserve, protect and where necessary encourage the use of, heritage/ traditional varieties of plants and trees that form part of the local/ regional biodiversity resource, and that contribute to local identity.</p>						
Architectural and Archaeological Objectives						
<p>AAO 1: To review and amend on an ongoing basis the Record of Protected Structures and make additions, deletions and corrections as appropriate over the period of this plan.</p> <p>AAO 2: To prepare a buildings at risk register and to prevent the endangerment of protected structures, historic or vernacular buildings.</p> <p>AAO 3: To prepare a Local Area Plan for Castletown Demesne and in conjunction with relevant bodies to protect the views as outlined in Objective AAO4 and map 12.10.</p> <p>AAO 4: To protect the views at Castletown House</p> <ul style="list-style-type: none"> -axial views between the Castletown House and Conolly's Folly; -between Castletown House and the Wonderful Barn; -the views from the House to the river and across the back parterre; - views across the river and to the linked demesnes of Donaghcumper and St. Wolstans - the views from the main avenue to the river towards Castletown, and up and down the river to Celbridge and New Bridges. <p>AAO 5 To preserve the views to and from Carton House within the Demesne walls, as outlined in Map 12.9.</p> <p>AAO 6: To safeguard the amenities of Castletown including the main avenue, Donaghcumper, St Wolstans and River Liffey environs as shown on Map 12.10.</p> <p>AAO 7: To prepare a character appraisal and area specific policy for each ACA to preserve, protect and enhance the character of these areas.</p> <p>AAO 8: To carry out an audit and assess the condition of all protected structures within the Council's ownership and devise a management plan for these structures.</p> <p>AAO 9: To assess the demesnes within Kildare and promote the conservation of their essential character, both built and natural, while allowing for appropriate re-use.</p> <p>AAO 10: To identify and retain good examples of historic street furniture in situ e.g. cast-iron postboxes, water pumps, signage, street lighting, kerbing and traditional road and street surface coverings.</p> <p>AAO 11: To produce detailed guidance notes and provide advice to the owners, public, developers, public bodies, groups and associations with regard to Protected Structures, ACAs, conservation grant schemes and architectural heritage in general.</p> <p>AAO 12: To co-operate with Waterways Ireland in the management, maintenance and enhancement of the Royal Canal and Grand Canal and associated structures/features.</p> <p>AAO 13: To carry out an audit of all historic rail and road bridges and disused railway lines in Kildare and liaise with Iarnrod Eireann and the National Roads Authority regarding same.</p> <p>AAO 14: To safeguard sites, features and objects of archaeological interest generally and to secure the preservation (in-situ or by record) of all archaeological monuments included in the Record of Monuments and</p>	<p>CH1 CH2 L1 B2</p>					<p>B1 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2</p>

<p>Places as established under Section 12 of the National Monuments (Amendment) Act 1994, and their settings.</p> <p>AAO 15: To ensure that in the event of a planning application being granted for development within the curtilage of a protected structure, the proposed works to the protected structure should occur in the first phase of the development to prevent endangerment, abandonment and dereliction of the structure.</p> <p>AAO 16: To require that planning applications take into consideration the impacts of the development on their landscapes and demonstrate that the development proposal has been designed to take account of the heritage resource of the landscape.</p> <p>AAO 17: To carry out field surveys of Industrial Archaeological types in the County and make recommendations for their protection.</p>						
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8.15 Chapter 13: Natural Heritage / Biodiversity

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
<p>Aim</p> <p>To protect, conserve and manage natural heritage including sites designated at national and EU level and protected species and habitats outside of designated sites and to secure conservation objectives in the interests of the proper planning and sustainable development of the county.</p>	<p>B1 B2 B3 HH1 S1 M1 M2 W1 W2 W3 L1</p>					<p>C1 C2 CH1 CH2</p>
<p>Natural Heritage Policies</p> <p>Heritage Plan Policy</p> <p>HB 1: To implement the key objectives and associated actions identified in the County Heritage Plan and Revisions thereof</p> <p>Natural Heritage Policies</p> <p>NT 1: To facilitate, maintain and enhance as far as is practicalable the natural heritage and amenity of the county by seeking to encourage the preservation and retention of woodlands, hedgerows, stone walls, rivers streams and wetlands. Where the removal of such features is unavoidable appropriate measures to replace like with like should be considered, subject to safety considerations.</p> <p>NT 2: To encourage the protection of historic hedgerows or significant hedgerows which serve to link habitat areas to each other and the surrounding countryside.</p> <p>NT 3: To promote the carrying out of basic habitat assessments to inform the design of new developments in order to ensure that proposals for development integrate the protection and enhancement of biodiversity and landscape features wherever possible, by minimising adverse impacts on existing habitats (whether designated or not), by including mitigation and/or compensation measures, as appropriate,</p>	<p>B1 B2 B3 HH1 S1 M1 M2 W1 W2 W3 L1 CH1 CH2</p>					<p>C1 C2</p>

<p>NT 4: To require compliance with Article 10 of the Habitats Directive with regard to encouraging the management of features in the landscape which are of major importance for wild fauna and flora. Such features are those which, by virtue of their linear and continuous structure (such as rivers with their banks or the traditional systems for marking field boundaries) or their function as stepping stones (such as ponds or small woods), are essential for the migration, dispersal and genetic exchange of wild species.</p> <p>NT 5: To request the National Parks and Wildlife Service to prioritise the preparation of Management Plans for Natura 2000 Sites which are located within the county.</p> <p>NT 6: To encourage access to our natural heritage and to promote access where it is practicable and does not affect the integrity of protected sites or conflict with their conservation objectives</p>						
<p>Designated Sites and Species</p> <p>DS 1: To maintain, protect and where possible enhance the conservation value of existing European and national designated sites (NHA, SAC and SPA) in the county and any additional sites that may be proposed for designation during the period of this Plan.</p> <p>DS 2: To have regard to the policies and guidance of the National Parks and Wildlife Service of the DoEHLG in respect of proposed development where it is possible that such development may impact on a designated european or national site or a site proposed for designation.</p> <p>DS 3: To ensure the impact of proposed development on a pNHA is assessed by requiring the submission of an Ecological Impact Assessment (EcIA) prepared by a suitably qualified professional, which should accompany planning applications and council developments</p> <p>DS 4: To ensure an Appropriate Assessment in accordance with Article 6(3) and Article 6(4) of the Habitats Directive and in accordance with DoEHLG guidance, is carried out in respect of any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect on a Natura 2000 site, either individually or in combination with other plans or projects.</p> <p>DS 5: To ensure that projects which may give rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites will not be permitted (either individually or in combination with other plans or projects) unless for reasons of overriding public interest.</p> <p>DS 6: To ensure that development does not have a significant adverse impact on plant species, animals and birds listed in the Flora Protection Order, Wildlife Act 1976-2000, those listed in Annex IV of the Habitats Directive, and those listed in Annex I of the Birds Directive.</p> <p>DS 7: To consult with the National Parks and Wildlife Service when undertaking, approving and authorising development which is likely to affect plant, animal or bird species protected by law. In the event of a proposed development impacting on a site known to be a breeding or resting site of species listed in Habitats Regulations a derogation licence, issued by DoEHLG may be required.</p>	<p>B1 B2 B3 HH1 S1 M1 M2 W1 W2 W3 L1</p>					<p>C1 C2 CH1 CH2</p>
<p>Trees, Woodlands and Hedgerows</p> <p>TW 1: To promote the protection of trees, in particular native and broadleaf species specimen trees which are of conservation and/or amenity value and to incorporate these into the design of new developments.</p> <p>TW 2: To promote the environmentally sensitive management of hedges in accordance with best practice.</p> <p>TW 3: To protect and manage existing woodlands, trees and hedgerows which are of amenity or biodiversity value and/or contribute to landscape character. Proper provision must be made for their protection and management when undertaking, approving or authorising development. A management plan should be provided to ensure that trees are adequately protected during development.</p>	<p>B2 S1 L1 CH1</p>					<p>B1 B3 HH1 M1 M2 W1 W2 W3 C1 C2 CH2</p>

