

SEA ENVIRONMENTAL REPORT

FOR THE

KILDARE COUNTY DEVELOPMENT PLAN 2017-2023

for: Kildare County Council

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List of Abbreviations

AA	Appropriate Assessment
ACA	Architectural Conservation Area
ATSEBI	Assessment of Trophic Status of Estuaries and Bays in Ireland
CFRAM	Catchment Flood Risk Assessment and Management
CSO	Central Statistics Office
DAHG	Department of Arts, Heritage and the Gaeltacht
DCENR	Department of Communications, Energy and Natural Resources
DEHLG	Department of the Environment, Heritage and Local Government
DECLG	Department of the Environment, Community and Local Government
EIA	Environmental Impact Assessment
EPA	Environmental Protection Agency
EQS	Environmental Quality Standard
EU	European Union
GSI	Geological Survey of Ireland
NHA	Natural Heritage Area
NIAH	National Inventory of Architectural Heritage
NRA	National Roads Authority
NSS	National Spatial Strategy
OPW	Office of Public Works
PAS	Priority Action Substance
RAL	Remedial Action List
RBD	River Basin District
RMP	Record of Monuments and Places
RPA	Register of Protected Areas
RPS	Record of Protected Structures
RPGs	Regional Planning Guidelines
RBMP	River Basin Management Plan
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SEO	Strategic Environmental Objective
SFRA	Strategic Flood Risk Assessment
SI No.	Statutory Instrument Number
SPA	Special Protection Area
UCD	University College Dublin
WFD	Water Framework Directive
WMU	Water Management Unit
WSSP	Water Services Strategic Plan
WMP	Eastern–Midlands Region Waste Management Plan

Glossary

Appropriate Assessment

The obligation to undertake Appropriate Assessment derives from Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC. AA is a focused and detailed impact assessment of the implications of a strategic action or project, alone and in combination with other strategic actions and projects, on the integrity of a Natura 2000 site in view of its conservation objectives.

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.

Environmental Problems

Annex I of Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27th 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 and Development Act 2000 as amended 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 former Department of the Environment, Heritage and Local Government (now Department of Arts, Heritage and the Gaeltacht) 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 appropriate environmental authorities.

Strategic Actions

Strategic actions include: *Policies/Strategies*, 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 developed from policies which generally govern environmental protection objectives established at international, Community or Member State level and are used as standards against which the provisions of the Plan and the alternatives can be evaluated in order to help identify which provisions would be likely to result in significant environmental effects and where such effects would be likely to occur, if - in the case of adverse effects - unmitigated.

Section 1 SEA Introduction and Background

1.1 Introduction and Terms of Reference

This is the Strategic Environmental Assessment (SEA) Environmental Report for the Kildare County Development Plan 2017-2023. It has been undertaken by CAAS Ltd. on behalf of Kildare County Council.

The purpose of this report is to provide a clear understanding of the likely environmental consequences of decisions regarding the adoption and implementation of the Plan. 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) as amended. This report should be read in conjunction with the Plan.

1.2 SEA Definition

Environmental assessment is a procedure that ensures that the environmental implications of decisions are taken into account before such decisions are made. *Environmental Impact Assessment*, or EIA, is generally used for describing the process of environmental assessment for individual projects, while *Strategic Environmental Assessment* or SEA is the term which has been given to the environmental assessment of plans and programmes, which help determine the nature and location of individual projects taking place. SEA is a systematic process of predicting and evaluating the likely significant environmental effects of implementing a proposed plan or programme, in order to ensure that these effects are adequately addressed at the earliest appropriate stages of decision-making in tandem with economic, social and other considerations.

1.3 SEA Directive and its transposition into Irish Law

Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27th 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 (Statutory Instrument Number (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 21st July 2004. The Regulations have been amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (SI No. 200 of 2011) and the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011 (SI No. 201 of 2011).

1.4 Implications for the Plan and the Planning Authority

Article 7 of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004) as amended requires that SEA is undertaken for the preparation of certain Development Plans.

The findings of the SEA are expressed in this Environmental Report, an earlier version of which accompanied the Draft Plan on public display. This earlier version was altered in order to take account of recommendations contained in submissions and in order to take account of changes which were made to the Draft Plan on foot of submissions. Members of the planning authority took into account the findings of this Report and other related SEA output during their consideration of the Draft Plan and before its adoption. On the adoption of the Plan, an SEA Statement is prepared which summarises, *inter alia*, how environmental considerations have been integrated into the adopted Plan.

Section 2 The Plan

2.1 Introduction

The Kildare County Development Plan (CDP) 2017-2023 sets out the overall strategy for the proper planning and sustainable development of County Kildare for the Plan period and beyond. The CDP has been prepared in accordance with the Planning and Development Act 2000, as amended. The Plan relates to the whole functional area of Kildare County Council.

The CDP sets out a strategic spatial framework for the proper planning and sustainable development of County Kildare for the period between 2017 and 2023. While the CDP is in place for a six-year period, it is framed having regard to the long-term development objectives of the County beyond 2023.

The CDP in the main focuses on 'big picture' planning issues. The Plan is not a 'spending plan', however it sets a framework within which developments could be undertaken, in the event that the public or private sector have the finance to develop.

The CDP provides for, and controls, the physical, economic and social development of the County, in the interests of the overall common good and in compliance with environmental controls. It includes a set of development objectives and standards, which set out where land is to be developed, and for what purposes (e.g. housing, shopping, schools, employment, open space, amenity, conservation etc.). It informs decisions on where public services such as roads and water services are to be provided, and affects the type of buildings that can be constructed and the use to which land can be put. It affects many facets of daily economic and social life, in terms of where you can live, what services and facilities are available and where job opportunities are to be sited.

2.2 Content of the Plan

The CDP consists of a written statement and maps that indicate the development objectives for County Kildare. The written statement is accompanied by a series of schedules and maps.

The Plan is set out in a written statement with accompanying maps in two volumes as follows:

- Volume One – Chapters 1 -17 and Appendices
- Volume Two – Land Use Plans

These two volumes are accompanied by SEA, AA and SFRA documents.

Chapter 1 sets out the introduction and strategic context for the plan.

Chapters 2 and 3 set out the core strategy and settlement strategy for County Kildare.

Chapters 4-14 set out detailed policies and objectives under a range of specific topic headings which the County Council seeks to achieve over the six-year life of the Plan e.g. housing, economic development, retail, infrastructure, rural development, social and community, heritage and landscape.

Chapters 15 and 16 outline urban and rural design guidance to promote quality developments.

Chapter 17 sets out development management 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.

Appendices which are part of Volume I include the Housing Strategy, Record of Monuments and Places, Record of Protected Structures and Scenic Routes.

Volume Two consists of the land use plans for the small towns, environs areas, villages and rural settlements in Kildare.

Separate Local Area Plans (LAPs) are in place, or will be in place, for the following towns: Sallins, Celbridge/ Castletown, Leixlip/ Collinstown, Monasterevin, Kilcock, Kilcullen, Newbridge, Maynooth, Kildare and Clane. These LAPs are reviewed and made under Sections 18, 19 and 20 of the Planning and Development Act, and as such do not form part of the CDP. However, the CDP does

provide the key parameters for these LAPs such the future population and housing targets and sets out the broad strategy for the future economic and social development of these towns.

Town Development Plans providing for the sustainable development of the towns of Naas and Athy are also in place and Local Area Plans will also be prepared for these settlements.

2.3 Plan Vision

The CDP's vision is:

For County Kildare to be a cohesive community of people enjoying distinct but interrelated urban and rural environments; where natural surroundings and important resources are protected; where opportunities abound to live and work in a safe atmosphere, allowing people to enjoy the benefits of well paid jobs, a variety of housing choices, excellent public services, ample cultural and leisure opportunities, and a healthy environment.

2.4 Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development

Far in advance of the placing of the Draft Plan on public display, Kildare County Council undertook various works in order to inform the preparation of the Draft Plan.

The findings of this strategic work were integrated into the Plan and will contribute towards both environmental protection and management and sustainable development within the County.

Strategic work undertaken by the Council includes background work in relation to Plan Strategies and other provisions for a variety of sectors including: settlement; economic development, enterprise and tourism; movement and transportation; infrastructure;

energy and communications; retail; rural development; social, community and cultural development; architectural and archaeological protection; natural heritage and green infrastructure; landscape, recreation and amenities; urban design; and rural design.

In addition, the undertaking of this SEA process as well as the preparation of an Appropriate Assessment and a Strategic Flood Risk Assessment were part of this strategic work and contributed towards the integration of environmental considerations into individual Plan provisions as detailed in Section 9 of this report.

2.5 Relationship with other relevant Plans and Programmes

The CDP sits within a hierarchy of strategic actions such as plans and programmes and is subject to a number of high level environmental protection policies and objectives with which it must comply (including those detailed in Appendix I¹, Section 4, Section 5 and Section 9 of this report).

As required by the Planning and Development Act, the CDP is consistent with such national plans, policies and strategies as the Minister determines relate to proper planning and sustainable development. The CDP may, in turn, guide lower level strategic actions. In this regard, Appendix I includes statutory provisions, plans, policies and strategies that set the context within which the CDP is framed and which have influenced the strategies and objectives of the CDP.

¹ Appendix I is not intended to be a full and comprehensive review of EU Directives, the transposing regulations or the regulatory framework for environmental protection and management. The information is not exhaustive and it is recommended to consult the Directive, Regulation, Plan or Programme to become familiar with the full details of each.

Section 3 SEA Methodology

3.1 Introduction to the Iterative Approach

This section details how the SEA has been undertaken alongside the preparation of the Plan. Figure 3.1 lays out the main stages in the Plan/SEA preparation process.

The Plan and associated SEA, AA and SFRA documents were prepared in an iterative manner whereby multiple revisions of each document were prepared, each informing subsequent iterations of the others.

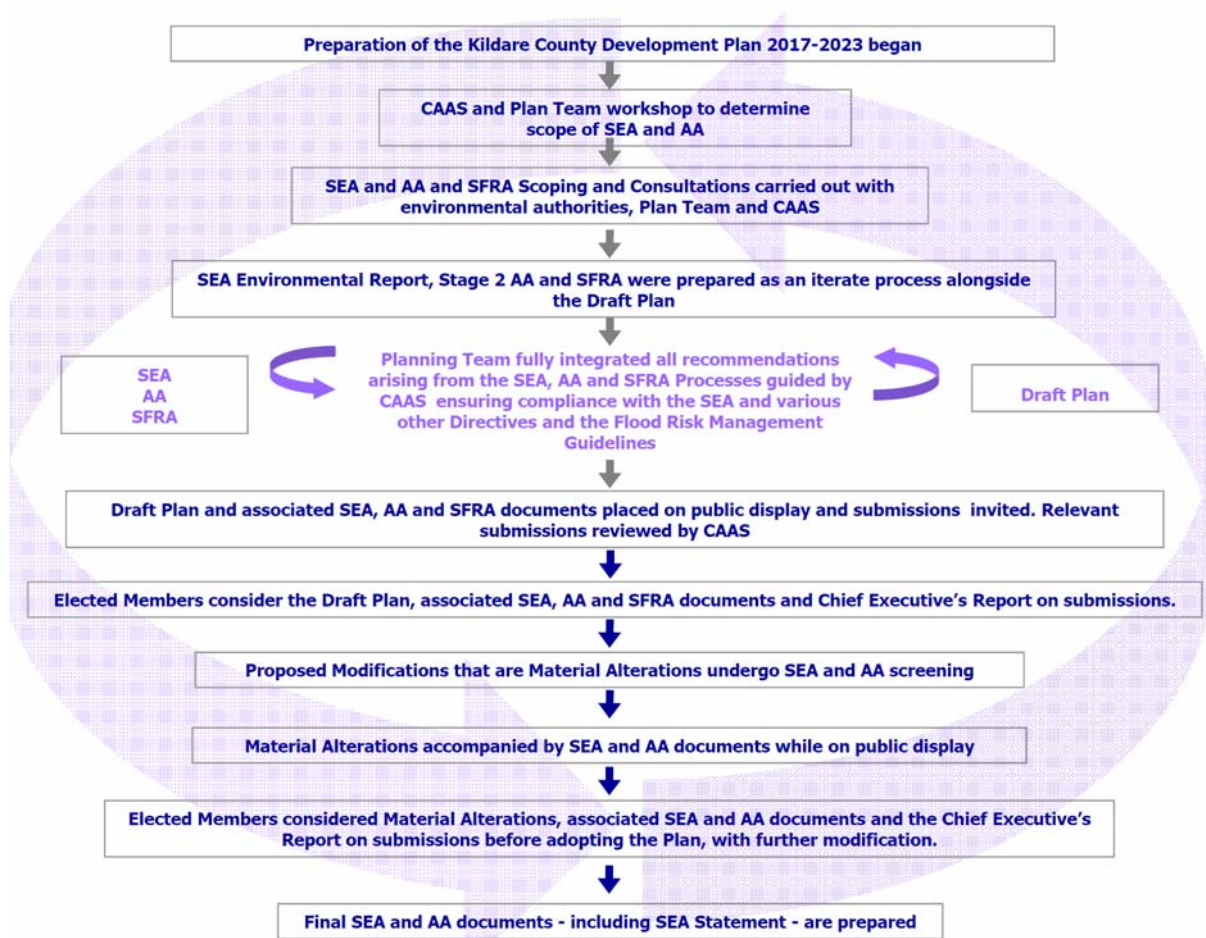


Figure 3.1 County Development Plan and SEA Stages

3.2 Appropriate Assessment and Integrated Biodiversity Impact Assessment

3.2.1 Appropriate Assessment

Appropriate Assessment (AA) Screening and Stage 2 AA have been undertaken alongside the preparation of the Plan.

The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The Stage 2 AA concluded that the Plan will not affect the integrity of the Natura 2000 network².

The preparation of the Plan, SEA and AA has taken place concurrently and the findings of the AA have informed both the Plan and the SEA. Various provisions have been integrated into the Plan through the AA process.

3.2.2 Integrated Biodiversity Impact Assessment

Many elements of Integrated Biodiversity Impact Assessment as detailed in the EPA's (2013) Practitioner's Manual have been aligned with in undertaking SEA for the Plan. These include:

Scoping

- Biodiversity-relevant issues were identified for consideration at scoping stage and these are now detailed in Section 4.3.
- Reference to a zone of influence is provided, including at Section 4.3.

Baseline

- Biodiversity data sources relevant for this County level assessment have been identified and datasets collated/gathered.
- The biodiversity baseline addresses designated sites and other habitats and species of ecological value.
- AA information has been incorporated into the SEA baseline.

² Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

- (a) no alternative solution available,
- (b) imperative reasons of overriding public interest for the plan to proceed; and
- (c) adequate compensatory measures in place.

Alternatives

- Impacts upon biodiversity are considered under each of the alternatives.

Impact assessment

- Effects on biodiversity are identified and assessed and the AA gives consideration to the interrelationship between biodiversity and potential effects on European sites.

Mitigation and monitoring

- Taking into account all measures contained within the Plan, all the proposed mitigation measures deriving from the various processes were generally consistent and compatible.
- Indicators and associated targets have been included in SEA for monitoring European sites.

Reporting

- This SEA ER addresses all biodiversity-related considerations relevant for this county level assessment.
- This SEA ER contains all biodiversity-relevant information, data, figures and maps relevant for this County level assessment.
- This SEA ER has been informed by the findings of the AA.

Communication and consultation

- Submissions including those from the Environmental Protection Agency and the Department of Arts, Heritage and the Gaeltacht have been taken on board.
- The preparation of the Plan, SEA and AA has taken place concurrently and the findings of the AA have informed both the Plan and the SEA.

3.3 Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) has been undertaken alongside the preparation of the Plan.

The requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DECLG, 2009).

The preparation of the Plan, SEA and SFRA has taken place concurrently and the findings of the SFRA have informed both the Plan and the SEA. The land use zoning and provisions contained in the County Development Plan have taken into account the findings of the SFRA. This has included the undertaking of Justification Tests by the Council, changing land use zoning and recommendations regarding the undertaking of site-specific SFRA at for development proposals at project level.

3.4 Scoping

3.4.1 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 addressed was broadly decided upon taking into account the collection of environmental baseline data and input from environmental authorities. Scoping allowed the SEA to become focused upon key issues relevant to the environmental components which are specified under the SEA Directive³.

As the Plan is not likely to have significant effects on the environment in another Member State transboundary consultations as provided for by Article 7 of the SEA Directive were not undertaken.

3.4.2 Scoping Notices

All relevant environmental authorities identified under the SEA Regulations as amended, were all sent SEA scoping notices by the Council 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 the Council⁴.

3.4.3 Submissions

Submissions were made by the Department of Arts, Heritage and the Gaeltacht, Environmental Protection Agency, Laois County Council, Carlow County Council and Meath County Council during the SEA Scoping/Plan-preparation process. These submissions influenced the scope of the assessments as detailed in the final SEA Scoping Report.

³ These components comprise biodiversity, fauna, flora, population, human health, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.