<p>TW 4: To ensure that hedgerow removal, to facilitate development, is kept to an absolute minimum and, where unavoidable, a requirement for mitigation planting will be required comprising a hedge of similar length and species composition to the original, established as close as is practicable to the original and where possible linking in to existing adjacent hedges. Native plants of a local provenance should be used for any such planting.</p> <p>TW 5: To restrict the cutting of hedges during the bird-nesting season (1st March until 31st August), except in certain legally defined circumstances, in accordance with the provisions of the Wildlife (Amendment) Act 2000.</p> <p>TW 6: To recognise the biodiversity and archaeological importance of townland boundaries, including hedgerows, and promote their protection and retention.</p> <p>TW 7: To protect, where possible, the trees which are considered an important component of demesne landscapes.</p>					
<p>Invasive Non-Native Species</p> <p>IS 1: To promote best practice with respect to minimising the spread of invasive species in the carrying out of development.</p> <p>IS 2: To support measures for the prevention and / or eradication of invasive species as appropriate within the county as opportunities and resources allow. Targeted invasive species control should be informed by current distribution of species, degree of threat posed and resources available to control and/or eradicate them.</p>	<p>B1 B2 B3 W1 L1</p>				<p>HH1 S1 M1 W2 W3 M2 C1 C2 CH1 CH2</p>
<p>Inland Waterways- River, Streams, Canals, Wetlands and Groundwater.</p> <p>IW 1: To require the submission of an Ecological Impact Assessment where deemed necessary by the Planning Authority (and where necessary an Appropriate Assessment in relation to Natura 2000 sites) including bat and other surveys for developments along river, stream and canal corridors. These assessments should where appropriate suggest a minimum buffer of undisturbed vegetation to be retained to mitigate against pollution risks, reduce flooding potential, maintain habitats and provide an ecological corridor. This buffer zone shall, where possible be maintained free of development and hard surfaces.</p> <p>IW 2: To seek during redevelopment the creation of a riparian buffer strip along either side of all watercourses where practicable.</p> <p>IW 3: To ensure that expert advice is sought in developing lighting proposals along river, stream and canal corridors, where possible and where these are not in conflict with bat species, in order to mitigate impacts of lighting on bats and other species</p> <p>IW 4: To require that runoff from a developed area will not result in deterioration of downstream watercourses or habitats, and that pollution generated by a development is treated within the development area prior to discharge to local watercourses.</p> <p>IW 5: To protect rivers, streams and other water courses and, wherever possible, maintain them in an open state capable of providing suitable habitats for fauna and flora while discouraging culverting or realignment.</p> <p>IW 6: To consult, as appropriate, with the relevant Fisheries Board in relation to any development that could potentially impact on the aquatic ecosystems and associated riparian habitats.</p> <p>IW 7: To ensure, where possible, residential and commercial developments use sustainable drainage systems in accordance with best current practice.</p> <p>IW 8: To ensure that floodplains and wetlands, where appropriate, are retained for their biodiversity and</p>	<p>B1 B2 B3 HH1 S1 M1 M2 W1 W2 W3 L1</p>				<p>C1 C2 CH1 CH2</p>

<p>flood protection value.</p> <p>IW 9: To promote the amenity, ecological and educational value of the rivers within the County while at the same time ensuring the conservation of its fauna and flora, and the protection of the quantity and quality of the water supply</p>						
<p>G 1: To require applications which require an EIS to have regard to the Irish Geological Institute "Geology in EIS – A Guide", Sept 2002.</p> <p>G 2: To protect Geological Natural Heritage Areas that become designated during the life time of the Plan</p> <p>G3: To encourage, where practicable, and when not in conflict with ownership rights, access to geological and geomorphological features identified in the Plan.</p>	<p>B1 B2 B3 HH1 S1 M1 M2 W1 W2 W3 L1</p>					<p>C1 C2 CH1 CH2</p>
<p>Natural Heritage / Biodiversity Objectives</p>						
<p>NHO 1: To identify and protect, in co-operation with the relevant statutory agencies and other relevant groups, sites of local biodiversity importance (Local Biodiversity Areas), not otherwise protected by legislation.</p> <p>NHO 2: To encourage the development of proposals for new woodlands utilising funding available through schemes such as the Neighbour Wood and Native Woodland Schemes.</p> <p>NHO 3: To undertake a study to survey, document and map significant mature trees and groups of trees of high amenity or biodiversity value within the county at appropriate locations subject to funding.</p> <p>NHO 4: To investigate the use of Tree Preservation Orders under the Planning Act 2000, as amended, to protect significant trees in the county as identified in tree surveys.</p> <p>NHO 5: To implement the actions contained in the County Biodiversity Plan 2009-2013 through the identification of priority actions subject to the availability of funding.</p> <p>NHO 6: To integrate biodiversity considerations into Local Area Plans, programmes and activities.</p> <p>NHO 7: To identify, conserve and provide guidance on development in important local biodiversity areas within the county.</p> <p>NHO 8: To conduct surveys to identify mature trees/groups of trees and mature hedgerows of high amenity / biodiversity value at appropriate locations throughout the county.</p> <p>NHO 9: To support measures for the prevention and/or eradication of invasive species as appropriate within the county as opportunities and resources allow.</p> <p>NHO10: To carry out habitat mapping on a phased basis (including wetlands) within the plan area. This habitat mapping will identify Local Important Biodiversity areas in co-operation with NPWS, DoEHLG and Inland Fisheries Ireland.</p> <p>NHO11: To identify suitable buffer zones between designated ecological sites and areas zoned for development.</p>	<p>B1 B2 B3 HH1 S1 M1 M2 W1 W2 W3 L1</p>					<p>C1 C2 CH1 CH2</p>

8.16 Chapter 14: Landscape, Recreation and Amenities

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
Aim						
To provide for the protection, management and enhancement of the landscape of the county and to ensure that development does not disproportionately impact on the landscape character areas, scenic routes, or protected views through the implementation of appropriate policies and objectives to ensure the proper planning and sustainable development of the area.	B1 B2 B3 CH1 CH2 L1					HH1 S1 W1 W2 W3 M1 M2 C1 C2
Policies						
<p>General Landscape Policies</p> <p>LA 1: To ensure that consideration of landscape sensitivity is an important factor in determining development uses. In areas of high landscape sensitivity, the design, type and the choice of location of proposed development in the landscape will also be critical considerations.</p> <p>LA 2: To protect and enhance the county's landscape, by ensuring that development retains, protects and, where necessary, enhances the appearance and character of the existing local landscape.</p> <p>LA 3: To require a Landscape/Visual Impact Assessment to accompany significant proposals, located within or adjacent to sensitive landscape. This assessment will provide details of proposed mitigation measures to address negative impacts.</p> <p>LA 4: To seek to ensure that local landscape features, including historic features and buildings, hedgerows, shelter belts and stone walls are retained, protected and enhanced where appropriate, so as to preserve the local landscape and character of an area, whilst providing for future development.</p> <p>LA 5: To prohibit advertising structures and hoardings in the open countryside. The Council will use its enforcement powers under the Planning Acts to secure the removal of unauthorised advertising signs and hoardings including those that are affixed to trailers, wheeled vehicles etc.</p> <p>LA 6: To preserve, where permissible, the open character of commonage.</p>	B1 B2 B3 CH1 CH2 L1					HH1 S1 W1 W2 W3 M1 M2 C1 C2