⁴ The following authorities were notified: Department of Agriculture, Food and the Marine; Department of Arts, Heritage and the Gaeltacht; Department of Communications, Energy and Natural Resources; Department of the Environment, Community and Local Government; Environmental Protection Agency; Wexford County Council; Meath County Council, Offaly County Council; Laois County Council; Carlow County Council; South Dublin County Council; Fingal County Council; Wicklow County Council.

3.5 Environmental Baseline Data

The SEA process is informed by the environmental baseline (i.e. the current state of the environment) to facilitate the identification and evaluation of the likely significant environmental effects of implementing the provisions of the Plan and the alternatives and the subsequent monitoring of the effects of implementing the provisions of the Plan as adopted.

3.6 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. In accordance with this requirement, alternative scenarios for the Plan are examined in Section 7.

3.7 The SEA Environmental Report

In this Environmental Report - an earlier version of which was placed on public display alongside the Draft Plan and other associated documents - the likely environmental effects of implementing the Plan and the alternatives are predicted and their significance evaluated.

The Environmental Report provides the Council, stakeholders and the public with a clear understanding of the likely environmental consequences of implementing the Plan.

Mitigation measures to prevent or reduce significant adverse effects posed by the Plan are identified in Section 9 - these have been integrated into the Plan.

The Environmental Report has been updated in order to take account of recommendations contained in the submissions and in order to take account of changes that were made to the original Plan that was put on submission.

The Environmental Report is required to contain the information specified in Schedule 2 of the Planning and Development (Strategic Environmental Assessment) Regulations 2004

(SI No. 436 of 2004) as amended (see Table 3.1).

No significant difficulties have been encountered during the undertaking of the assessment.

3.8 The SEA Statement

On the making of the Plan by the Council, an SEA Statement is prepared which includes 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 SEA Environmental Report and consultations have been taken into account, summarising the key issues raised in consultations and in the Environmental Report indicating what action was taken in response;
- 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 as adopted was selected; and
- The measures decided upon to monitor the significant environmental effects of implementing of the Plan.

Table 3.1 Checklist of Information included in this Environmental Report

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 or programme, and of its relationship with other relevant plans and programmes	Sections 2, 5 and 8
(B) Description of relevant aspects of the current state of the environment and the evolution of that environment without implementation of the plan or programme	Section 4
I Description of the environmental characteristics of areas likely to be significantly affected	Sections 4, 7 and 8
(D) Identification of any existing environmental problems which are relevant to the plan or programme, particularly those relating to European protected sites	Section 4
(E) List environmental protection objectives, established at international, EU or National level, which are relevant to the plan or programme and describe how those objectives and any environmental considerations have been taken into account when preparing the Plan	Sections 5, 7, 8 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 or programme	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 6, 7 and 8
(I) A description of proposed monitoring measures	Section 10
(J) A non-technical summary of the above information	Non-Technical Summary
(K) Interrelationships between each environmental topic	Addressed as it arises within each Section

Section 4 Environmental Baseline

4.1 Introduction

Reflecting the specifications in the SEA Directive, the relevant aspects (those which have the greatest potential to be affected by implementation of the Plan) of the current state of the environment for the following environmental components is provided in this section:

- Air and Climatic Factors;
- Population and Human Health;
- Biodiversity, Flora and Fauna;
- Material Assets;
- Soil;
- Water;
- Cultural Heritage;
- Landscape; and
- The interrelationship between the above factors.

Article 5 of the SEA Directive, in accordance with the established European principle of subsidiarity, states that the report shall include the information that may reasonably be required taking into account:

- Current knowledge and methods of assessment;
- The contents and level of detail in the plan or programme and its stage in the decision-making process; and
- The extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment.

In this context, the information identified is relevant to lower tier planning and project development and associated environmental assessments.

Given the potential for impacts beyond the boundary of the Plan Area, the spatial scope of the SEA takes into account the zone of influence (15km or greater where relevant) of the Plan area.

4.2 Likely Evolution of the Environment in the Absence of a new Plan

In the absence of a new Plan it is uncertain how permission for new development would be applied for and considered.

The current County Plan has contributed towards environmental protection within County Kildare.

If the current Plan was to expire and not be replaced by a new Plan, this would result in a deterioration of the County's planning and environmental protection framework. Although higher level environmental protection objectives – such as those of various EU Directives and transposing Irish Regulations – would still apply, the deterioration of this framework would mean that new development would be less coordinated and controlled. Such development could result in an increase in the occurrence of adverse effects on all environmental components, especially those arising cumulatively. Cumulative effects occur as a result of the addition of many small impacts to create one larger, more significant, impact.

Such adverse effects could include:

- Arising from both construction and operation of development and associated infrastructure: loss of/damage to biodiversity in designated sites (including Natura 2000 Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna;
- Habitat loss, fragmentation and deterioration, including patch size and edge effects;
- Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species;
- Potential interactions if effects upon environmental vectors such as water and air are not mitigated;

- Damage to the hydrogeological and ecological function of the soil resource;
- Adverse impacts upon the status of water bodies, including downstream bathing waters, arising from changes in quality, flow and/or morphology;
- Increase in the risk of flooding;
- Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts);
- Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts);
- Increases in waste levels;
- Emissions to air including greenhouse gas emissions and other emissions;
- Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities; and
- Occurrence of adverse visual impacts and conflicts with the appropriate protection of statutory designations relating to the landscape.

4.3 Biodiversity and Flora and Fauna

4.3.1 Overview

County Kildare has a wide range of habitat types and landscapes supporting diverse species both in natural and semi natural state and managed locations. These include grassland, woodland, stream and canal habitats, bog land and riparian habitats. These habitats support a variety of species and ecosystems that contribute to the unique biodiversity of Kildare. Many of these areas are coming under pressure as development intensifies the demand for land. It is imperative that measures are put in place to respond to these pressures and that any development will not have a detrimental effect on the natural environment.

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.

County Kildare 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.

Ecological designations include:

- Special Protection Areas⁵;
- Special Areas of Conservation⁶;

⁵ 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 DECLG due to their conservation value for birds of importance in the European Union.

⁶ 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.

- Natural Heritage Areas and Proposed Natural Heritage Areas⁷;
- Nature Reserves⁸;
- Certain entries to the Water Framework Directive Register of Protected Areas⁹;
- Wildfowl Sanctuaries¹⁰; and
- RAMSAR sites¹¹.

Protected Species include:

- Annex IV (Habitats Directive) species of flora and fauna, and their key habitats (i.e. breeding sites and resting places), which are strictly protected wherever they occur, whether inside or outside the above sites, e.g. otter and bats;
- Other species of flora and fauna and their key habitats which are protected under the Wildlife Acts, 1976-2000, wherever they occur; and

⁷ 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. Proposed NHAs were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated. These sites are of significance for wildlife and habitats.

⁸ A Nature Reserve is an area of importance to wildlife, which is protected under Ministerial order. There are currently 78 Statutory Nature Reserves. Most are owned by the State but some are owned by organisations or private landowners.

⁹ 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 wildlife have been listed on Registers of Protected Areas (RPAs). RPAs include those for Protected Habitats or Species, Shellfish, Salmonid, Nutrient Sensitive Areas, Recreational Waters and Drinking Water.

¹⁰ These sanctuaries are areas that have been excluded from the 'Open Season Order' so that game birds can rest and feed undisturbed. There are 68 sanctuaries in the State. Shooting of game birds is not allowed in these sanctuaries.

¹¹ 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.

- 'Protected species and natural habitats' as defined in the European Liability Directive (2004/35/EC) and European Communities (Environmental Liability) Regulations, 2008, including: Birds Directive – Annex I species and other regularly occurring migratory species, and their habitats (wherever they occur) and Habitats Directive – Annex I habitats, Annex II species and their habitats, and Annex IV species and their breeding sites and resting places (wherever they occur).

The Zone of Influence of the Plan beyond the County area with respect to impacts upon ecology via surface waters upon ecological resources – including designated ecology – can be estimated to be areas within 15km of the County boundary and all downstream areas of catchments which drain the County.

4.3.2 Ecological Networks and Connectivity

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. They are composed of linear features, such as treelines, hedgerows and rivers/streams, which provide corridors or stepping stones for wildlife species moving within their normal range. They are important for the migration, dispersal and genetic exchange of species of flora and fauna particularly for mammals, especially for bats and small birds and facilitate linkages both between and within designated ecological sites, the non-designated surrounding countryside and the more urban areas of the County.

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 or stepping stones for wildlife species moving within their normal range. They are particularly important for mammals, especially for bats and small birds.

Within and surrounding the County, the ecological networks are made up of components including undeveloped foothill/upland areas, rivers and lakes, woodlands, lands used for agriculture, parks, gardens and hedgerows within and surrounding the Plan area.

These components provide habitats for flora and fauna and facilitate linkages to the surrounding countryside for flora and fauna.

4.3.3 Land Cover Mapping

The CORINE land cover mapping¹² for Kildare classifies land cover under various headings as shown on Figure 4.1. The most common land covers within the County e.g. *pastures* and *non-irrigated arable land* are indicative of normal agricultural lands. Land cover categories indicating lands that are likely to be most valuable to biodiversity include *peat bogs*, *agriculture with natural vegetation*, *natural grassland*, *broad-leaved forest*, *moors and heaths* and *transitional woodland scrub*.

4.3.4 Candidate Special Areas of Conservation

There are 7 Special Areas of Conservation (SACs) within the Plan area:

- Ballynafagh Bog SAC
- Ballynafagh Lake SAC
- Mouds Bog SAC
- Pollardstown Fen SAC

¹² 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 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.

- Red Bog, Kildare SAC
- River Barrow and River Nore SAC
- Rye Water Valley/Carton SAC

Figure 4.2 maps SACs (and SPAs) both within the County, and within 15km of the County.

The distance of 15km is currently recommended in the DoE document *Appropriate Assessment of Plans and Projects-Guidance for Planning Authorities*, however, sites beyond this distance should also be considered where there are hydrological linkages or other pathways that extend beyond 15km thereby ensuring that all potentially affected European sites are considered. Potential effects identified by this assessment relate to those that could occur both within and beyond this distance as a result of, for example, water pollution. More detail on the potential impacts on European Sites is provided in the Stage 2 *Appropriate Assessment* that accompanies the Plan and this SEA Environmental Report.

4.3.5 Special Protection Areas

There is one Special Protection Areas (SPAs) within the Plan area:

- Poulaphouca Reservoir SPA

Figure 4.2 maps SACs (and SPAs) both within the County, and within 15km of the County.

4.3.6 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*. Proposed NHAs (pNHA) were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated.

There are 2 NHAs and 21 pNHAs occurring inside the Plan area¹³, as mapped on Figure 4.3 and listed below:

- Carbury Bog NHA (001388)
- Hodgestown Bog NHA (001393)

¹³ Source: NPWS (2017)

- Oakpark pNHA (000810)
- Corballis Hill pNHA (001389)
- Barrow Valley at Tankardstown pNHA (000858)
- Dunlavin Marshes pNHA (01772)
- Ballina Bog pNHA (000390)
- Grand Canal pNHA (002104)
- Donadea Wood pNHA (001391)
- Royal Canal pNHA (002103)
- Rye Water Valley/Carton pNHA (001398)
- Kiltel Wood pNHA (001394)
- Ballynafagh Bog pNHA (000391)
- Ballynafagh Lake pNHA (001387)
- Mouds Bog pNHA (000395)
- Pollardstown Fen pNHA (000396)
- Red Bog Kildare pNHA (000397)
- Poulaphouca Reservoir pNHA (000731)
- Curragh Kildare pNHA (000392)
- Liffey Valley Meander Belt pNHA (000393)
- Liffey at Osberstown pNHA (001395)
- Liffey Bank above Athgarvan pNHA (001396)
- Derryvullagh Island pNHA (001390)

4.3.7 Nature Reserves

There is one Nature Reserve in County Kildare: Pollardstown Fen.

Pollardstown Fen is a large marshland that covers an area approximately 2.2km² just northwest of Newbridge. This site is the largest remaining calcareous spring-fed fen in Ireland. Pollardstown Fen is recognised internationally for its extensive vegetation of Black Bog Rush and Saw Sedge. This habitat supports a great number of threatened plant species such as the Fly Orchid, Fen Bedstraw and Tufted Sedge to name a few. The Fen is also home to a large number of animals, bird life in particular and is very popular amongst birdwatchers, with rare species such as Marsh Harriers being observed.

4.3.8 Registers 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). There are a number of water dependent habitats in the County which have been listed on these registers.

RPA's for wildlife in County Kildare include the channels of the River Liffey and the River Barrow by virtue of their nutrient sensitivity, and the River Boyne by virtue of its designation as a Salmonid Water under the European Communities (Quality of Salmonid Waters) Regulations 1998 (SI No. 293 of 1988). Designated Salmonid Waters are capable of supporting salmon (*Salmo salar*), trout (*Salmo trutta*), char (*Salvelinus*) and whitefish (*Coregonus*). Designated Salmonid Waters and Nutrient Sensitive Rivers are mapped on Figure 4.4.

Further information on entries to the RPA by virtue of their value to people is provided in Section 4.6.

4.3.9 Freshwater Pearl Mussel

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 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.

4.3.10 Wildfowl Sanctuaries

Wildfowl Sanctuaries are areas that have been excluded from the 'Open Season Order' so that game birds can rest and feed undisturbed.

There are 68 sanctuaries in the State. Shooting of game birds is not allowed in these sanctuaries. One of these Wildfowl Sanctuaries is in County Kildare, Ballynafagh Lake (Blackwood Lake) WFS-30.

4.3.11 Tree Preservation Orders

Tree Preservation Orders (TPOs) enable local authorities to preserve any single tree or group of trees and brings them under planning control. TPOs are only made if it appears that a tree or group of trees need to be protected in the interests of amenity in the environment. The Plan provides protection of specific trees and woodland at various locations within the county including at Clane, Ballymore Eustace, Clogheen and Clongowes.

4.3.12 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 County Kildare, Pollardstown Fen (Site No. 474), which spans 130 hectares of wetlands.

Pollardstown Fen was designated on 30th May 1990. It is situated on the northern margin of the Curragh approximately 3km west-north-west of Newbridge. 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 water birds 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.

4.3.13 Existing Problems

Previous developments such as residential and commercial developments, along with the provision of transportation infrastructure, have resulted in loss of biodiversity and flora and fauna across the County as many semi natural areas within the County have been replaced by impermeable surfaces.

The Plan includes robust measures to contribute towards the protection of biodiversity and flora and fauna.

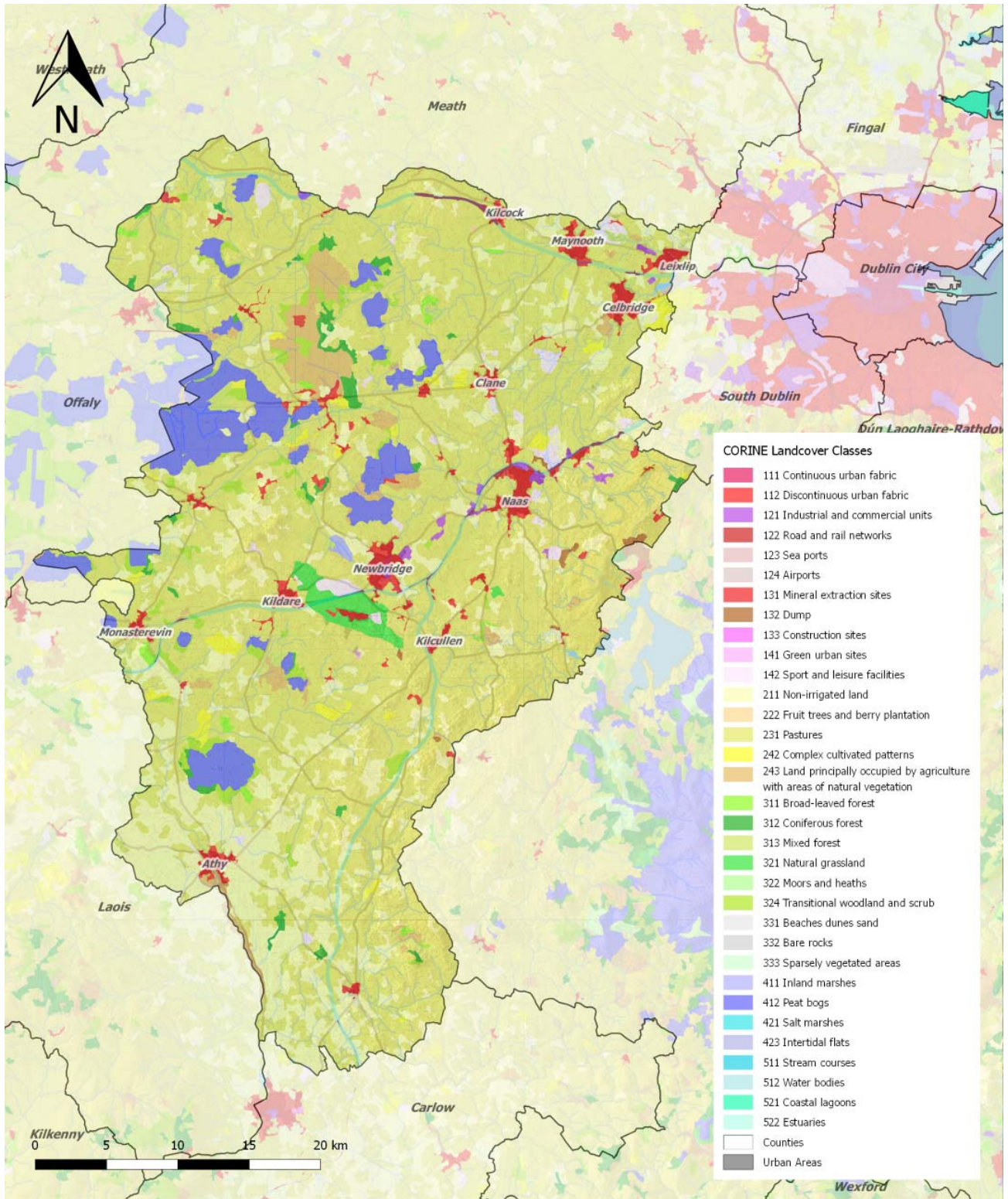


Figure 4.1 CORINE Land Cover 2012

Source: EPA (2014)

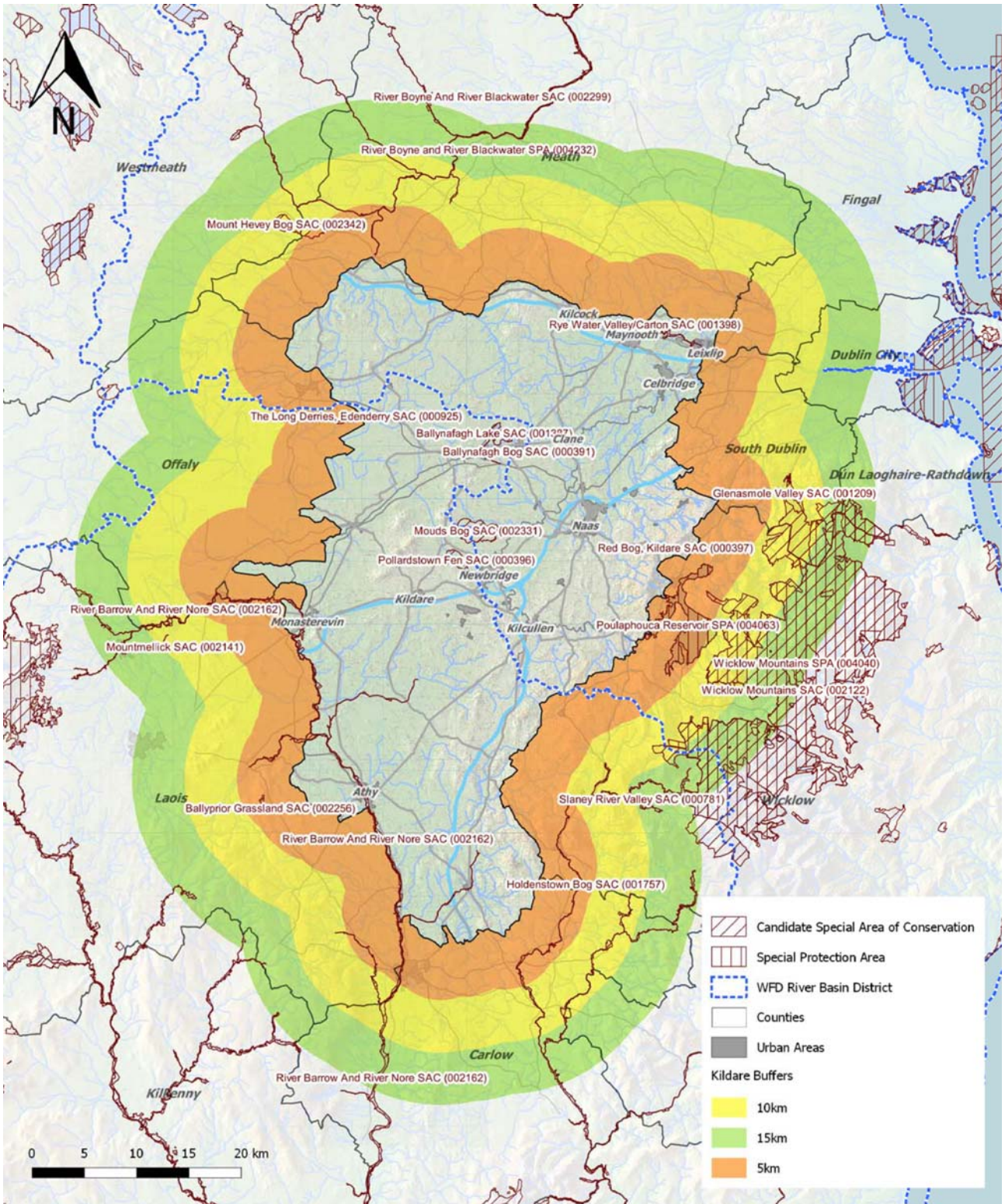


Figure 4.2 SPAs and cSACs within the County

Source: NPWS (datasets downloaded April 2016)

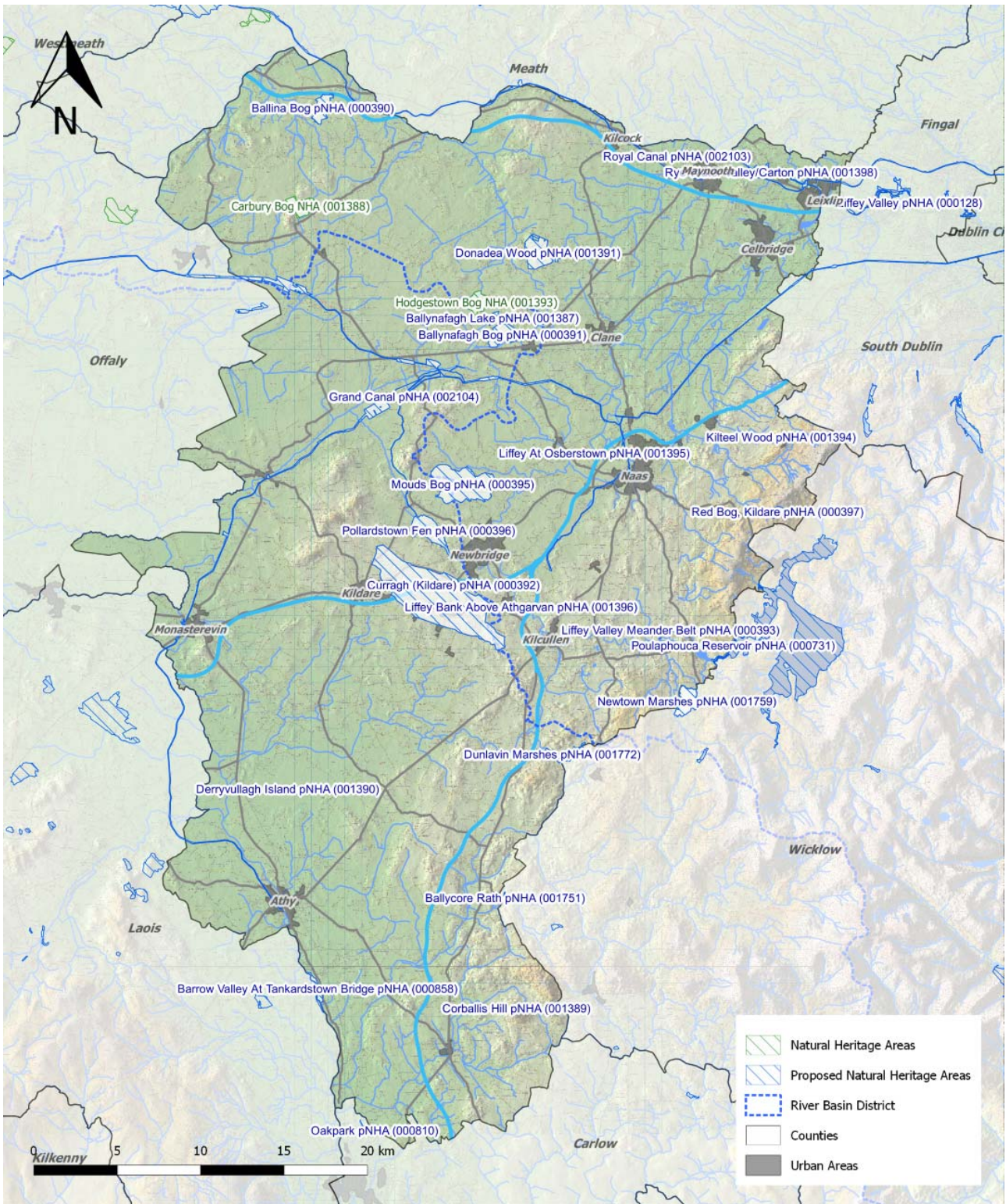


Figure 4.3 Natural Heritage Areas and Proposed Natural Heritage Areas

Source: NPWS (datasets downloaded April 2016)

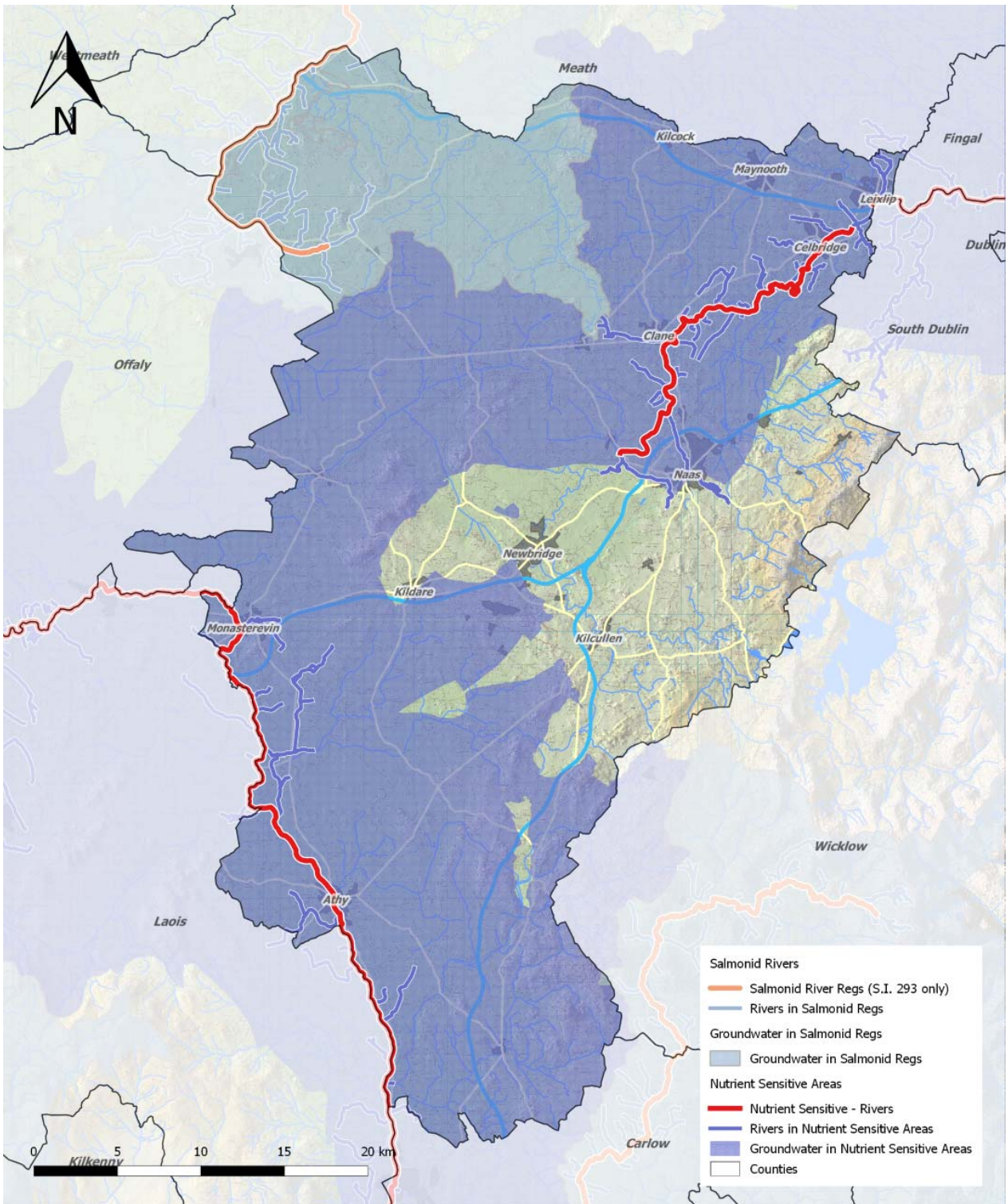


Figure 4.4 Designated Salmonid Waters and Nutrient Sensitive Rivers

Source: NPWS (datasets downloaded April 2016)

Athy, Kildare, Monasterevin and Kilcullen.

4.4 Population and Human Health

4.4.1 Introduction

The new population provided for in the Plan will interact with various environmental components. Potential interactions include:

- Recreational and development pressure on habitats and landscapes;
- Increase in demand for waste water treatment at the municipal level;
- Increase in demand for water supply;
- Potential interactions in flood-sensitive areas; and
- Potential effects on water quality.

4.4.2 Population

The population of County Kildare was 186,335 persons in 2006. This rose by 23,977 persons or c. 12.87% to 210,312 persons in 2011. The highest concentrations in population are along the north-east of the County and in settlements throughout the County.

For the review of the County Development Plan, the Planning Authority carried out an assessment which involved an evaluation of the dynamics and distribution of population and settlement within the county for the period 2006-2011. This assessment revealed:

- The period showed continued increase in population at an average rate of 4,795 persons per annum over the five years
- Population has more than doubled in the rural hinterlands of urban centres such as Athy, Naas, Newbridge, Clane and Kilcock and the village of Caragh. A considerable amount of this development pressure has arisen from the demand for high numbers of single rural dwellings and the demand for housing within rural settlements.
- The draw of Dublin as an employment hub, with approximately 50% of the workforce leaving the county for employment, is reflected in the county's settlement pattern. Higher population densities are located in the Metropolitan northeast and within and around the towns of Naas, Newbridge,

Between 2009 and 2013 rural one-off dwellings accounted for 40% of all builds in Kildare. This high figure reflected the relatively low level of construction within the urban areas of Kildare due to the economic downturn and issues such as the Osberstown waste water treatment catchment.

An average of 264 rural dwellings were built per annum in Kildare between 2009-2015. This has consolidated a pattern of dispersed and in some situations resulted in dense rural development.

4.4.3 Human Health

The impact of implementing the Plan on human health is determined by the impacts which the Plan will have upon 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. 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.

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.

4.4.4 Existing Problems

The greatest health risk from radiation in Ireland is caused by radon. The presence of radon gas, a naturally occurring radioactive gas that originates from the decay of uranium in rocks and soils, occurs across the country. It

accounts for more than half of the total radiation dose received by the Irish population. As a known carcinogen, in the same category as tobacco smoke and asbestos it is a cause of lung cancer. Exposure to radon for long periods or at high concentrations can lead to lung cancer.

Some areas within County Kildare, particularly to the south-east of the County are estimated as having 10%-20% of homes above the reference level for Radon (mapping available at <http://www.epa.ie/radiation/radonmap>).

There is historic and predictive evidence of flooding in various locations across the County (see information on Strategic Flood Risk Assessment at Section 4.6.6). All recommendations made by the SFRA in relation to flood risk management have been integrated into the Plan.

Compliance issues in relation to water services are detailed under Section 4.8.1.

4.5 Soil

4.5.1 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.

4.5.2 Soil Types

Soil types, as classified by Teagasc in co-operation with the Forest Service, EPA and GSI are mapped on Figure 4.5. The soils of the County support a variety of uses including 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.

Large expanses of Cutaway Peat are evident in the north and 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.

4.5.3 County Geological Sites

In 2005 the Council in partnership with the Irish Geological Heritage Programme of the Geological Survey of Ireland assessed the geological heritage of Kildare and identified the most important sites which are worthy of protection as County Geological Sites.

The locations of 21 County Geological Sites within County Kildare are mapped on Figure 4.6.

4.5.4 Contaminated Soil

Given the urban nature of certain areas within the County and the range of land use activities which have taken place historically, soils may have been contaminated to some degree in the past in certain areas. Such contamination has the potential to affect water quality, biodiversity and flora and fauna and human health. Both the existing 2011-2017 Plan and the 2017-2023 Plan include provisions in relation to environmental protection and degraded/contaminated lands.

4.5.5 Existing Problems

Legislative objectives governing soil were not identified as being conflicted with.