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<p>Lowland Plains and Boglands Character Area Policies</p> <p>LL 1: To recognise that the lowlands are made up of a variety of working landscapes, which are critical resources for sustaining the economic and social well-being of the county.</p> <p>LL 2: To continue to permit development that can utilise existing structures, settlement areas and infrastructure, whilst taking account of the visual absorption opportunities provided by existing topography and vegetation.</p> <p>LL 3: To recognise that this lowland landscape character area includes areas of significant landscape and ecological value, which are worthy of protection.</p> <p>LL 4: To recognise that intact boglands are critical natural resources for ecological and environmental reasons.</p> <p>LL 5: To recognise that cutaway and cut-over boglands represent degraded landscapes and/or brownfield sites and thus are potentially robust to absorb a variety of appropriate developments.</p>	<p>B1 B2 B3 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>Upland Character Areas incl. East Kildare Uplands (Area of High Amenity))</p> <p>LU 1: To ensure that development will not have a disproportionate visual impact (due to excessive bulk, scale or inappropriate siting) and will not significantly interfere or detract from scenic upland vistas, when viewed from areas nearby, scenic routes, viewpoints and settlements.</p> <p>LU 2: To ensure that developments on steep slopes (i.e. >10%) will not be conspicuous or have a disproportionate visual impact on the surrounding environment as seen from relevant scenic routes, viewpoints and settlements.</p> <p>LU 3: To facilitate, where appropriate, developments that have a functional and locational requirement to be situated on steep or elevated sites (e.g. reservoir, telecommunication masts or wind energy structures) where residual adverse visual impacts are minimised or mitigated.</p> <p>LU 4: To maintain the visual integrity of areas, which have retained a largely undisturbed upland character.</p> <p>LU 5: To have regard to the potential for screening vegetation when evaluating proposals for development within the uplands.</p>	<p>B1 B2 B3 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>Transitional Character Areas</p> <p>TA 1: To maintain the visual integrity of areas, which have retained an upland character.</p> <p>TA 2: To recognise that the lowlands in the transitional area are made up of a variety of working landscapes that are critical resources for sustaining the economic and social well-being of the county.</p> <p>TA 3: To continue to permit development that can utilise existing infrastructure, whilst taking account of local absorption opportunities provided by the landscape, landform and prevailing vegetation.</p> <p>TA 4: To continue to facilitate appropriate development, in an incremental and clustered manner, where feasible, that respects the scale, character and sensitivities of the local landscape, recognising the need for sustainable settlement patterns and economic activity within the county.</p>	<p>B1 B2 B3 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>Water Corridors (Rivers and Canals) (Areas of High Amenity)</p> <p>WC 1: To seek to locate new development in the water corridor landscape character areas towards existing structures and mature vegetation.</p> <p>WC 2: To facilitate appropriate development that can utilise existing structures, settlement areas and infrastructure, whilst taking account of the visual absorption opportunities provided by existing topography and vegetation.</p> <p>WC 3: To control development that will adversely affect the visual integrity of distinctive linear sections of water corridors and river valleys, and open floodplains.</p> <p>WC 4: To co-operate with the DoEHLG in the protection and conservation of both Canals and the River</p>	<p>B1 B2 B3 CH1 CH2 L1 W1 W3 M1 M2 HH1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			

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<p>Barrow, designated as a pNHA and cSAC respectively and in the sections of the River Liffey designated as a pNHA.</p> <p>WC 5: To promote the amenity, ecological and educational value of the canals and rivers within the county while at the same time ensuring the conservation of their fauna and flora, and protection of the quantity and quality of the water supply.</p> <p>WC 6: To support and promote an extension of the proposed Special Amenity Area Order for the Liffey Valley from Lucan to Leixlip (which is envisaged by the Dublin Local Authorities) to other parts of the Valley within County Kildare.</p> <p>WC 7: To explore the establishment of the Barrow Valley and the Canals as Areas of Special Amenity, as per section 202 of the Planning and Development Act, 2000 as amended.</p>						
<p>The Curragh and Environs (Area of High Amenity)</p> <p>CU 1: To restrict development, particularly on the Curragh edge, or where it obtrudes on the skyline as viewed from the Curragh Plains and to avoid the over development of the edge of the Curragh.</p> <p>CU 2: To ensure that fencing, earth works or planting do not conflict with the intrinsic quality of the landscape.</p> <p>CU 3: To co-operate with the Department of Defence, the DoEHLG, the racehorse industry, the owners of sheep grazing rights and the various interests currently with rights to the Curragh in the protection and conservation of the Curragh, designated as a pNHA.</p> <p>CU4: To restrict the development of vertical structures within the Curragh Plains including advertising signs, hoardings, fencing etc which create visual clutter and disrupt the open nature of the Plains.</p>	<p>B1 B2 B3 CH1 CH2 L1</p>					<p>HH1 S1 W1 W2 W3 M1 M2 C1 C2</p>
<p>Pollardstown Fen (Area of High Amenity)</p> <p>PF1: To restrict development within the immediate environs of the Fen which may have a negative impact on the water quality and water quantity of the Fen.</p> <p>PF 2: To co-operate with the DoEHLG and other statutory bodies in the protection and conservation of the Fen, a designated cSAC and the immediate environs of the Fen.</p> <p>PF 2: To promote the amenity, ecological and educational value of the Pollardstown Fen Area</p>	<p>B1 B2 B3 CH1 L1 S1 W1 W2</p>					<p>HH1 W3 M1 M2 C1 C2 CH2</p>
<p>Scenic Routes Policies</p> <p>SR 1: To protect views from designated scenic routes by avoiding any development that could disrupt the vistas or disproportionately impact on the landscape character of the area thereby affecting the scenic and amenity value of the views.</p> <p>SR 2: To review and update all Scenic Routes and Views in the County during the lifetime of the Plan (Tables 14.2 – 14.7 refer).</p>	<p>B1 B2 B3 CH1 CH2 L1</p>					<p>HH1 S1 W1 W2 W3 M1 M2 C1 C2</p>
<p>Water Course and Canal Corridor Views</p> <p>WV 1: To curtail any further development along the canal and river banks that could cumulatively affect the quality of a designated view.</p> <p>WV 2: To preserve and enhance the scenic amenity of the river valleys and canal corridors and the quality of the vistas available from designated views.</p> <p>WV 3: To restrict development on floodplains of the rivers in the county.</p> <p>WV 4: To prevent inappropriate development along canal and river banks and to preserve these areas in the interests of biodiversity, built and natural heritage and amenity, by creating or maintaining buffer zones, where development should be avoided.</p>	<p>B1 B2 B3 CH1 CH2 L1 W1 W3 HH1</p>					<p>S1 W2 M1 M2 C1 C2</p>
<p>Hill Views</p>	<p>B1 B2 B3</p>					<p>HH1 S1</p>