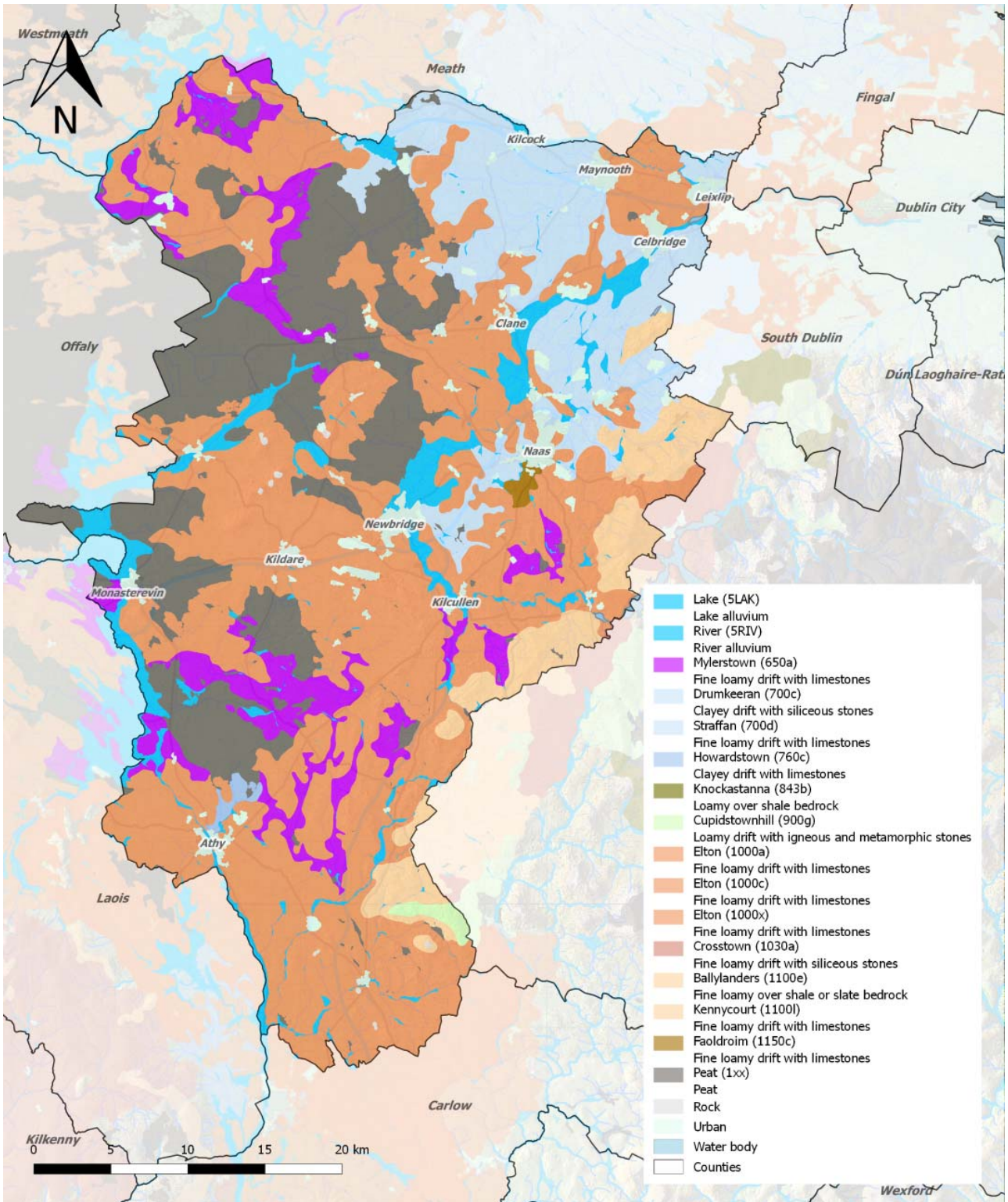


Figure 4.5 Soil Types

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

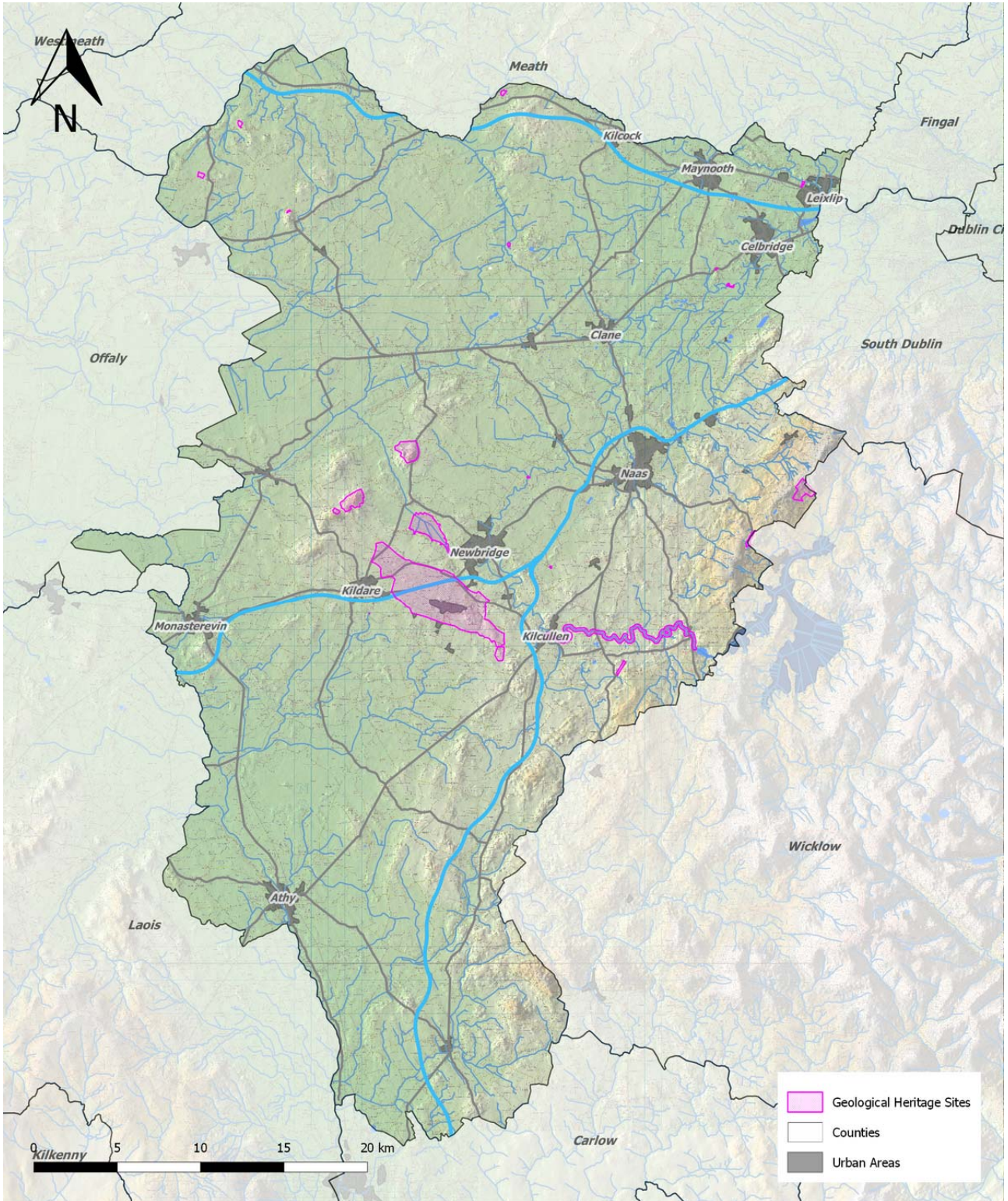


Figure 4.6 County Geological Sites
Source: Kildare County Council (2010)

4.6 Water

4.6.1 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.

4.6.2 The Water Framework Directive

4.6.2.1 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". 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.

The EU's Common Implementation Strategy Guidance Document No. 20 provides guidance on exemptions to the environmental objectives of the Water Framework Directive.

Article 4 of the WFD sets out various exemptions for deterioration in status caused as a result of certain physical modifications to water bodies. This is provided: all practicable mitigation measures are taken; there are reasons of overriding public interest or the benefits to human health, safety or sustainable development outweigh the benefits in achieving the WFD objective; there are no better alternatives; and the reasons for the physical modification are explained in the relevant river basin management plan.

4.6.2.2 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. Kildare falls within two river basin districts; the Eastern District and the South-Eastern District.

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.

4.6.2.3 River Basin Management Plan

Local Authorities, including Kildare County Council, have prepared the South Eastern and the Eastern River Basin Management Plans, both of which are being implemented through, inter alia, the County Development Plan, in order to help protect and improve waters in the County and wider RBDs. The Management

Plans provide specific policies for individual river basins in order to implement the requirements of the WFD.

4.6.3 Surface Water

4.6.3.1 Introduction

The River Barrow catchment which includes the main channel and tributaries such as the Rivers Slate, Figile, Athy, Tully, and Greese is the largest catchment in the County. Other catchments include those of the Boyne and Liffey.

There are a number of lakes and reservoirs in the County including the Poulaphouca, Leixlip Liffey and Golden Falls reservoirs and Redbog Lake.

The Zone of Influence of the Plan beyond the County area with respect to impacts upon waters can be estimated to be all bodies of groundwater and all surface waters downstream areas of catchments which drain the County.

4.6.3.2 WFD Surface Water Status

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.

Chemical Status is a pass/fail assignment with a failure defined by a face-value exceedance of an Environmental Quality Standards (EQS) for one or more Priority Action Substances (PAS) listed in Annex X of the Water Framework Directive (WFD). The EQS values for individual PAS substances are set at European level. *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 4.7 illustrates currently available data from the EPA on the status of waters within and surrounding the County. These status

classifications are contributed towards by morphological pressures, such as those relating to culverts, river straightening or bed/bank reinforcement in reservoirs.

The largest catchment in the County is the Barrow catchment which drains the south west of the County and includes the Barrow River and all of its tributaries. This catchment is generally a mixture *good* or *moderate* status.

The north east of the County forms part of the Liffey catchment which includes the River Liffey and its tributaries. The waters in the Liffey catchment are generally classified as being of *poor* or *good* status. Poulaphouca Reservoir is located within the Liffey catchment and partially in County Kildare. This lake is the only lake in Kildare attributed with a status (it is identified as being of *moderate* status). Downstream of County Kildare, the Liffey catchment includes a various bathing waters at Dublin Bay.

The north-eastern corner of the County forms part of the Boyne – waters here are generally classified as being of *poor* or *moderate* status.

4.6.4 Ground Water

4.6.4.1 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.

4.6.4.2 WFD Groundwater Status

For groundwater bodies, the approach to classification is different from that for surface water. For each body of groundwater, both the chemical status and the quantitative must be determined. Both have to be classed as either *good* or *poor*. The WFD sets out a series of criteria that must be met for a body to be classed as good chemical and quantitative status. The EPA has classified groundwater status in County Kildare as shown on Figure 4.8. Groundwater is generally identified as being of *good* status however the Curragh

Gravels West groundwater catchment is identified as being of *poor* status.

4.6.4.3 Groundwater Productivity and Vulnerability

The Geological Survey of Ireland (GSI) rates groundwater according to both their vulnerability to pollution and their productivity.

Groundwater Vulnerability is a term used to represent the intrinsic geological and hydrogeological characteristics that determine the ease with which groundwater may be contaminated by human activities. Groundwater vulnerability maps are based on the type and thicknesses of subsoils (sands, gravels, glacial tills (or boulder clays), peat, lake and alluvial silts and clays), and the presence of karst features. Groundwater is most at risk where the subsoils are absent or thin and, in areas of karstic limestone, where surface streams sink underground at swallow holes¹⁴.

Figure 4.9 maps groundwater vulnerability for the County. Groundwater underlying County Kildare is mainly classed as Medium to High. Other areas are classified as having extreme and low groundwater vulnerability.

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. Groundwater Productivity rates the value of the groundwater resource. The predominant categorisation in County Kildare 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 are 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*.

Groundwater protection within the County is carried out through the County's Groundwater Protection Scheme which has been undertaken jointly between the Geological Survey of Ireland and Kildare County Council. The purpose of the scheme is to preserve the quality of groundwater, particularly for drinking water purposes, for the benefit of present and future generations. The scheme identifies the vulnerability of areas within the County and Groundwater protection responses for existing and new potentially polluting activities.

4.6.5 WFD Registers 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).

RPAs in County Kildare, by virtue of how their waters are used by people, include stretches of rivers supplying waters intended for human consumption – these are protected already 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. Ground water underlying the County is listed on the RPA for Drinking Water.

Other RPAs include downstream bathing waters in the Liffey catchment. Further information on entries to the RPA by virtue of their value to wildlife is provided in Section 4.3.

4.6.6 Flooding

The main sources of flood risk within the County are fluvial (from rivers/streams) and pluvial (from rainwater).

The County Development Plan has undergone Strategic Flood Risk Assessment (SFRA) in

¹⁴ Source: Geological Survey of Ireland (2014) Metadata

response to requirements contained in *The Planning System and Flood Risk Management Guidelines for Planning Authorities* (DEHLG/OPW, 2009). The findings of the SFRA are presented in a report which accompanies the Plan.

The purpose of the SFRA is to provide sufficient information to allow sound planning decisions to be made on sites at risk of flooding over the lifetime of the Plan and also to ensure that Elected Members have the necessary information in coming to decisions on the Plan with respect to flood risk and its management.

Flooding is an environmental phenomenon which, as well as having caused economic and social impacts, could in certain circumstances pose a risk to human health. The existence of flood risk within the County can be illustrated by historical information on the locations and/or extents of known flooding events. The main sources of flooding in the county are fluvial and pluvial flooding.

The SFRA has also been informed by modelled information on flood risk from the Office of Public Works which has been prepared as part of the Catchment Flood Risk Assessment and Management (CFRAM) Studies. County Kildare falls within two CFRAM Studies, the Eastern CFRAM and the South Eastern CFRAM. The two CFRAM Studies identified Areas for Further assessment (AFAs), which through the National CFRAM Programme will be assessed by a flood risk management plan. The designation of AFAs took into account flood risk AFAs and comprise the following settlements:

- Allenwood
- Athy
- Castledermot
- Celbridge
- Clane
- Hazelhatch
- Johnstownbridge
- Kilcock
- Leixlip
- Maynooth
- Monasterevin
- Naas
- Newbridge
- Rathangan
- Suncroft
- Turnings/Killeenmore

4.6.7 Existing Problems

Subject to exemptions provided for by Article 4 of the WFD¹⁵, based on available data on the status of waters within the County, certain surface water bodies within the County will need improvement in order to comply with the objectives of the WFD:

- Certain water bodies within the County identified as being of *poor* or *moderate* status. These include water bodies within the following catchments: Liffey, Boyne and Barrow.

The Eastern and South-Eastern RBD Management Plans and associated Programmes of Measures include provisions to help ensure that these water bodies meet the objectives of the WFD. The Plan will contribute towards the achievement of the objectives of this Management Plan.

There is historic and predictive evidence of flooding in various locations across the County. All recommendations made by the SFRA in relation to flooding risk management have been integrated into the Plan.

¹⁵ Article 4 of the WFD sets out various exemptions for deterioration in status caused as a result of certain physical modifications to water bodies. This is provided: all practicable mitigation measures are taken; there are reasons of overriding public interest or the benefits to human health, safety or sustainable development outweigh the benefits in achieving the WFD objective; there are no better alternatives; and the reasons for the physical modification are explained in the relevant river basin management plan.