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<p>HV 1: To protect the upland Landscape Character Areas as identified in the Landscape Character Assessment and to ensure that development on or in the vicinity of the upland areas does not disproportionately affect views to and from the hills, or impact on the landscape character of the area as a whole.</p>	<p>CH1 CH2 L1</p>				<p>W1 W2 W3 M1 M2 C1 C2</p>
<p>Landscape Objectives LO 1: To have regard to the Landscape Sensitivity Classification of sites in the consideration of any significant development proposals. LO 2: To ensure landscape assessment will be an important factor in all land-use proposals. LO 3: To investigate the feasibility of preparing a Landscape Conservation Area Assessment within the county to identify any area(s) or place(s) within the county as a Landscape Conservation Area in accordance with the Planning and Development Acts. LO 4: To protect the visual and scenic amenities of County Kildare's built and natural environment. LO 5: To preserve the character of all important views and prospects, particularly upland, river, canal views, views across the Curragh, views of historical or cultural significance (including buildings and townscapes) and views of natural beauty. LO 6: To preserve and protect the character of those views and prospects obtainable from scenic routes identified in this Plan, listed in Table 14.2 and identified on Map 14.3. LO 7: To encourage appropriate landscaping and screen planting of developments along scenic routes. Where scenic routes run through settlements, street trees and ornamental landscaping may also be required. LO 8: To prepare further detailed guidance in relation to views and prospects available along scenic routes occurring within the boundaries of Local Area Plans. LO 9: To plant gateway roundabouts within the County with innovative design themes, having regard to traffic safety. LO10: To review and update the County Landscape Character Assessment in accordance with all relevant legislation and guidance documents.</p>	<p>B1 B2 B3 CH1 CH2 L1 W1</p>				<p>HH1 S1 W1 W2 W3 M1 M2 C1 C2</p>
<p>Recreation and Amenity Aim</p>					
<p>To develop recreation areas and the amenities of County Kildare in an equitable, environmental and sustainable way.</p>	<p>B1 B2 B3 CH1 CH2 L1 W1 W3 M1 M2 HH1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>		
<p>Policy</p>					
<p>Countryside Recreation CR 1: To support the diversification of the rural economy through the development of the recreational potential of the countryside in accordance with the National Countryside Recreation Strategy. CR 2: To support the development of woodland areas in conjunction with proposed development and on Council owned lands. CR 3: To develop and implement a County Walking Strategy within the lifetime of the Plan, in consultation with statutory bodies and landowners, and in accordance with recommendations of the County Kildare Walking Routes Project, 2005. This strategy will seek to identify established walking routes in the county, evaluate these routes and make recommendations for their promotion CR 4: To develop, in conjunction with the Irish Sports Council and adjoining Local Authorities, long</p>	<p>C1 C2 B3</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>		

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<p>distance walking and cycling routes.</p> <p>CR 5: To investigate the possibility of developing long distance walking routes within the lifetime of the Plan, along disused sections of railway lines (e.g. Tullow line) and canals in the County (Corbally Line, Blackwood Feeder, and Mountmellick Line).</p> <p>CR 6: To develop in conjunction with local communities short walking routes, such as heritage trails and Slí Na Sláinte routes.</p> <p>CR 7: To facilitate, where appropriate the provision of cycle-ways or walkways along the extent of the canals and watercourses in the county in co-operation with landowners, Waterways Ireland, DoEHLG and other Local Authorities.</p> <p>CR 8: To explore the feasibility of developing the route of the Slí Mór and Slí Dála as long distance walking routes in co-operation with the Irish Sports Council, Fáilte Ireland and other Local Authorities.</p> <p>CR 9: To promote the expansion of cycle facilities throughout the county and to liaise with Fáilte Ireland, the Sports Council, the National Transportation Authority and other bodies in the development of cycling touring routes throughout the county and adjoining counties, in particular in areas of high amenity.</p> <p>CR 10: To investigate the possibility of providing appropriately designed quality signage for walking and cycling routes throughout the county.</p> <p>CR 11: To support and promote public access to upland areas, rivers, lakes and other natural amenities which do not endanger the conservation of such natural amenities.</p> <p>CR 12: To facilitate the development of a walking route between Ballymore Eustace, Golden Falls, Poulaphouca, Russborough and Barrettstown in cooperation with landowners and government agencies.</p> <p>CR13: To encourage and support the development of water safety awareness initiatives in association with Kildare Water Safety and related statutory bodies.</p> <p>CR14: To seek to provide car parks for walkers at appropriate access points to amenities, where feasible, and subject to compliance with the requirements arising from the Habitats Directive.</p>						
<p>Public Rights of way Policy</p> <p>RW 1: To preserve, protect, promote and improve for the common good, existing rights of way which contribute to general amenity, particularly those which provide access to archaeological sites and National Monuments and amenities, including upland areas and water corridors, and to create new ones or extend existing ones where appropriate either by agreement with landowners or through the use of compulsory powers, without adversely affecting landscape conservation interests.</p> <p>RW 2: To seek to ensure that new development will not have a negative impact on established walking routes/ public rights of way, in particular in areas of high amenity and along the inland waterways of the county.</p> <p>RW 3: To identify existing rights of way and walking routes prior to any new planting, new infrastructural development and any new energy / telecommunications or golf course developments.</p> <p>RW 4: To seek to improve the condition and appearance of existing rights of way as part of a proposed development where the applicant has confirmed legal status of existing rights of way.</p>	<p>C1 C2 B3 B1 B2 CH1 CH2 L1</p>					<p>W1 W2 W3 M1 M2</p>
<p>Open Space Policy</p>	<p>C1 C2 B3</p>		<p>B1 B2</p>			<p>M1</p>

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<p>OS 1: To implement the recommendations of the Kildare Open Space Strategy, when adopted, and make provision for a hierarchy of parks, open spaces and outdoor recreation areas within town and villages so that the population can participate in a wide range of active and passive recreational pursuits within easy reach of their homes and places of work.</p> <p>OS 2: To require the provision of good quality, well located and functional open space in new residential developments to cater for all age groups.</p> <p>OS 3: To preserve, manage and maintain to a high standard the existing public parks and open spaces in the county.</p> <p>OS 4: To develop and improve physical linkages and connections between the network of open spaces.</p> <p>OS 5: To retain, where appropriate, areas adjacent to waterways as a linear park which may link into the wider open space network.</p>	<p>B1 B2 L1 W3 W1 W2 HH1 S1 M2 CH1 CH2</p>					
<p>Recreation and Amenity Policy</p> <p>RA 1: To zone lands for sports and recreational amenities within Local Area Plans in accordance with established local demands and needs.</p> <p>RA 2: To prohibit the development of areas zoned open space/amenity or areas which have been indicated in a previous planning application as being open space.</p> <p>RA 3: To avoid the loss of an existing amenity or recreational facility through any development proposal, unless:</p> <p>(i) The facility or amenity was established as an interim use pending the completion of an improved or satisfactory replacement facility, or</p> <p>(ii) The applicant can demonstrate that there is an insufficient local demand for the existing, or</p> <p>(iii) Satisfactory alternative provision can be made by the applicant prior to the commencement of development.</p> <p>RA 4: To require the provision of recreational facilities concurrent with new residential developments as deemed necessary by the Council. Types of facilities to be provided will be dependent upon factors such as the size of a given development proposal and the availability of facilities (if any) in the area</p> <p>RA 5: To seek improvement in the range, quality and capacity of sporting and recreational facilities through initiatives in partnership with community groups and sporting organisations and to cater for all age-groups and abilities.</p> <p>RA 6: To encourage the clustering of sport and community facilities and to encourage them to be multi-functional and not used exclusively by any one group.</p> <p>RA 7: To consider the future needs of sporting facilities i.e. capacity, access, community facilities, in the provision of new or in the expansion of existing sporting facilities.</p> <p>RA 8: To promote town and village centre sites for sports and recreational facilities and to facilitate out of town/village sites, where appropriate, (following a sequential test) in servicing large hinterland communities, where the site includes comprehensive off road parking, conforms to all safety guidelines and is in accordance with the proper planning and sustainable development of the area.</p> <p>RA 9: To complete the swimming pool programme which will meet the needs of the whole county through the provision of a north Kildare swimming pool within the Leixlip Amenities Campus.</p> <p>RA 10: To seek to promote additional non mainstream facilities for children and teenagers through the provision of suitable recreation and amenity facilities in all major towns and villages.</p>	<p>C1 C2 B3 B1 B2 L1 W3 W1 W2 HH1 S1 M2 CH1 CH2</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>Allotments Policy</p> <p>AL 1: To facilitate the development of allotments of an appropriate scale, and in accordance with current guidelines, which meet the following criteria:</p>	<p>C1 C2 B3 B1 B2 L1</p>					<p>W3 W1 W2 HH1 S1 M2</p>

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(i) The lands are situated within or immediately adjacent to the edge of towns/villages; (ii) The lands are easily accessible to the residents of a particular town or village; and (iii) Adequate water supply and adequate parking facilities can be provided						CH1 CH2
Green Infrastructure Policy GI 1: To facilitate and promote the development of green infrastructure which allows for the development of active and passive recreation and the protection and enhancement of heritage and landscape features. GI 2: To make provision for habitat creation/maintenance and facilitate biodiversity by encouraging the development of linear parks, nature trails, wildlife corridors and urban woodlands.	C1 C2 B3 B1 B2 L1 W3 W1 W2 HH1 S1 M2 CH1 CH2		B1 B2			M1
Liffey Valley Park LV 1: To progress the implementation of the flagship projects identified in the Towards a Liffey Valley Park Strategy. LV 2: To pursue the creation of a Liffey Valley Regional Park together with Fingal and South Dublin County Councils within the lifetime of the Plan	C1 C2 B3 B1 B2 L1 W3 W1 W2 HH1 S1 M2 CH1 CH2		B1 B2			M1
Children's Play Areas CP 1: To develop and implement a Play Policy for County Kildare which will set out a strategy for the provision, resourcing and implementation of improved opportunities for children to play. CP 2: To provide play facilities adjacent to other community and childcare facilities, in so far as is possible, and to ensure their proper management and maintenance. CP 3: To seek the provision and suitable management of children's play areas in new housing developments and to implement measures to find suitable sites for their provision to serve existing residential areas	C1 C2 B3		B1 B2 W1 CH1 CH2 L1			HH1 S1 W2 W3 M1 M2
Recreation and Amenity Objectives						
RAO 1 To facilitate the provision of a variety of amenities within the county, including natural amenities, walking routes, cycling routes, and sports facilities. RA O2: To develop and implement a county walking strategy in consultation with statutory bodies and landowners and in accordance with the recommendations of the County Kildare Walking Routes Project, 2005 RAO 3: To prepare a Sports and Recreation Strategy for the county in co-operation with Kildare Sports Partnership, during the lifetime of this Plan. RAO 4: To develop a Play Policy for County Kildare. RAO 5: To complete the sports, arts and community facility audit for the county to inform future requirements over the period of this Plan. RAO 6: To designate or zone, through the Local Area Plan process, suitable active and passive open space in all settlements, commensurate with their existing and future needs . RAO 7: To require passive and active open space to be provided in tandem with new residential development. RAO 8: To protect and develop substantial connected networks of green spaces in urban areas and urban fringe areas adjacent to the countryside to serve the growing communities in urban centres. RAO 9: To identify flagship projects for the River Liffey Valley from Celbridge to Ballymore Eustace as recommended in the report Towards a Liffey Valley Park Strategy. RAO 10: To investigate the feasibility of creating a pedestrian link between the Liffey Valley and the Wicklow	B1 B2 B3 CH1 CH2 L1 W1 W3 M1 M2 HH1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			

<p>Mountains and Wicklow Way in consultation with Wicklow County Council as recommended in the report Towards a Liffey Valley Park Strategy. RAO 11: To preserve the pedestrian link between the River Liffey and the Grand Canal at the Leinster Aqueduct and to explore making the existing underpass fully accessible as recommended in the report Towards a Liffey Valley Park Strategy. RAO 12: To provide for the preservation of public rights of way which give access to mountains, lakeshores, riverbanks or other places of natural beauty or recreational utility, where public rights of way shall be identified both by marking them on at least one of the maps forming part of this Plan and by indicating their location on a list appended to this Plan.</p>						
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8.17 Chapter 15: Urban Design Guidelines

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
<p>Aim To create vibrant and bustling towns and villages with a diverse mix of activities where residents can benefit from quality urban living.</p>	C1 C2		B1 B2 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1			B3

8.18 Chapter 16: Rural Design Guidelines

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
Aim						
To promote architecture and design which complements and reinforces the existing character of the rural landscape through the identification of guiding principles resulting in good quality design and sustainable development.	CH2 L1 B3		B1 B2 HH1 S1 W1 W2 W3 C1 C2 M1 M2 CH1 L1			

8.19 Chapter 17: Village Plans and Rural Settlements

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
Aim						
Aim: To provide a coherent planning framework for the development of the county's designated villages and rural settlements identified in the County Settlement Strategy	C1 C2 B3		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Village and Rural Settlement Policies						
VRS 1: To facilitate local housing demands together with the provision of local and community services / facilities and local employment opportunities throughout the villages and rural settlements in accordance with the principles of proper planning and sustainable development.	B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1					

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<p>VRS 2: To facilitate sustainable population growth of the identified villages with growth levels of upto 25% to cater primarily for local demands.</p>	<p>B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>VRS 3: To facilitate the sustainable population growth of the identified rural settlements with growth levels of upto 20% to cater primarily for local demands. Local demand for rural settlements is defined as persons residing for a period of 5 years within a 10km radius of the site. Primarily for local demand' shall be defined as being in excess of 50% of the overall development</p>	<p>B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>VRS 4: To generally permit density levels in accordance with indicative levels outlined on Table 4.2. Chapter 4. Proposals shall also conform with the Development Management Standards contained in Chapter 19 of this Plan. Exceptions may be made to development management standards in infill / brownfield sites within village centres or the settlement core where the scheme is of exceptional quality and design.</p>	<p>B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1 CH1 CH2 S1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>VRS 5: To develop lands in both Villages and Settlements sequentially and generally in accordance with the following:</p> <ul style="list-style-type: none"> • Development will be encouraged from the centre outwards with undeveloped lands closest to the village centre or phase 1 lands being given first priority • The development of 'infill' sites and utilise lands with opportunities for brownfield / regeneration will also be particularly encouraged • 'Leap-frogging' will be strongly resisted • Phasing of individual developments may be conditioned as part of a grant of planning permission in villages/ settlements. 	<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>VRS 6: To generally control the scale of individual development proposals to 10-15% of the existing housing stock of any village or settlement over the lifetime of the County Development Plan in accordance with the Sustainable Residential Development in Urban Areas Guidelines (2009). For example for a village of 800 people, the typical pattern and grain of existing development suggests that any individual scheme for new housing should not be larger than 26 -40 residential units and for villages / settlements with less than 300 persons new housing schemes should not be larger then 15 units. Larger schemes will only be considered where they relate to important strategic sites e.g. (infill within the core of a village / settlement, or the redevelopment of backlands) and will be contingent on the agreement of a masterplan and phasing arrangement being agreed with the Council.</p>	<p>C1 C2</p>					<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>

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<p>VRS 7: To ensure an appropriate mix of dwelling units including serviced sites are provided in the village / settlement to cater for a range of household sizes (refer 4.9.3). Serviced site proposals should include general design principles for individual plots (plot ratio, building heights, building orientation, private open space, palette of building materials, boundary details and parking).</p>	<p>B1 B2 B3 HH1 S1 W1 W2 M1 M2 C1 C2</p>		<p>B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1</p>			
<p>VRS 8: To require the submission of a design statement for any scheme within villages and settlements for 10 units or more or where deemed necessary by the Planning Authority. The design statement should clearly describe how the proposal relates to the site and its context. The following requirements must be included in a design statement:</p> <ul style="list-style-type: none"> • New development shall contribute to compact villages / settlements by being designed to integrate successfully with the existing settlement. • Desire lines and linkages to local centres, public transport and other facilities; • A discernible focus of the scheme or a demonstration that the development reinforces an existing local centre; • Retention and successful exploitation of local views into and out of the scheme and highlighting of selected focal points; • Response to local character without necessarily repeating adjacent forms and details. This shall include referencing the elements of the area that give character and a sense of place such as urban grain, historic core, buildings of architectural merit and local characteristics (e.g. local materials, building lines, walls, building heights, rivers, streams, trees / hedgerows and local landscape features). • Existing buildings, landform and ecological features should be noted on drawings; • Proposals to contribute to the overall open space network of the village / settlement. • Creative use of local materials and locally found details. • Demonstration of contemporary and innovative architecture and design that ensures the creation of a unique sense of place. <p>The drawings and statement should illustrate why a particular design solution was arrived at for that particular site and how the design responds to the ecology, topography and features (both natural and man-made) existing on site and immediately adjacent to the site.</p>	<p>B1 B2 C1 C2 W1 CH1 CH2 L1</p>					<p>B3 S1 HH1 W2 W3 M1 M2</p>
<p>VRS 9: To require the submission of a social infrastructure assessment for schemes in excess of 10 number units in villages / settlements. Where deficiencies exist to facilitate the development, measures shall be proposed as part of a development scheme in order to provide for additional suitable social infrastructure (services/facilities). Significant development will be restricted where there is an absence of a sufficiently developed local infrastructure such as schools and community facilities to cater for development.</p>	<p>C1 C2</p>					<p>B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1</p>
<p>VRS 10: To restrict growth in a village / settlement where necessary physical and social infrastructure cannot be delivered. in the absence of infrastructure the projected growth for that development centre may be allocated to other serviced settlements within the same electoral area or to serviced towns within the upper range of the settlement hierarchy.</p>	<p>C1 C2 M1 M2 W1 W2 S1 B1 B2 HH1</p>					<p>B3 W3 CH1 CH2 L1</p>