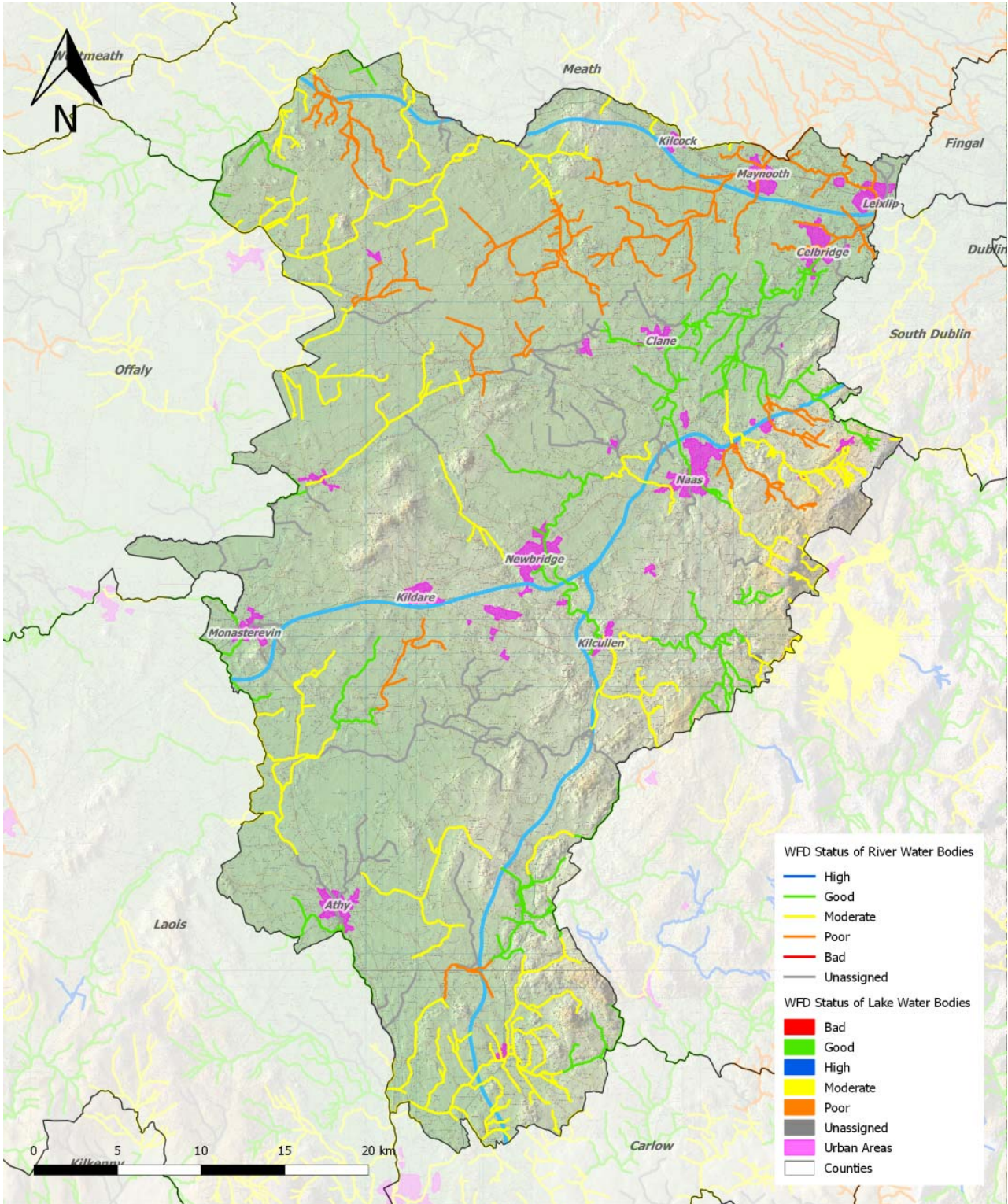


Figure 4.7 Status of Surface Waters
 Source: EPA (various)

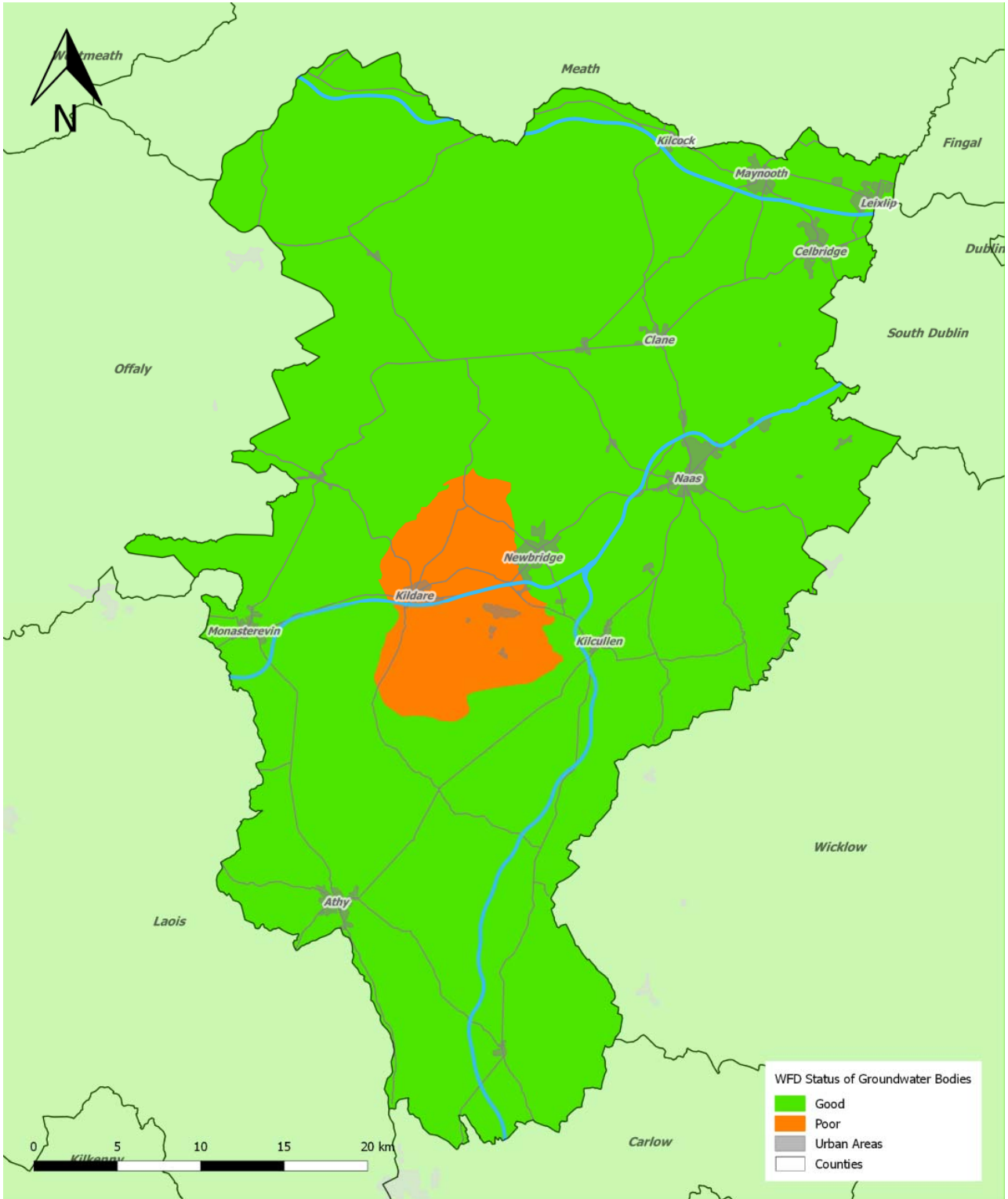


Figure 4.8 Groundwater Status

Source: EPA (2014)

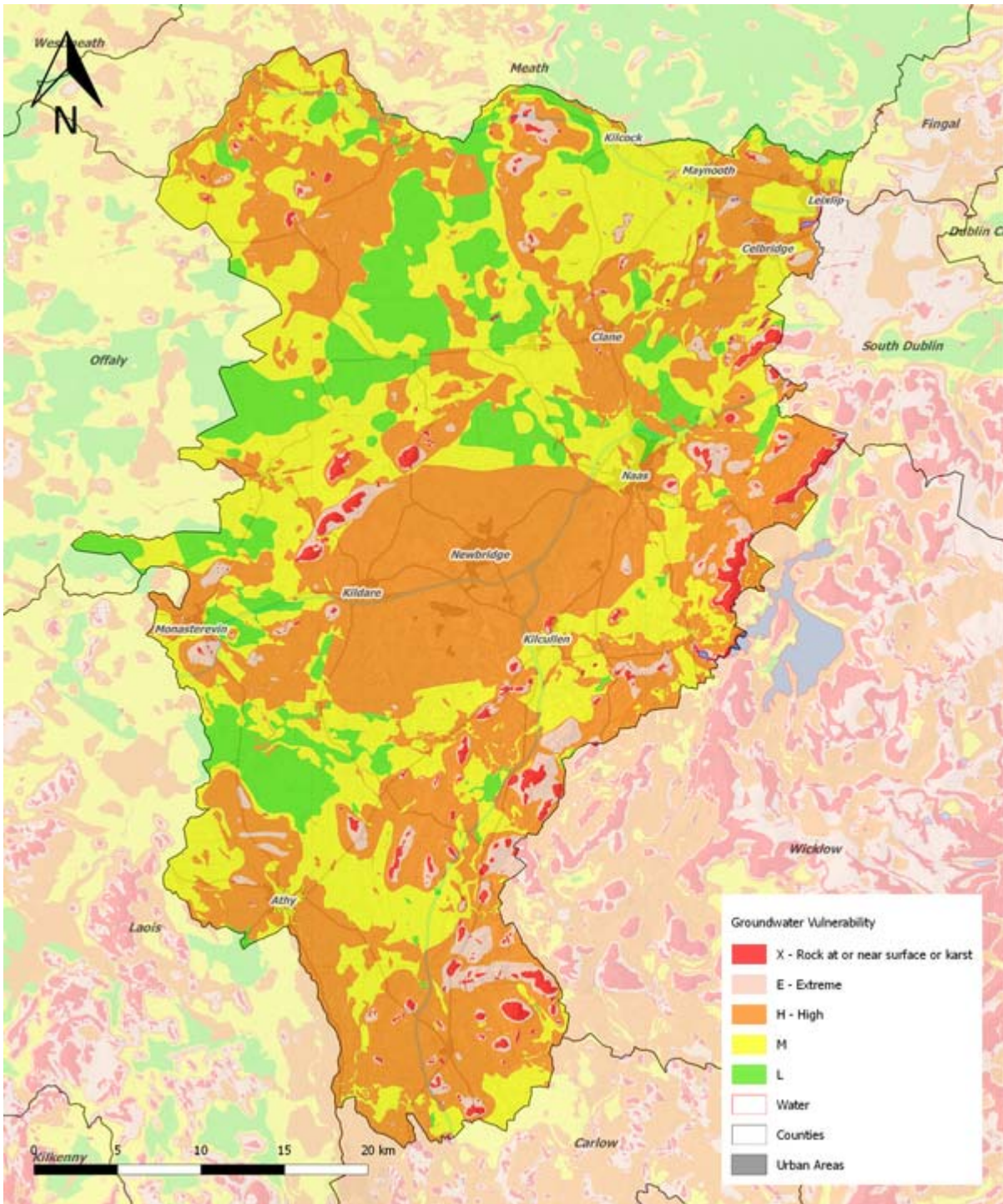


Figure 4.9 Groundwater Vulnerability
Source: GSI (2014)

4.7 Air and Climatic Factors

4.7.1 Climatic Factors

The key issue involving the assessment of the effects of implementing the Plan on climatic factors relates to greenhouse gas emissions arising from transport. Climatic factors also interact with flooding (see Section 4.6.6).

The Plan facilitates improvements in sustainable mobility, thereby facilitating reductions in and limiting increases of greenhouse gas emissions. Such emissions would occur otherwise with higher levels of motorised transport and associated traffic.

Ireland's emissions profile has changed considerably since 1990, with the contribution from transport more than doubling and the share from agriculture reducing since 1998. Travel is a source of:

1. Noise;
2. Air emissions; and
3. Energy use (39% of Total Final Energy Consumption in Ireland in 2012 was taken up by transport, the largest take up of any sector)¹⁶.

Between 2008 and 2011, Ireland's greenhouse gas emissions decreased across all sectors due to the effects of the economic downturn with emissions falling by 15.2% between 2008 and 2011. However, 2012 saw emissions rise by 1.2% when compared with 2011¹⁷.

Between 1990 and 2013, the Transport sector shows the greatest overall increase at 115.5%. Emissions increased by 2.1% in 2013, the first increase in Transport emissions since 2007. However, Transport emissions have decreased by 23.1% below peak levels in 2007 primarily due to the economic downturn, improving vehicle standards due to the changes in vehicle registration tax and the increase use in biofuels. The increase up to 2007 can be attributed to general economic prosperity, increasing population with a high

reliance on private car travel as well as rapidly increasing road freight transport.¹⁸

The EPA 2015 publication *Ireland's Greenhouse Gas Emission Projections 2014-2035*, identifies that:

- Under the 'worst case' scenario, Ireland is projected to cumulatively exceed its obligations by 4 Tonnes of CO₂eq over the period 2013-2020.
- Under the 'best case' scenario, Ireland is projected to cumulatively meet its compliance obligations over the 2013-2020 period and meet its 2020 target. This takes into account the overachievement of the annual limits in the period 2013- 2017 which is banked and used in the years 2018-2020. The report identifies that achieving the outlook under the 'best case' scenario will require focus and effort which includes meeting renewable targets for transport and heat as well as energy efficiency targets.
- Transport emissions are projected to show strong growth over the period to 2020 with a 13%-19% increase on current levels depending on the level of policy implementation. Relative to 2005, transport emissions are projected to remain the same or, at best, decrease by 4% by 2020.

Maximising sustainable mobility will help Ireland meet its emission target for greenhouse gases under the 2020 EU Effort Sharing target which commits Ireland to reducing emissions from those sectors that are not covered by the Emissions Trading Scheme (e.g. transport, agriculture, residential) to 20% below 2005 levels.

Land-use planning contributes to the number and the extent of which journeys occur. By addressing journey time through land use planning and providing more sustainable modes and levels of mobility (as is provided for by the Plan), noise and other emissions to air and energy use 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.

¹⁶ Sustainable Energy Ireland (2014) *Energy in Ireland 1990 – 2012*

¹⁷ EPA (2013) Ireland's Greenhouse Gas Emissions in 2012

¹⁸ EPA (2014) Ireland's Provisional Greenhouse Gas Emissions in 2013

Provisions in relation to climate change such as a commitment to prepare a Climate Change Adaptation Strategy have been integrated into the Plan.

Provisions in relation to green infrastructure have also been integrated into the Plan. Green Infrastructure has the potential to achieve objectives and synergies with regard to the following:

- Provision of open space amenities;
- Sustainable management of water;
- Protection and management of biodiversity;
- Protection of cultural heritage; and
- Protection of protected landscape sensitivities.

4.7.2 Ambient 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 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 in the Ambient Air Quality and Cleaner Air for Europe (CAFE) Directive (2008/50/EC) (which replaces the earlier Air Quality Framework Directive 1996 and the first, second and third *Daughter Directives*; the fourth *Daughter Directive* will be included in CAFE at a later stage).

The CAFE Directive was transposed into Irish legislation by the Air Quality Standards Regulations 2011 (S.I. No. 180 of 2011). It replaces the Air Quality Standards Regulations 2002 (S.I. No. 271 of 2002), the Ozone in Ambient Air Regulations 2004 (S.I. No. 53 of 2004) and S.I. No. 33 of 1999. The fourth Daughter Directive was transposed into Irish legislation by the Arsenic, Cadmium, Mercury, Nickel and Polycyclic Aromatic Hydrocarbons in Ambient Air Regulations 2009 (S.I. No. 58 of 2009).

In order to comply with the directives mentioned above, 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). Newbridge, Naas, Leixlip and Celbridge are located within zone C while the rest of the County is located within Zone D.

The EPA's (2015) *Air Quality in Ireland 2014* identifies that, overall, air quality in Ireland compares favourably with other EU Member States and continues to be of good quality relative to other EU countries.

The Plan facilitates improvements in sustainable mobility, thereby facilitating reductions in and limiting increases of emissions to air including noise. Such emissions would occur otherwise with higher levels of motorised transport and associated traffic.

4.7.3 Existing Problems

Legislative objectives governing air and climatic factors in County Kildare were not identified as being conflicted with.

4.8 Material Assets¹⁹

4.8.1 Water Services

4.8.1.1 Irish Water

The provision of an adequate supply of water and wastewater treatment facilities is critical to facilitate and sustain the growth of the County over the lifetime of the plan and beyond. As of January 2014, Kildare County Council no longer has any direct control in relation to the provision of such services. The delivery, integration and implementation of water and wastewater projects and infrastructural improvements are now the responsibility of the newly established State body 'Irish Water'.

Kildare County Council will work closely with Irish Water to ensure that the County Development Plan and - in particular the Core Strategy - continue to align with both the National Spatial Strategy and the Regional Planning Guidelines and that the provision of water/ wastewater services will not be a limiting factor in terms of targeted growth.

Kildare County Council retains responsibility for:

- Private wastewater treatment systems and private water supplies. Through the planning process the Council will assess applications for the provision of private waste water treatment systems and water supplies in order to ensure proposals put forward are in accordance with the standards set out in EU/national legislation, EPA guidance and would not be prejudicial to public health;
- Surface and groundwater protection (see Section 4.6); and
- Storm and surface water infrastructure - while the Office of Public Works have responsibility for flood risk management Kildare County council is responsible for the management of storm and surface water infrastructure.

¹⁹ Much of the text in this section is taken from the Plan

4.8.1.2 Waste Water Infrastructure

Kildare is served by circa 37 wastewater treatment plants. The largest wastewater treatment plants are located at Osberstown and Leixlip. Wastewater collection and treatment capacity has struggled to keep pace with development in the county. Many networks and plants in the county are operating at capacity, with consequential negative impacts on receiving water quality.

A contract to upgrade Osberstown current capacity of 80,000 population equivalent (PE) to 130,000 PE commenced in 2014 and will be completed in late 2016. Leixlip Wastewater treatment plant is currently being upgraded to 150,000 PE and this upgrade is due to be completed in mid-2016. However, most of this capacity will be absorbed by a large industrial connection and headroom capacity for other development will be somewhat limited. The medium-term plan is to connect the sewage network to the Ringsend catchment by 2020 and to discharge treated effluent to Dublin Bay. The provision of treatment and network capacity is imperative to address water quality and sewage treatment issues to facilitate development

Table 4.1 details existing waste water treatment demand and capacity in public systems within Kildare. Taking into account the population equivalent of the urban area catchments which they serve, there is currently a shortfall in design capacity at four of the public systems in the County: Derrinturn, Kilmeague, Leixlip and Oberstown.

Two of the public waste water systems, Ballymore Eustace and Kilmeague, are identified by the EPA as having failed to comply with quality standards in 2014.