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VRS 11: To ensure that all development proposals have regard to Chapters 7 and 19 of the County Development Plan.	B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1	B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1				
Villages and Settlements	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
Village Plans	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Johnstown	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Straffan	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Ballymore-Eustace	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Allenwood	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Johnstownbridge	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Coill Dubh/Coolearagh	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Kilmeague	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Caragh	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Kildangan	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Suncroft	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Ballitore/Timolin/Moone/Crookstown	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Rural Settlement Plans	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Broadford	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Milltown	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			

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Kilteel	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Staplestown	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Ardclough	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Robertstown	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Allen	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Brannockstown	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Rathmore/Eadestown	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Twomilehouse	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Brownstown	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Cutbush	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Maddenstown	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Nurney	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Calverstown	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Rathcoffey	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Narraghmore	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Maganey/Levitstown	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Moyvally	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Kilmead	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Kilberry	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			

Note that with regard to positive interactions with the status of SEOs - these are likely to arise by providing for development within existing settlements thereby reducing the likelihood of conflicting interactions occurring in alternative, more rural greenfield areas where the provision infrastructure and services may not be economically viable and where elevated levels of environmental sensitivities may occur. With regard to conflicting interactions with the status of SEOs, these have the potential to arise from accommodating development within the designated Villages and Rural Settlements. Potentially conflicting interactions between development and the provision of appropriate

waste water infrastructure (and the consequent interactions with other SEOs) will depend upon the capacity of this infrastructure and loadings - domestic and non-domestic - upon this infrastructure. Information on the current capacity and loading figures for the waste water treatment plants is provided in Section 3.6.1.2.

8.20 Chapter 18: Environs Plans

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
Naas Environs (North)	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Naas Environs (South)	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Naas Environs (West)	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Kilcock Environs (North)	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Blessington Environs	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Kill Environs	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Athy Environs (Gallows Hill)	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			
Athy Environs (Bennetsbridge)	B1 B2 B3 HH1 W1 W2 W3 M1 M2 C1 C2 L1		B1 B2 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1			

Note that with regard to positive interactions with the status of SEOs - these are likely to arise by providing for development within existing settlements thereby reducing the likelihood of conflicting interactions occurring in alternative, more rural greenfield areas where the provision infrastructure and services may not be economically viable and where elevated levels of environmental sensitivities may occur. With regard to conflicting interactions with the status of SEOs, these have the potential to arise from accommodating development within the various Environs. Potentially conflicting interactions between development and the provision of appropriate waste water infrastructure (and the consequent interactions with other SEOs) will depend upon the capacity of this infrastructure and loadings - domestic and non-domestic - upon this infrastructure. Information on the current capacity and loading figures for the waste water treatment plants is provided in Section 3.6.1.2.

8.21 Chapter 19: Development Management Standards

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs- unlikely to be mitigated	Potential Conflict with status of SEOs- likely to be mitigated	Uncertain interaction with status of SEOs	Neutral Interaction with status of SEOs	No Likely interaction with status of SEOs
Aim						
To ensure the orderly and sustainable development of the County through the setting out of objectives and standards for the management of development.	B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 C1 C2 CH1 CH2 L1					

Section 9 Mitigation Measures

9.1 Introduction

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing the County Development Plan.

Mitigation involves ameliorating significant negative effects. Where there are significant negative effects, consideration is given in the first instance to preventing such effects or, where this is not possible for stated reasons, to lessening or offsetting those effects. Mitigation measures can be roughly divided into those that: *avoid* effects; *reduce* the magnitude or extent, probability and/or severity of effects; *repair* effects after they have occurred, and; *compensate* for effects, balancing out negative impacts with other positive ones.

The mitigation measures may be incorporated into the briefing of design teams as well as the subsequent design, specification and development management of the landuses to be accommodated within the County.

Additional more detailed mitigation measures to those identified below would be likely to be required by the development management and EIA processes of individual projects and would be likely to be required to be integrated into relevant lower-tier plans and programmes.

Section 11 includes a number a SEA Summary table which highlights how likely significant effects are mitigated against.

9.2 Mitigation through Consideration of Alternatives

A range of potential alternative development scenarios for the Kildare County Development Plan were identified at an early stage in the process and evaluated for their likely significant environmental effects (see Sections 6 and 7).

The environmental baseline and the Strategic Environmental Objectives (see Sections 3 and 4) were used in order to predict and evaluate

the environmental effects of implementing the alternatives.

Communication of the findings of this evaluation helped the Plan team make an informed choice as to which alternative was to be put before the members of the Council.

Communication of this evaluation to the members of the Council through this report will help the members to make an informed choice with regard to the making of the Plan.

9.3 Mitigation Integrated into Town Plans

The Plan includes a number of village and rural settlement plans. Environmental considerations have been integrated into the land use zoning objectives contained in these Plans through the SEA process from the SEA Scoping stage to the submission of the draft Plan to the Elected Members.

Careful consideration in particular has been paid to the protection of Natura 2000 Sites.

9.4 Mitigation Integrated into the Plan

This section lists key measures which have been integrated into the Plan which are envisaged to mitigate significant adverse effects on the environment of implementing the Plan. Mitigation measures generally benefit multiple environmental components i.e. a measure providing for the 'protection of surface water resources' could beneficially impact upon the protection of biodiversity, flora and fauna, drinking water resources, human health and provision of appropriate waste water treatment infrastructure.

The reference codes are those which accompany the relevant measures in Section 8 of this report and in the Plan.

9.4.1 Biodiversity and Flora and Fauna

Policies: HB 1, NT 1, NT 2, NT 3, NT 4, NT 5, TW 1, TW 2, TW 3, TW 4, TW 5, TW 6, IS 1,

IW 1, IW 2, IW 3, IW 4, IW 5, IW 6, IW 7, IW 8, IW 9, WS 8, DS 1, DS 2, DS 3, DS 4, DS 5, DS 6 and DS 7

Objectives: NHO 1, NHO 2, NHO 3, NHO 4, NHO 5, NHO 6, NHO 7, NHO 8 and NHO 9

9.4.2 Water Protection

Policies: WQ 1, WQ 2, WQ 3, WQ 4 and WQ 5

Objective: WDO 4

9.4.3 Waste Water Treatment

Policies: WS 1, WW 1, WW 2, WW 3, WW 4, WW 5, WW 6, WW 7, WW 8, WW 9 and WW 10.

Objectives: WDO 1, WDO 2 and WDO 14

9.4.4 Drinking Water Quality and Supply

Policies: WS 1, WS 2, WS 3, WS 4, WS 5, WS 6, WS 7 and WS 9.