4.8.1.3 Drinking Water

Irish Water being the Water Services body for the state and County Kildare is responsible for providing and maintaining adequate public water supply infrastructure. Private water supplies provide an alternative for areas that are not served by public water supply infrastructure and comprise mainly of wells for single dwellings and group water schemes for rural clusters and small settlements. Farms and commercial developments outside of settlements will usually also have their own private supplies. While the Local Authority has a limited role in the provision of such private supplies, for domestic supplies it administers

grant schemes where available and undertakes monitoring.

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 most recent drinking water report from the EPA 'Drinking Water Report 2014' (EPA, 2015) identifies that:

- There are 12 public water supplies in County Kildare serving a population of 185,658;
- Microbiological parameter compliance for the year was 100%;
- Chemical parameter compliance for the year was 99.9%;
- No boil notices were issued in 2014; and
- No water restrictions occurred.

The EPA publishes a Remedial Action List which identifies water supplies which are not in compliance with the Regulations mentioned above. The most recent EPA Remedial Action List (Q4 of 2015) illustrates that all water supplies within the County were in compliance with the Drinking Water regulations for Q4 of 2015, and are not in need of improvement with respect to treatment and management issues.

4.8.2 Waste Management

The Eastern–Midlands Region Waste Management Plan (WMP) 2015-2021 provides the framework for solid waste management in

the region and sets out a range of policies and actions to meet specified mandatory and performance based targets. The WMP seeks to assist and support resource efficiency and waste prevention initiatives. A key WMP target is to achieve a 1% reduction per annum in the quantity of household waste generated per capita over the period of the WMP. In tandem, the WMP identifies measures to develop a circular economy whereby waste management initiatives are no longer confined to treating and disposing of waste, instead supporting initiatives that value waste as a resource or potential raw material.

It is the policy of Kildare County Council, as set out in the Regional Waste Management Plan, to:

- Prevent or minimise the production of waste in the first instance;
- Reduce, re-use and recycle to the maximum extent possible;
- Endeavour to recover energy from waste where possible; and
- Ensure the efficient and safe disposal of any residual waste.

4.8.3 Agriculture

With 67% of land within the County dedicated to agricultural uses, the agricultural sector remains a significant source of income and employment in the more rural areas of the County. However, over the past number of years there has been a significant fall off in agricultural employment. This is indicative of the changing nature of the rural economy.

EU Common Agricultural Policy (CAP) reforms, and the marked shift away from direct supports towards environmental improvements and rural development will significantly influence the future direction of the agricultural sector. Measures within the reform include incentivising younger people under 35 to enter the sector and facilitating the expansion of larger more efficient farms. In addition to the above the abolition of the EU Milk Quota in early 2015 has led Teagasc to set a target to increase milk output over the next 5 years alongside the development of 'dairy cattle to beef systems' with an estimated output increase of 20%.

With a reduction in full time employment in agriculture, farm diversification through Alternative Farm Enterprises (AFE's) have

been identified as a means of diversifying the rural economy. These measures are likely to significantly influence the direction and growth of the agricultural sector within the County.

4.8.4 Forestry

The forests of Ireland are very diverse, ranging from commercial plantations to native woodlands, to trees and woods in and around our towns and cities. The range of benefits from Ireland's forest cover is also diverse, extending beyond basic timber production to encompass employment, bio-diversity, wildlife conservation, environmental protection, rural development, carbon sequestration, amenity and recreation, and tourism.

At present the forest land cover within County Kildare stands at c. 6.1% (2012 National Forest Inventory) of the total land area. This degree of forest cover falls short of the national objective of the 'Forestry Programme 2014–2020 Ireland' which sets a target of 17% of the country's total land area to be under forest by mid-century. Only c. 11% of the county is currently forested.

4.8.5 Transport

Kildare County Council recognises the progress made in the national public transport network over the past number of years, while acknowledging that deficiencies still exist within County Kildare. One of the major challenges facing the County during the lifetime of this plan is the need to promote and provide for sustainable transportation options whilst providing for increased vehicular, cycle and pedestrian growth on the road network in the county through road improvement and management of demand where possible.

Some 66% of commuters in the County use private car transport. 18% of commuters use bus and/or rail for their daily commute. 16% of commuters walk or cycle to work, school or college.

The key to getting people out of their cars and into public transport is to have a reliable, convenient and fast service available, that brings people to the places they want to go, and in the case of Kildare, this will primarily mean the main centres of employment and retail in Dublin.

As new employment opportunities develop in the County, particularly in the growth centres of Athy, Naas, Newbridge, Clane and Kilcock the challenge will also be to make these towns more accessible.

4.8.6 Existing Problems

There are a number of challenges with respect to the provision of transport and water services infrastructure which are described under Sections 4.8.1 and 4.8.5 above.

The provisions of the Plan will contribute towards protection of the environment with regard to impacts arising from material assets.

Urban area	Reg. No.	BOD, COD, TSS compliance	Reason for failure	Persistent failures	Urban area (p.e)	WWTP (p.e)	Level of treatment provided	Receiving Water	Sensitive area	Nutrient quality compliance
Allenwood	DO493-01	Pass			842	1,500	Secondary & P removal	River		
Athy	DO003-01	Pass			13,800	15,000	Secondary & P removal	River	✓	Pass
Ballymore Eustace	DO238-01	Fail	Quality		748	2,000	Secondary	River		
Castledermot	DO236-01	Pass			1,848	2,400	Secondary & P removal	River		
Coill Dubh	DO242-01	Pass			1,066	2,000	Secondary & P removal	River		
Derrinturn	DO244-01	Pass			3,070	1,600	Secondary & P removal	River		
Kildare Town	DO178-01	Pass			11,891	28,000	Secondary & P removal	River		
Kilmeague	DO233-01	Fail	Quality		812	700	Secondary	River		
Leixlip	DO004-02	Pass			100,309	80,000	Secondary & P removal	River	✓	Pass
Monasterevin	DO177-01	Pass			2,531	9,000	Secondary & P removal	River	✓	
Osberstown (Upper Liffey Valley Scheme)	DO002-01	Pass			104,723	80,000	Secondary & P removal	River	✓	Pass
Rathangan	DO175-01	Pass			2,779	4,000	Secondary & P removal	River		
Robertstown	DO234-01	Pass			450	1,000	Secondary & P removal	River		

Table 4.1 Public Waste Water Treatment Information²⁰

²⁰ Source: EPA Focus on Urban Waste Water Treatment in 2014 (2015).
CAAS for Kildare County Council

4.9 Cultural Heritage

4.9.1 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 current generations.

4.9.2 Archaeological Heritage

4.9.2.1 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.

4.9.2.2 Record of Monuments and Places

The National Monument Acts 1930-2004 are the primary legislative framework for the protection of archaeological heritage in Ireland. Through the definition of monuments, historic monuments, and national monuments a wide range of structures and features fall under the remit of these Acts.

The Record of Monuments and Places (RMP) was established under Section 12 of the National Monuments (Amendment) Act 1994 and structures, features, objects or sites listed in this Record are known as Recorded Monuments. The term Monument refers to any artificial or partly artificial building or structure, that has been carved, sculptured or worked upon or which appears to have been purposely put or arranged in position. It also includes any, or part of any prehistoric or ancient tomb, grave or burial deposit, or ritual, industrial or habitation site. Monuments that predate 1700 AD are automatically accorded the title Historic Monument. A 'National Monument' is defined in the National Monuments Acts (1930-2004) as a monument or the remains of a monument, the preservation of which is of national importance by reason of the historical, archaeological, traditional, artistic or architectural interest.

As well as extending protection to all known sites, now identified as Recorded Monuments, the National Monuments Acts 1930-2004 extends protection to all previously unknown archaeological items and sites that are uncovered through ground disturbance or the accidental discovery of sites located underwater. Where necessary, the Minister with responsibility for Heritage will issue preservation orders to ensure protection is afforded to sites believed to be under threat.

Figure 4.10 shows the spatial distribution of entries to the RMP in County Kildare. These monuments are found throughout the County with clusters found in towns and lower concentrations found in peatland areas.

Castles, Churches, Ringforts and Grave Yards are amongst the most common recorded monuments in the Plan area.

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.

Churches are used for public Christian worship. These can be of any date from c. 500 AD onwards.

Grave yards include the burial area around a church. These dates from the medieval period (5th to 16th centuries) onwards.

4.9.2.3 Areas of Archaeological Potential and Significance

Table 4.2 below shows Areas of Archaeological Potential and Significance in the County.

Settlements	Ardree, Ardscull, Athy, Ballymore Eustace, Castledermot, Celbridge, Clane, Cloncurry, Dunmanoge, Harristown, Kildare, Kilkea, Kill, Leixlip, Moone, Naas, Old Kilcullen, Oughterard, Rathangan, Rathmore, Silliothill
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Table 4.2 Areas of Archaeological Potential and Significance

4.9.3 Architectural Heritage

4.9.3.1 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.

4.9.3.2 Record of Protected Structures

Part IV of the Planning & Development Act requires every development plan to include a record of protected structures (RPS). A 'protected structure' is a structure or a specific feature of the structure as may be specified that a Planning Authority considers to be of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social or technical point of view.

The placing of a structure on the RPS seeks to ensure that the character and interest of the structure is maintained and any changes or alterations to it are carried out in such a way as to retain and enhance that character and interest. The inclusion of a structure in the RPS confers certain responsibilities upon the owner of the structure and requires that

planning permission be sought for any changes or alterations to the structure. The definition of a 'structure' or 'a specified part of a structure' for the purpose of the RPS includes "the interior of the structure; the land lying within the curtilage of the structure; any other structures lying within the curtilage of that structure and their interiors; and all fixtures and features which form part of the interior or exterior of the structure". From the date of notification of an intention to include a structure in the RPS, the owner has a duty to protect that structure from endangerment.

Figure 4.10 maps the location of entries to the Record of Protected Structures within County Kildare. Also, mapped on Figure 4.10 are entries to the National Inventory of Architectural Heritage (NIAH) (these provide the basis for the recommendations of the Minister for Arts, Heritage and the Gaeltacht for the inclusion of particular structures into the RPS). Concentrations of protected architectural structures are found within existing settlements.

4.9.3.3 Architectural Conservation Areas

In accordance with Section 81 of the Planning and Development Act, a Development Plan is required to include an objective to preserve the character of a place, area, group of structures or townscape, taking account of building lines and heights, that:

- (a) is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or
- (b) contributes to the appreciation of protected structures,

if the Planning Authority is of the opinion that its inclusion is necessary for the preservation of the character of the place, area, group of structures or townscape concerned and any such place, area, group of structures or townscape shall be known as an "Architectural Conservation Area" (ACA).

ACAs contribute to the revitalisation of the fabric of towns, villages and rural areas by supporting their aesthetic value, giving them a distinctive identity, and thus make a positive contribution to local economies and tourist potential. The designation of an ACA does not prejudice innovative and contemporary design; on the contrary, in principle, design of a contemporary and minimalist style will be

facilitated within ACA's provided it does not detract from the character of the area.

Boundaries for Architectural Conservation Areas have been defined for Ballitore, Kilcock, Kildare, Leixlip, Maynooth, Monasterevin, Moone, Prosperous and Rathangan.

4.9.4 World Heritage Site

The United Nations Educational, Scientific and Cultural Organization (UNESCO) seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity. A UNESCO World Heritage Site is a site that has been nominated for the UNESCO International World Heritage program. The program aims to catalogue and preserve sites of outstanding importance, either cultural or natural, to the common heritage of humankind. A Tentative List is an inventory of those properties which a country intends to consider for nomination to the World Heritage List. One site in Kildare, Dún Ailinne, has been included on the Tentative List for Ireland as part of a larger assembly of sites.

4.9.5 Existing Problems

The context of archaeological and architectural heritage has changed over time within County Kildare however no existing conflicts with legislative objectives governing archaeological and architectural heritage have been identified.

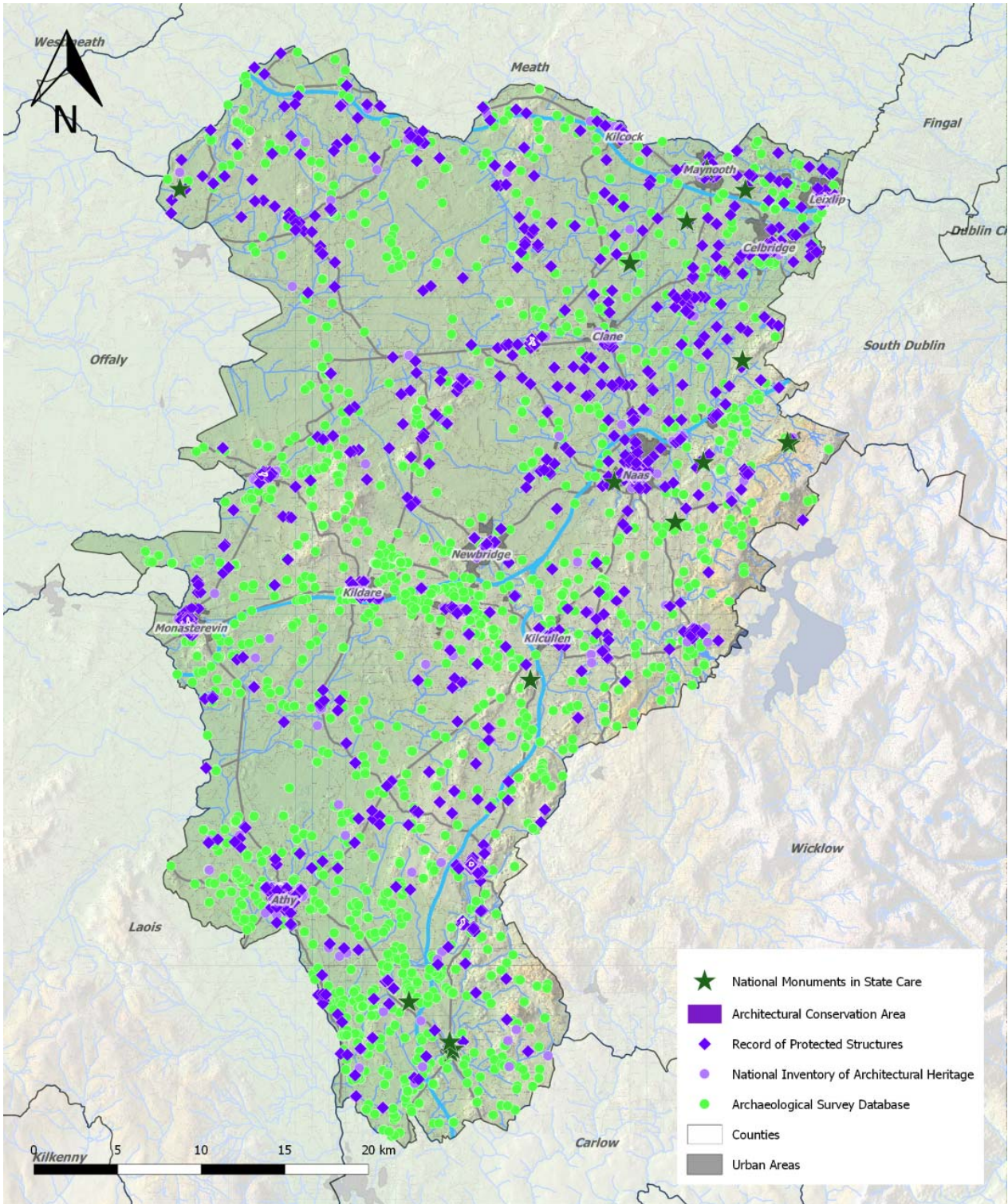


Figure 4.10 Entries to the Record of Monuments and Places
Source: Kildare County Council (Unknown)

4.10 Landscape

4.10.1 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; landcover, which includes vegetation, water, human settlements, and; human values which are a result of historical, cultural, religious and other understandings and interactions with landform and landcover.

4.10.2 Legislation

The importance of landscape and visual amenity and the role of its protection are recognised in the Planning and Development Act 2000 as amended, which requires that Development Plans include objectives for the preservation of the landscape, views and the amenities of places and features of natural beauty.

4.10.3 Landscape Character Areas

The landscape assessment that has been undertaken as part of the plan identifies 4 distinctive landscape categories each containing a number of landscape areas. The landscape categories are identified below and mapped on Figure 4.11. The individual landscape areas are described below under each of the landscape categories.

1. The Uplands

1(a) - Eastern Uplands – Oughterard

The Eastern Uplands are located in the northeast of the County and extend into the neighbouring County of Wicklow, as they are part of the Wicklow Mountain complex. The undulating hills situated within County Kildare lie to the east of the Liffey. The elevated nature of this area provides a defined skyline with scenic views over the central plains of Kildare and the neighbouring Wicklow Mountains which further define the skyline and the extent of visibility

1(b) - South-eastern Uplands – Corballis Hills– Red Hill, Dunmurry Hill, Allen Hill

The South-eastern Uplands coincide with Corballis and Hughstown Hills to the south-east of the County, east of Castledermot. This upland area also extends into the neighbouring Wicklow Mountains, as they are part of the same geomorphological complex. The relatively elevated nature of this area provides a locally defined skyline to the east with scenic views over the southern plains of Kildare as well as to the neighbouring Wicklow Mountains, which further define the skyline and the extent of visibility.