Objectives: WDO 1, WDO 3, WDO 5, WDO 6, WDO 7, WDO 12 and WDO 13

9.4.5 Flooding

Policies: SW 1, SW 2, SW 3, SW 4, SW 5, SW 6, SW 7, SW 8, SW 9, SW 10, SW 11, SW 12, SW 13, SW 14, SW 15, SW 16, SW 17, SW 18, SW 19 and SW 20

Objectives: WDO 9, WDO 10, WDO 11 and WDO 14

9.4.6 Cultural Heritage

Policies: AH 1, AH 2, AH 3, AH 4, AH 5, AH 6, AH 7, AH 8, PS 1, PS 2, PS 3, PS 4, PS 5, PS 6, PS 7, PS 8, PS 9, PS 10, PS 11, PS 12, PS 13, PS 14, PS 15, PS 16, PS 17, VA 1, VA 2, VA 3, VA 4, VA 5, VA 6, VA 7, ACA 1 and ACA 2

Objectives: AAO 1, AAO 2, AAO 5, AAO 6, AAO 7, AAO 8, AAO 11 and AAO 14

9.4.7 Landscape

Policies: LA 1, LA 2, LA 3, LA 4, LA 5 and SR 1

Objectives: LO 1, LO 2, LO 3, LO 4, LO 5, LO 6 and LO 8

9.4.8 Air and Noise

Policies: PC 1, PC 2, PC 3, PC 4, PC 5, PC 6 and NR 4

Objectives: EN 4 and EN 6

9.4.9 Energy and Greenhouse Gas Emissions

Policies: TL 2, TL 4 and TL 5

Objectives: ST1, ST 2, ST 3, ST 4, ST 5, ST 6, ST 7, ST 8, ST 9, ST 10, ST 11, ST 12, ST 13, ST 14, ST 16 and ST 15

Section 10 Monitoring Measures

10.1 Introduction

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This section details measures for monitoring the likely significant effects of implementing the County Development Plan.

Monitoring enables, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action. In addition to this, monitoring can also play an important role in assessing whether the Plan is achieving environmental objectives and targets - measures which the Plan can help work towards - whether these need to be reexamined and whether the proposed mitigation measures are being implemented.

10.2 Indicators and Targets

Monitoring is based around the indicators which were chosen earlier in the process. These indicators allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives used in the evaluation. Focus is given to indicators which are relevant to the likely significant environmental effects of implementing the Plan and existing monitoring arrangements will be used in order to monitor the selected indicators. Each indicator to be monitored is accompanied by the target(s) which were identified with regard to the relevant legislation (see Section 4).

Table 10.1 below shows the indicators and targets which have been selected for monitoring the likely significant environmental effects of implementing the Plan.

It is noted that with regard to Indicator B2, important macro-corridors, stepping stones and contiguous areas of habitat include the County's rivers, lakes, uplands and peatlands. It is recommended that important macro-corridors and contiguous areas of habitat are identified as part of the monitoring programme and that time resources are spent in the monitoring of these rather than in the

monitoring of corridors or areas of habitat which are not important at County level.

10.3 Sources

Measurements for indicators should come from existing monitoring sources in combination with the Development Management Process at the Council. Existing monitoring sources exist for each of the indicators and include those maintained by the Kildare County Council and other relevant authorities e.g. the Environmental Protection Agency, the National Parks and Wildlife Service and the Central Statistics Office.

Where significant adverse environmental effects - including positive, negative, cumulative and indirect - are likely to occur as a result of implementing relevant lower-tier plans and programmes such instances should be identified and recorded and should feed into the monitoring evaluation.

10.4 Reporting

A preliminary monitoring evaluation report on the effects of implementing the County Development Plan will be prepared to coincide with the Manager's report to the Elected Members on the progress achieved in securing Plan objectives within two years of the making of the Plan (this Manager's report is required under Section 15 of the 2000 Planning Act).

10.5 Responsibility

Kildare County Council is responsible for collating existing relevant monitored data, the preparation of preliminary and final monitoring evaluation reports, the publication of these reports and, if necessary, the carrying out of corrective action.

It is recommended that a Steering Committee be established within the Council to oversee the monitoring process.

10.6 Thresholds

Thresholds at which corrective action will be considered are as follows:

- boil notices on drinking water;
- fish kills;
- court cases taken by the DEHLG regarding impacts upon archaeological heritage including entries to the Record of Monuments and Places; and,
- complaints received from statutory consultees regarding avoidable environmental impacts resulting from development which is granted permission under the County Development Plan.

Table 10.1 Selected Indicators, Targets and Monitoring Sources

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source
Biodiversity, Flora and Fauna	<p>B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive</p> <p>B2: Percentage loss of functional connectivity to macro-corridors, stepping stones and contiguous areas of habitat which are important on a County level without remediation as a result of implementation of the Plan – as evidenced from a resurvey of CORINE mapping</p> <p>B3: Population of the County involved in land management</p>	<p>B1: Maintenance of favourable conservation status for habitats and species listed under Annexes I and II of the Directive</p> <p>B2: No significant macro-corridors, stepping stones and contiguous areas of habitat or parts thereof which are important on a County level and which provide functional connectivity to be lost without remediation as a result of implementation of the Plan</p> <p>B3: Sustain the population of the County involved in land management</p>	<p>DEHLG report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive & Consultations with the NPWS</p> <p>CORINE mapping, Consultation with the National Parks and Wildlife Service & Development Management Processes in the Council</p> <p>Central Statistics Office</p>
Population and Human Health	<p>HH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors as identified by the Health Service Executive and Environmental Protection Agency</p>	<p>HH1: No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan</p>	<p>EPA and Health Service Executive</p>
Soil	<p>S1: Number of instances of pollution and/or contamination of soil</p>	<p>S1: No significant instances pollution and/or contamination of soil</p>	<p>EPA</p>

Environmental Component	Selected Indicator(s)	Selected Target(s)	Sources
Water	<p>W1: Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009)</p> <p>W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC</p> <p>W3: Number of developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk</p>	<p>W1: To achieve 'good status'⁸⁴ in all bodies of surface waters by 2015 and not to knowingly allow deterioration in the status of any surface water</p> <p>W2: Compliance with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC</p> <p>W3: Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk in compliance with <i>The Planning System and Flood Risk Management Guidelines for Planning Authorities</i></p>	<p>EPA</p> <p>EPA</p> <p>Development Management Process in the Council</p>
Material Assets	<p>M1i: Number of new developments granted permission which can be adequately served with waste water treatment over the lifetime of the Plan</p> <p>M1ii: Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council</p>	<p>M1i: All new developments granted permission to be connected to and adequately served by waste water treatment over the lifetime of the Plan</p> <p>M1ii: For the Council to prepare a Water Services Strategic Plan in compliance with the Water Services Act</p>	<p>Development Management Process in the Council</p> <p>Kildare County Council</p>

⁸⁴ Good status as defined by the WFD equates to approximately Q4 in the current national scheme of biological classification of rivers, as set out by the EPA. Good status as defined by the WFD equates to approximately mesotrophic in the current trophic classification of lakes, as set out by the EPA.

Environmental Component	Selected Indicator(s)	Selected Target(s)	Sources
Material Assets cont.	<p>M2i: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health</p> <p>M2ii⁸⁵: Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council</p>	<p>M2i: No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan</p> <p>M2ii: For the Council to prepare a Water Services Strategic Plan in compliance with the Water Services Act</p>	<p>EPA, EPA Remedial Action List and the Council</p> <p>Kildare County Council</p>
Air and Climatic Factors	<p>C1i: Percentage of population within the County travelling to work or school by public transport or non-mechanical means</p> <p>C1ii: Average distance travelled to work or school by the population of the County</p>	<p>C1i: An increase in the percentage of the population travelling to work or school by public transport or non-mechanical means</p> <p>C1ii: A decrease in the average distance travelled to work or school by the population of the County</p>	<p>Central Statistics Office</p> <p>Central Statistics Office</p>
Cultural Heritage	<p>CH1: Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential - (and their context of the above within the surrounding landscape where relevant) protected</p>	<p>CH1: Protect entries to the Record of Monuments and Places - including Zones of Archaeological Potential - (and their context of the above within the surrounding landscape where relevant)</p>	<p>Development Management/ Enforcement Process in the Council; Complaints from statutory consultees</p>

⁸⁵ Indicator and Target M2i are the same as Indicator and Target M1

Environmental Component	Selected Indicator(s)	Selected Target(s)	Sources
Cultural Heritage cont.	<p>CH2i: Percentage of entries to the Record of Protected Structures (and/or their context within the surrounding landscape where relevant) protected</p> <p>CH2ii: Number of additions to the Record of Protected Structures and the number of additional ACAs</p>	<p>CH2i: Protect entries to the Record of Protected Structures (and/or their context within the surrounding landscape where relevant)</p> <p>CH2ii: Make Additions to the Record of Protected Structures and make additional ACAs, where appropriate</p>	<p>Development Management/ Enforcement Process in the Council; Complaints from statutory consultees</p> <p>Kildare County Council</p>
Landscape	<p>L1: Number of complaints received from statutory consultees regarding avoidable impacts on the landscape resulting from development which is granted permission under the Plan</p>	<p>L1: No developments permitted which result in avoidable impacts on the landscape resulting from development which is granted permission under the Plan</p>	<p>Development Management/ Enforcement Process in the Council; Complaints from statutory consultees</p>

Section 11 SEA Summary Table

Below is a summary table outlining how likely significant effects (if unmitigated) are linked to relevant mitigation measure(s) - which have been integrated into the Plan - and indicator(s) which will be used for monitoring.

Likely Significant Effect, if unmitigated	Mitigation Measure Reference(s) from the Plan (including)	Primary Indicator(s) for Monitoring
Loss of biodiversity with regard to Natura 2000 Sites	Policies: HB 1, NT 5, WS 8, DS 1, DS 2, DS 3, DS 4, DS 5, DS 6 and DS 7 Objective: NHO 5	B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive
Loss of biodiversity with regard to ecological connectivity and stepping stones	Policies: HB 1, NT 1, NT 2, NT 3, NT 4, NT 5, TW 1, TW 2, TW 3, TW 4, TW 5, TW 6, IS 1, IW 1, IW 2, IW 3, IW 4, IW 5, IW 6, IW 7, IW 8 and IW 9 Objectives: NHO 1, NHO 2, NHO 3, NHO 4, NHO 5, NHO 6 NHO 7, NHO 8 and NHO 9	B2: Percentage loss of functional connectivity to macro-corridors, stepping stones and contiguous areas of habitat which are important on a County level without remediation as a result of implementation of the Plan – as evidenced from a resurvey of CORINE mapping
Loss of rural management practices	Policy NHO5 and Various provisions of the Core Strategy, Economic Development Strategy and Housing Chapter	B3: Population of the County involved in land management
Spatially concentrated deterioration in human health arising from exposure to incompatible land uses	Policies: WS 1, WS 2, WS 3, WS 4, WS 5, WS 6, WS 7, WW 1, WW 2, WW 3, WW 4, WW 5, WW 6 AG 3, RH 5, ECD 16, ECD17, WQ 1, WQ 2, WQ 3, WQ 4, WQ 5, WS 6, PC 1, PC 2, PC 3, PC 4, PC 5, PC 6 and NR 4 Objectives: WDO 1, WDO 2, WDO 3, WDO 4, WDO 5, WDO 6, WDO 7, WDO 12, WDO 13, WDO 14, ENO 4, EN 4, EN 6, EN 7, EN 8 and EN 9	HH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors as identified by the Health Service Executive and Environmental Protection Agency
Pollution and/or contamination of soils.	Policies: AG 3, RH 5, ECD 16, ECD17, WQ 1, WQ 2, WQ 3, WQ 4, WQ 5 and WS 6 Objectives: WDO 4, ENO 4, EN 7, EN 8 and EN 9	S1: Number of instances of pollution and/or contamination of soil
Adverse impacts upon the quality of surface waters	Policies: WQ 1, WQ 2, WQ 3, WQ 4 and WQ 5 Objective: WDO 4	W1: Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009)
Adverse impacts upon ground water quality	Policies: WQ 1, WQ 2, WQ 3, WQ 4 and WQ 5 Objective: WDO 4	W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC
Flooding	Policies: SW 1, SW 2, SW 3, SW 4, SW 5, SW 6, SW 7, SW 8, SW 9, SW 10, SW 11, SW 12, SW 13, SW 14, SW 15, SW 16, SW 17, SW 18, SW 19 and SW 20 Objectives: WDO 9, WDO 10, WDO 11 and WDO 14	W3: Number of developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk

Likely Significant Effect, if unmitigated	Mitigation Measure Reference(s) from the Plan (including)	Primary Indicator(s) for Monitoring
Inadequate waste water treatment for new populations	Policies: WS 1, WW 1, WW 2, WW 3, WW 4, WW 5, WW 6, WW 7, WW 8, WW 9 and WW 10. Objectives: WDO 1, WDO 2 and WDO 14	M1i: Number of new developments granted permission which can be adequately served with waste water treatment over the lifetime of the Plan M1ii: Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council
Inadequate drinking water supply for new populations	Policies: WS 1, WS 2, WS 3, WS 4, WS 5, WS 6, WS 7 and WS 9. Objectives: WDO 1, WDO 3, WDO 5, WDO 6, WDO 7, WDO 12 and WDO 13	M2i: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health M2ii: Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council
Increases in greenhouse gas emissions and increases in car dependency	Policies: TL 2, TL 4 and TL 5 Objectives: ST1, ST 2, ST 3, ST 4, ST 5, ST 6, ST 7, ST 8, ST 9, ST 10, ST 11, ST 12, ST 13, ST 14, ST 16 and ST 15	C1i: Percentage of population within the County travelling to work or school by public transport or non-mechanical means C1ii: Average distance travelled to work or school by the population of the County
Effects on entries to the Record of Monuments and Places	Policies: AH 1, AH 2, AH 3, AH 4, AH 5, AH 6, AH 7 and AH 8 Objective: AAO 14	CH1: Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential - (and their context of the above within the surrounding landscape where relevant) protected
Effects on entries to the Record of Protected Structures and Architectural Conservation Areas	Policies: AH 1, AH 2, AH 3, AH 4, AH 5, AH 6, AH 7, AH 8, PS 1, PS 2, PS 3, PS 4, PS 5, PS 6, PS 7, PS 8, PS 9, PS 10, PS 11, PS 12, PS 13, PS 14, PS 15, PS 16, PS 17, VA 1, VA 2, VA 3, VA 4, VA 5, VA 6, VA 7, ACA 1 and ACA 2 Objectives: AAO 1, AAO 2, AAO 5, AAO 6, AAO 7, AAO 8 and AAO 11	CH2i: Percentage of entries to the Record of Protected Structures (and/or their context within the surrounding landscape where relevant) protected CH2ii: Number of additions to the Record of Protected Structures and the number of additional ACAs
Visual impacts on the landscape or on 'views and prospects to be preserved'	Policies: LA 1, LA 2, LA 3, LA 4, LA 5 and SR 1 Objectives: LO 1, LO 2, LO 3, LO 4, LO 5, LO 6 and LO 8	L1: Number of complaints received from statutory consultees regarding avoidable impacts on the landscape resulting from development which is granted permission under the Plan

Table 11.1 SEA Summary Table: Likely Significant Effects, Mitigation Measures and Indicators for Monitoring