1(c) - Northern Hills – Newtown Hills

This character area is a small upland area on the central-northern part of the County boundary, which includes the hills to the north and south of Newtown (with 145m O.D. and 135m O.D. respectively) that locally define the skyline in this area. This unit lies immediately south of the Royal Canal. The relatively elevated nature of the local roads in this area, which run through both hilltops, provides scenic views over the northern and north-western plains of Kildare as well as to the Royal Canal corridor at certain vantage points and to the neighbouring County Meath undulating lowlands.

1(d) - Chair of Kildare

The Central Uplands or the Chair of Kildare as the area is locally known consists of a number of hills that interrupt the continuity of the Kildare plains. This landscape character unit is located immediately north of Kildare town. The elevated nature of this area provides highly scenic views over the central plains and bog lands of Kildare.

2. Lowland Plains and Bog lands

2(a) - Northern Lowlands– Naas and environs

This extensive lowland area to the north-east of the County is bisected by the River Liffey valley. The Royal Canal runs along its northern boundary and the Grand Canal corridor follows a northeast to southwest alignment. This area is characterised by generally flat terrain and open lands with regular (medium sized) field patterns. Hedgerows are generally well maintained and low, with scattered trees along the field boundaries that partially screen the lowest lying areas. Nevertheless, the generally low-lying vegetation of the area allows long-distance and extensive visibility. Distant views include the skylines of the Eastern Uplands, the Newtown Hills to the west, and the Chair of Kildare hilltops to the south-west.

2(b) - North-western Lowlands–Cadamstown and environs

This lowland landscape character unit is located on the north-western boundary of the county. The area is characterised by generally flat topography and smooth terrain, gently undulating around Carbury, to a maximum elevation of 142m O.D. at Carbury Hill. The occurring open lands with medium to large field patterns are bordered by well-maintained and low hedgerows, which contain scattered trees along some sections of the field boundaries. Although hedgerows partially screen the adjacent lowest lying areas, the commonly flat terrain allows long-distance visibility. Distant views include the skylines of Newtown Hills to the east and Allen Hill to the south-east.

2(c) - Southern Lowlands

This landscape character unit comprises an extensive lowland area to the south-west of the County, the River Barrow and the Grand Canal running along its western quarter. This area is characterised by generally flat terrain and open lands with regularly shaped large field patterns. Hedgerows are well maintained and low, with scattered trees along the field boundaries that partially screen the lowest lying areas. Nevertheless, the generally flat topography and the low-lying vegetation allow long-distance and extensive visibility. Distant views include the skylines of the Eastern Kildare Uplands, the Newtown and Hughstown Hills and the Wicklow Mountains to the east, the Chair of Kildare hilltops to the north-east and the neighbouring hills of County Laois to the south-west

2(d) - Central Undulating Lowlands

This lowland landscape character unit is characterised by undulating topography and located in the centre of the

County. The terrain gently rises to a maximum elevation of 147m O.D. at the east of the Curragh lands. The Curragh Racecourse and its natural grasslands represent a significant landscape feature in the area. The generally medium sized open lands are bordered by well-maintained hedgerows that contain scattered trees along some sections of the field boundaries. Although hedgerows are generally low, the undulating lands provide the potential to screen adjacent low-lying areas. The skyline to the east is defined by the Eastern Kildare Uplands and the Chair of Kildare defines the extent of visibility to the west.

2(e) - Western Bog lands

This lowland landscape character unit, located to the western central part of the County, is characterised by flat topography and smooth terrain. The terrain has a high-water table and it is badly drained, providing generally unstable and unproductive land. This area of the county is highly distinctive due to the existing large areas of bog land vegetation. The commonly large sized open lands are often bordered by unmaintained hedgerows, which contain scattered trees, and have the potential to partially screen adjacent lands. Nevertheless, the generally low vegetation and the even ground provide extensive long-distance visibility. The skyline to the south of this unit is defined by the Chair of Kildare Hills and the Northern Uplands define the skyline to the northeast

3. Transition Lands

3(a) - Eastern Transition Lands

This transitional landscape character unit, located between the uplands and lowlands to the east of the County, is characterised by undulating topography. The River Liffey bisects the unit north and south. The lands are generally of medium size and regular pattern, with commonly well-maintained hedgerows. Gorse and natural vegetation occur at some areas of this unit. The terrain gently rises from the lowland areas to the hilltops of the Eastern Kildare Uplands. The land undulates through a series of hilltops, the main ones being: Old Kilcullen Hill, Bullhill, Mullacash Hill, Nine Tree Hill and Carrighill. The elevated vantage points along the local roads provide long-distance views of the Kildare lowlands. The skyline to the east of this unit is defined by the Eastern Uplands, distant views including the neighbouring Wicklow Mountains, define the extent of visibility. The hilltops of the Chair of Kildare Hills partially define the skyline to the west

4. River Valleys and Water Corridors

4(a) - River Liffey Valley

The Liffey Valley is located on the north-eastern quarter of the County, flowing in a north-east to south-east pattern and its waters winding along the central lowlands. Many towns have become well established along the riverbanks, such as Leixlip, Celbridge, Clane, Newbridge, Kilcullen and Ballymore Eustace, where the River Liffey flows into Poulaphouca Reservoir. This lowland unit, characterised mostly by smooth terrain and low vegetation, has extensive open mountain views (i.e. the Chair of Kildare to the west and the Eastern Uplands to the east; distant views including the neighbouring Wicklow Mountains).

4(b) - River Barrow Valley

The Barrow Valley is an extensive river valley flowing in a north south pattern along the western boundary of the County. The river valley is easily accessible by local roads and many towns have become well established along the riverbanks, such as Monasterevin and Athy. The river valley is characterised by its floodplain levels and gentle slopes of deciduous trees with a slow progression to pasture lands. Running along the Barrow Way, the riverbanks are predominately grassland, although sometimes there is a transition of natural vegetation.

Medium to large tillage fields with hedgerow boundaries are also common to the river valley. The terrain is generally even with long distance views of mountains – the Chair of Kildare hills and the Eastern Uplands and the Wicklow Mountains being discernible to the east.

4 c) - Grand Canal Corridor

The Grand Canal is an extensive water corridor that flows in an east to south-west direction through the County. The canal corridor is divided at Sallins into the Naas and Corbally Branch and is further divided in three branches at Robertstown: the Milltown Feeder, the Barrow Line and the continuation of the Grand Canal into the neighbouring County Offaly.

The canal corridor is easily accessible by local roads and a number of towns have been established along the canal banks such as Allenwood, Robertstown and Rathangan. Smooth terrain and even topography characterise the canal corridor which generally progress into pasturelands and boglands, although natural vegetation occurs at some of the sections. The corridor and its adjacent lands have been landscaped and enhanced along the sections where the canal crosses urban areas.

Canal locks are distinctive features of this water corridor. Long-distance views of the canal corridors can be obtained from existing bridges and distant views of the County uplands (such as Red Hill and Allen Hill) can also be gained from certain vantage points.

4(d) - Royal Canal Corridor

The Royal Canal flows in an east to west direction along the northern boundary of the County. The canal corridor flows through Leixlip, Maynooth and Kilcock and continues into the neighbouring County Offaly. Local roads run parallel to the corridor along some sections. Smooth terrain and even topography characterise the canal corridor, which generally progresses into pasturelands, although natural vegetation occurs at some of the sections and tillage fields can also be found in adjacent lands. The lands along the corridor have been landscaped and enhanced where the canal crosses urban settlements. Canal locks are distinctive features of this water corridor. Long-distance views of the canal corridor and its surrounding environs can be obtained from local roads and existing bridges.

4.10.4 Landscape Sensitivity

Based on the findings of the Landscape Character Assessment a landscape sensitivity rating was developed for each of the Landscape Character Areas. Landscape sensitivity is a measure of the ability of the landscape to accommodate change or intervention without suffering unacceptable effects to its character and values. It is determined using the following factors: slope, ridgeline, water bodies, land use and prior development. Each of the individual landscape areas in the County are described below in terms of their landscape sensitivity. Figure 4.12 shows the sensitivity rating and landscape sensitivity factors for each Landscape Character Area in the County.

Class 1: Low Sensitivity

Areas with the capacity to generally accommodate a wide range of uses without significant adverse effects on the appearance or character of the area. Landscape character areas:

- North-western Lowlands
- Northern Lowlands
- Central Undulating Lands
- Southern Lowlands

Class 2: Medium Sensitivity

Areas with the capacity to accommodate a range of uses without significant adverse effects on the appearance or character of the landscape having regards to localised sensitivity factors. Landscape character areas:

- Eastern Transition Lands
- South-eastern Uplands

Class 3: High Sensitivity

Areas with reduced capacity to accommodate uses without significant adverse effects on the appearance or character of the landscape having regard to prevalent sensitivity factors. Landscape character areas:

- Western Boglands
- Eastern Uplands

Class 4: Special

Areas with low capacity to accommodate uses without significant adverse effects on the appearance or character of the landscape having regard to special sensitivity factors. Landscape character areas:

- Chair of Kildare
- Northern Hills
- River Liffey
- River Barrow

Class 5: Unique

Areas with little or no capacity to accommodate uses without significant adverse effects on the appearance or character of the landscape having regard to unique and special sensitivity factors. Landscape character areas:

- The Curragh
- Pollardstown Fen

4.10.5 Views and Prospects

The Plan lists views and prospects that are considered to be of the highest amenity value

in the County. It includes views and prospects to and from:

- Water Corridors;
- Canals;
- County Waterways;
- Hills; and
- Scenic Routes.

Views and prospects listed by the Plan are shown on Figure 4.12.

4.10.6 Existing Environmental Problems

New developments have resulted in changes to the visual appearance of lands within the County however legislative objectives governing landscape and visual appearance were not identified as being conflicted with.

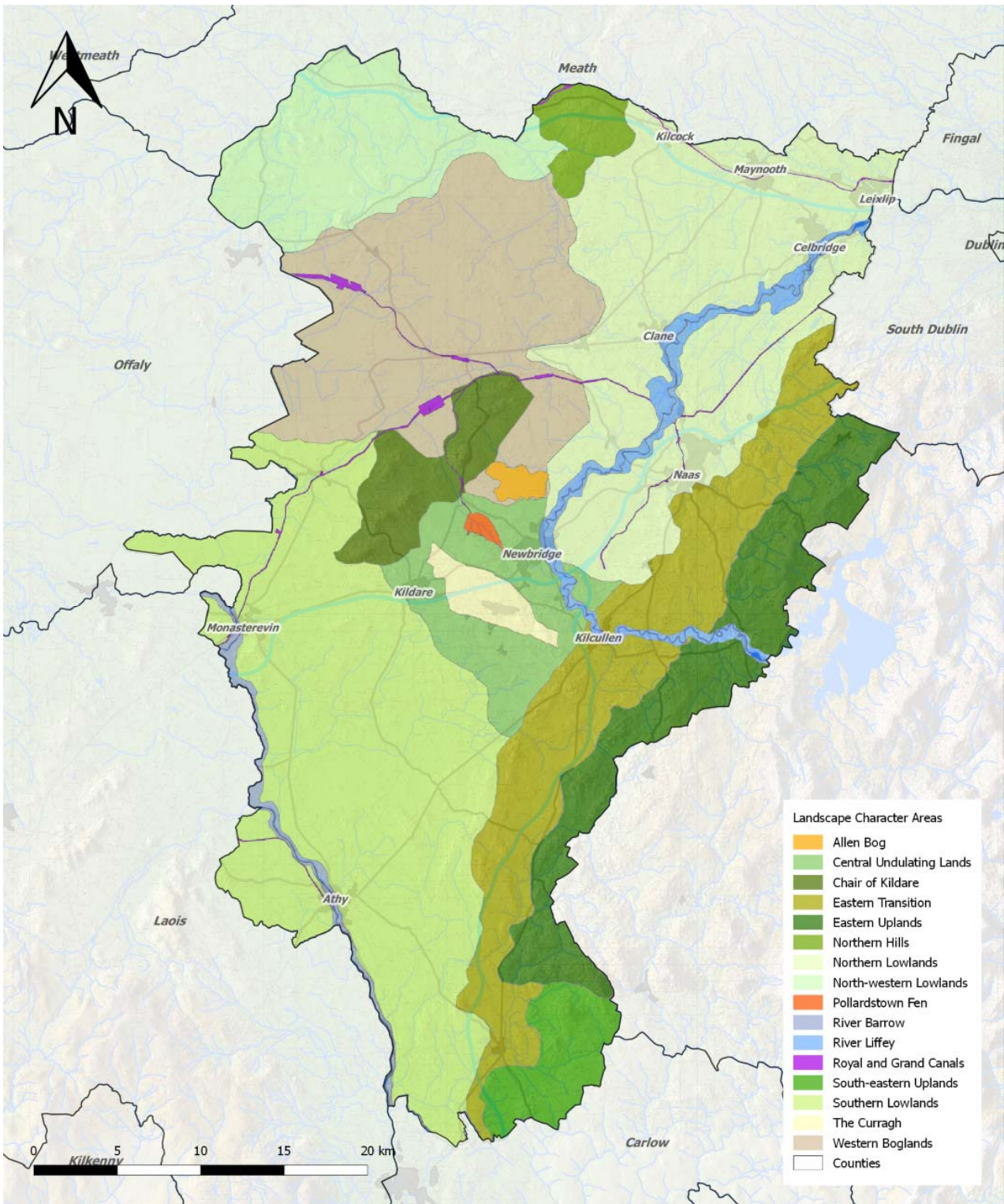


Figure 4.11 Landscape Category Map
 Source: Kildare County Council (2015)

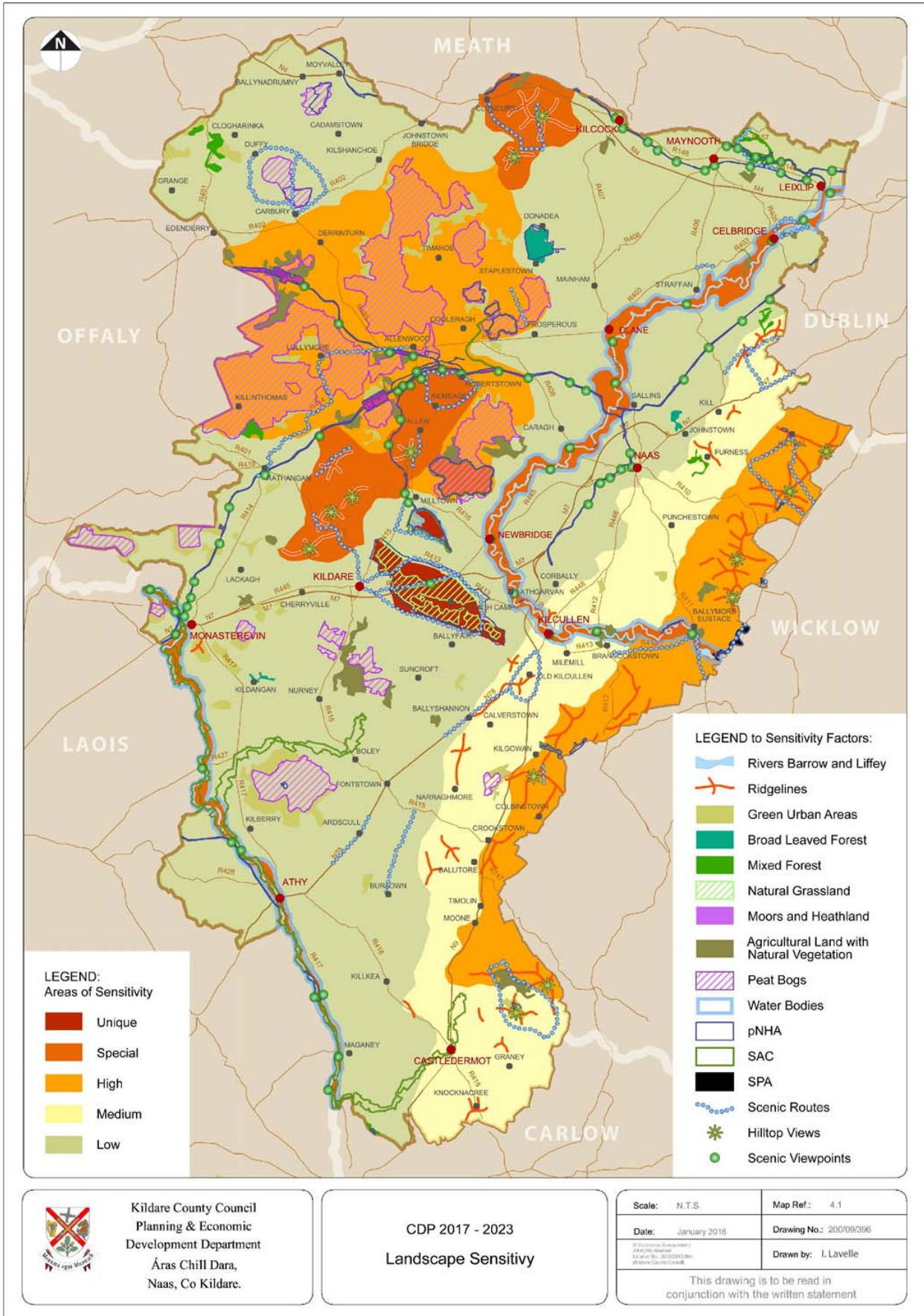


Figure 4.12 Sensitivity Ratings and Landscape Sensitivity Factors
 Source: Kildare County Council (2015)

4.11 Overlay of Environmental Sensitivity Mapping

In order to identify where most sensitivities within the County occur, a number of the environmental sensitivities described above were weighted and mapped overlapping each other.

Figure 4.13 provides an Overlay of Environmental Sensitivities in the County. Environmental sensitivities are indicated by colours which range from extreme sensitivity (red/pink colour gradients) to high sensitivity (pink/peach colour gradients) to moderate sensitivity (yellow colour gradients) to low sensitivity (green colour gradients). Where the mapping shows a concentration of environmental sensitivities there is an increased likelihood that development will conflict with these sensitivities and cause environmental deterioration.

The occurrence of environmental sensitivities does not preclude development; rather it flags at a strategic level that the mitigation measures - which have already been integrated into the Plan - will need to be complied with in order to ensure that the implementation of the Plan contributes towards environmental protection.

Most of the Plan area is identified as being of low sensitivity.

The greatest extent of higher sensitivity categorisations occurs in the centre of the County, concentrated between the areas of Kildare Town, Kilcullen and Newbridge. This is due to a variety of overlapping and related factors including soil type (peat), groundwater status (bad), landscape value (exceptional), ecological designation (proposed Natural Heritage Area) and geological designation (County Geological Heritage Area).

Elevated levels of sensitivity are found in the foothills to the west of the Kildare/Wicklow county boundary.

4.11.1 Methodology

A weighting system applied through Geographical Information System (GIS) software was used in order to calculate the vulnerability of all areas in the County. A slight differentiation was made in certain layers as follows:

- Natura Sites- SACs, SPAs (10 points);
- Other Ecological designations-NHAs, pNHAs (5 points);
- Cultural Heritage (Architectural Conservation Areas, entries to the Record of Protected Structures, State Care Monuments, Archaeological Monuments (10 points);
- Geological Sites of Importance (10 points);
- GSI Inner Source Protection Area (10 points), GSI Outer Source Protection Area (5 points)
- Aquifer Vulnerability - Aquifers which are extremely (10 points) or highly (5 points) vulnerable to pollution;
- WFD Status - WFD Status of Surface water bad ecological status (10 points), WFD Status of Surface water poor ecological status (5 points), WFD Status of Groundwater Poor status (Combined with above)
- Scenic Routes, Scenic View Points, Hilltop View Points (10 points);
- Landscape Values Exceptional value (10 points), Very high Value (5 points)
- WFD RPAs - WFD RPAs Margaritifera catchments, WFD RPAs Salmonid rivers (10 points), Salmonid River Water Basins (5 points), WFD RPAs Nutrient Sensitive Areas (10 points), NSA River Water Basins (5 points), WFD RPAs Drinking Water, WFD RPAs Bathing Water Catchments
- Soils- Peat, River Alluvium (10 points)
- Flood Extents (10 points)

The scale of sensitivity for each area of the County corresponds to the sensitivity factors: 5 points corresponds to one sensitivity factor; 10 points corresponds to two sensitivity factors; 20 points corresponds to four sensitivity factors and so on. The scores for each area are added together in order to determine overall vulnerability as is shown on Table 4.3.

Score	Vulnerability Class
5-15	Low
20-25	Moderate
30-45	High
>50	Extreme

Table 4.3 Overall Vulnerability Classes

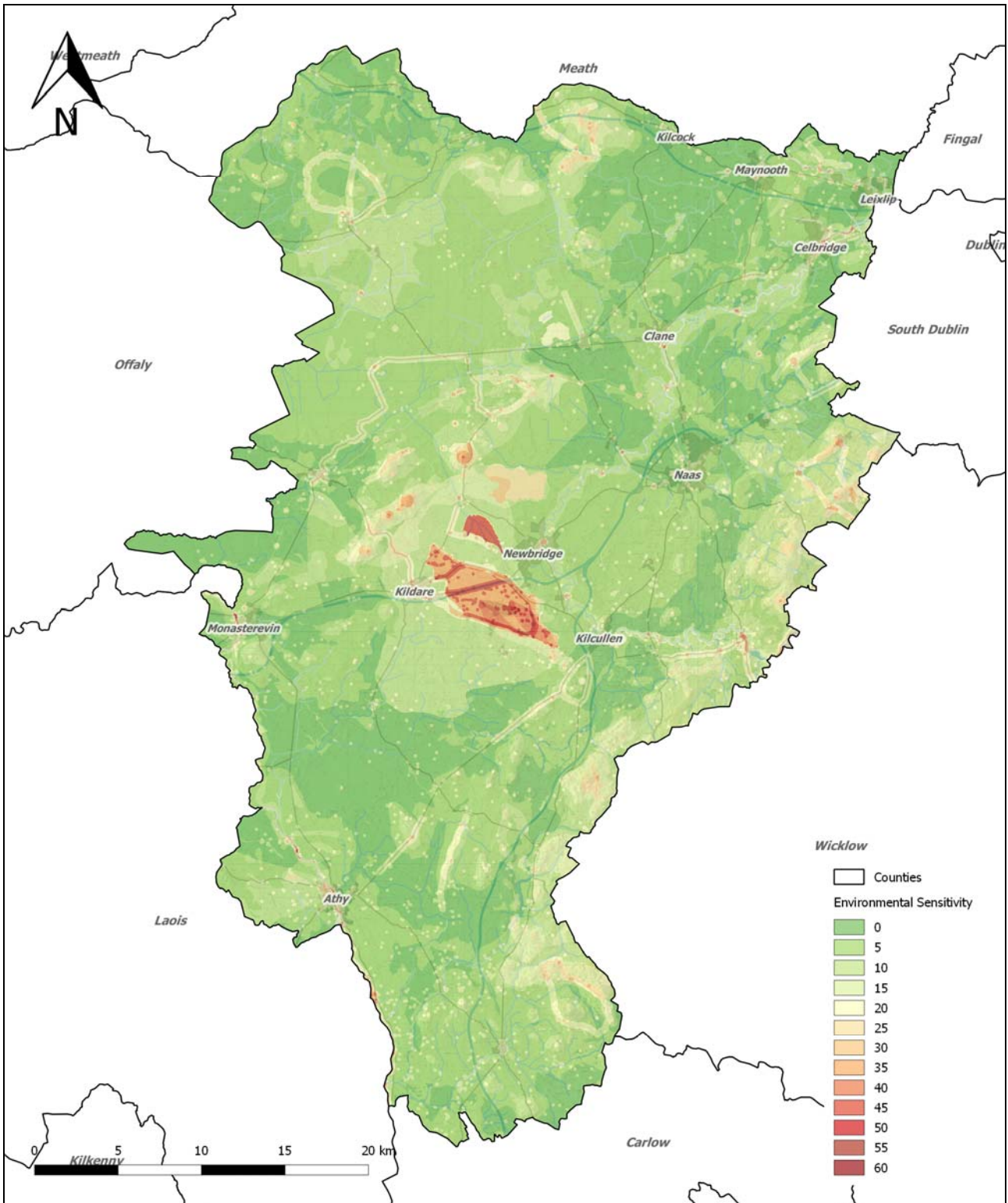


Figure 4.13 Overlay Mapping of Environmental Sensitivities
 Source: CAAS (2015)

Section 5 Strategic Environmental Objectives

Strategic Environmental Objectives (SEOs) are methodological measures developed from policies which generally govern environmental protection objectives established at international, Community or Member State level e.g. the environmental protection objectives of various European Directives which have been transposed into Irish law and which are required to be implemented.

The SEOs are set out under a range of topics and are used as standards against which the provisions of the Plan and the alternatives are evaluated in order to help identify which provisions would be likely to result in significant environmental effects and where such effects would be likely to occur, if - in the case of adverse effects - unmitigated.

The SEOs are linked to indicators which can facilitate monitoring the environmental effects of the Plan as well identifying targets which the Plan can help work towards.

All SEOs, indicators and targets are provided on Table 5.1 overleaf while background to these measures is provided in the subsections below.

Further detail on legislation, plans and programmes are provided under Section 2 (and associated Appendix I "Relationship with Legislation and Other Plans and Programmes") and Section 4.

Table 5.1 Strategic Environmental Objectives, Indicators and Targets

Environmental Component	Strategic Environmental Objectives	Selected Indicator(s)	Selected Target(s)
Biodiversity, Flora and Fauna	B1: To ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species ²¹	B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive	B1: Maintenance of favourable conservation status for all habitats and species protected under National and International legislation to be unaffected by implementation of the Plan ²²
	B2: To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function act as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species	B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the Plan	B2: No significant ecological networks or parts thereof which provide functional connectivity to be lost without remediation resulting from development provided for by the Plan
	B3: To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites ²³ and to ensure compliance with the Wildlife Acts 1976-2010 with regard to the protection of species	B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan B3ii: Number of significant impacts on the protection of listed species	B3i: Avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan B3ii: No significant impacts on the protection of listed species
Population and Human Health	PHH1: To protect populations and human health from exposure to incompatible land uses	PHH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors resulting from development provided for by the Plan, as identified by the Health Service Executive and Environmental Protection Agency	PHH1: No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan
Soil	S1: To avoid damage to the hydrogeological and ecological function of the soil resource	S1: Soil extent and hydraulic connectivity	S1: To minimise reductions in soil extent and hydraulic connectivity

²¹ 'Annexed habitats and species refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

²² Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

- (a) no alternative solution available;
- (b) imperative reasons of overriding public interest for the plan to proceed; and
- (c) adequate compensatory measures in place.

²³ The Planning and Development Act 2010 defines a 'wildlife site' as: (a) an area proposed as a natural heritage area and the subject of a notice made under section 16(1) of the Wildlife (Amendment) Act 2000, (b) an area designated as or proposed to be designated as a natural heritage area by a natural heritage area order made under section 18 of the Wildlife (Amendment) Act 2000, (c) a nature reserve established or proposed to be established under an establishment order made under section 15 (amended by section 26 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976, (d) a nature reserve recognized or proposed to be recognized under a recognition order made under section 16 (amended by section 27 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976, or (e) a refuge for fauna or flora designated or proposed to be designated under a designation order made under section 17 (amended by section 28 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976.

Environmental Component	Strategic Environmental Objectives	Selected Indicator(s)	Selected Target(s)
Water	W1: To maintain and improve, where possible, the quality and status of surface waters	W1i: 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) W1ii: Mandatory and Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)	W1i: Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' ²⁴ W1ii: To achieve - as a minimum - Mandatory values and, where possible, to achieve Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)
	W2: To prevent pollution and contamination of ground water	W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	W2: Not to affect the ability of groundwater to comply with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC
	W3: To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG, 2009)	W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	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>
Material Assets	M1: To serve new development with adequate and appropriate waste water treatment	M1: Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan	M1: All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan
	M2: To serve new development with adequate drinking water that is both wholesome and clean	M2: 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 as a result of implementing the Plan	M2: 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
	M3: To reduce waste volumes, minimise waste to landfill and increase recycling and reuse	M3i: Total collected and brought household waste M3ii: Packaging recovered (t) by self-complying packagers	M3i: Minimise increases in and, where possible, reduce household waste generation M3ii: Maximise increases in packaging recovered (t) by self-complying packagers
Air and Climatic Factors	C1: To reduce travel related emissions to air and to encourage modal change from car to more sustainable forms of transport	C1: Percentage of population travelling to work, school or college by public transport or non-mechanical means	C1: An increase in the percentage of the population travelling to work, school or college by public transport or non-mechanical means

²⁴ Good status as defined by the WFD equates to approximately Q4 in the current national biological classification of rivers as set out by the EPA.

Environmental Component	Strategic Environmental Objectives	Selected Indicator(s)	Selected Target(s)
Cultural Heritage	CH1: To protect archaeological heritage including entries to the Record of Monuments and Places and/or their context	CH1: Percentage of entries to the Record of Monuments and Places - including Areas of Archaeological Potential and Significance (and the context of the above within the surrounding landscape where relevant) - protected from significant adverse effects arising from new development granted permission under the Plan	CH1: Protect entries to the Record of Monuments and Places - including Areas of Archaeological Potential and Significance (and their context of the above within the surrounding landscape where relevant) from significant adverse effects arising from new development granted permission under the Plan
	CH2: To protect architectural heritage including entries to the Record of Protected Structures and Architectural Conservation Areas and their context	CH2: Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan	CH2: Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan
Landscape	L1: To minimise significant adverse visual impacts within and adjacent to the County	L1: Number of complaints received from statutory consultees regarding avoidable adverse visual impacts on the landscape resulting from development which is granted permission under the Plan	L1: No developments permitted which result in avoidable adverse visual impacts on the landscape resulting from development which is granted permission under the Plan

Section 6 Description of Alternative Scenarios

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 is 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 4 identifies the evolution of each component of the environment in the absence of implementing the Plan.

6.3 Drivers of Change

Ireland appears to be entering a period of economic recovery that is likely to be sustainable for the foreseeable future. Growth in the regional and national economies will be uneven at first – starting in the environs of the major settlements – before moving to more rural areas later.

Kildare's key location straddling major transportation and infrastructure routes together with its proximity to the Dublin/M50 Metropolitan region will mean that this recovery and growth will be early and amplified in this County.

As Leinster continues to increase in population and prosperity, Kildare is likely to remain one of the fastest growing counties. The demographic growth is likely to support and attract additional enterprise and employment – especially in services sectors and the new services and social media industries that rely on proximity to large pools of educated labour.

Changes in EU agricultural policies are likely to lead to intensification of pockets of high value dairy and tillage in parts of the County. The areas of highest agricultural productivity are in the same general locations as those that are likely to experience growth in settlement and enterprise.

Settlement

Settlement is likely to concentrate along the major transportation corridors. Motorway and rail connections will drive expansion of demand for affordable housing and good residential amenities. This will concentrate in areas that lie within a 40 to 60-minute commute from the M50 regional concentration of economic activity.

Enterprise

Growing concentrations of population coupled with good transportation access to regional employment opportunities and international transport connections are likely to increasingly attract new enterprise activity. All of Kildare lies within 100km – one hour of Dublin airport – this travel time is a very important locational factor for Foreign Direct Investment.

As the price of labour, services and accommodation increases within the M50 there is likely to be a steep increase in enterprises seeking to be located in the better endowed towns and villages within the key Strategic Communication Corridors. These smaller settlements that can offer high quality of life with affordable accommodation are likely to experience above average demand for growth – and may provide opportunities for significant rejuvenation of older urban cores.

Rural

Three sets of factors are likely to drive change in rural areas:

Agriculture

Post Common Agricultural Policy (CAP) - reform intensification of agriculture will result in increased size of holdings (by renting or acquisition) and well as increased environmental pressures due to disposal of wastes arising. The growth is likely to concentrate in and around zones of existing specialisation. Specialist agriculture may increasingly conflict with non-conforming adjacent infrastructure, enterprise and settlement projects - in areas of specialist concentration.

Infrastructure

Growth in settlement and enterprise will drive continuing need to install and upgrade infrastructure for energy, water services and transportation. Extractive industries will continue to grow - especially close to major settlement and transportation corridors.

Amenities

Growth in settlement as well as increasing prosperity, population and mobility throughout the region will place increasing pressure on regionally significant amenities. This will be most acute adjacent to strategic transportation corridors, such as the canal and river corridors and the east Kildare Uplands as well as on small scaled attractions based on nature, culture or recreation.

6.4 Background to Scenarios

A wide range of Scenarios (1-4) were evaluated for the last (2011 to 2017) County Development Plan.

At that time, Scenario 4 'Centred Development Strategy' 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.

Scenario 4 envisaged a concentration of development, population and demands for infrastructural capacity into the north-eastern part of the County.

It also envisioned concentrations of growth in the central corridor where the majority of the rest of the population and development are likely to concentrate because this area is already well served by road, rail, power and gas corridors.

This strategy also envisaged sufficient levels of continued rural development to sustain the future viability of smaller more dispersed rural communities.

Since 2011, the continued low levels of economic growth have caused the trends to have conformed more closely with Scenario 3 and parts of Scenario 2.

These envisaged less balanced developments in the County with a concentration of development, population in areas with relatively high concentrations in installed infrastructure with spare capacity – existing and planned.

It also envisioned concentrations of growth in the central corridor where the majority of the rest of the population and development are likely to concentrate because this area is already well served by road, rail, power and gas corridors.

These scenarios envisaged weaker and less co-ordinated development in weaker areas – both in the south and outside of the environs of the Strategic Transportation Corridor.

6.5 Description of Alternative Scenarios

Having regard to this review of outcomes it appears that the following range of Alternatives Scenarios fulfil the requirements of being realistic, capable of implementation, and representing a range of different approaches within statutory and operational requirements of the County Development Plan.

Note that the experience gained from examining the outcomes of actual development versus the scenarios that were examined for the previous (2011 – 2017) Kildare County Development Plan provides increased certainty and a lower range of differences for the scenarios that are examined in this assessment.

Pressure for development will return rapidly which will put pressure on plans and places where growth has been muted since 2006. As growth resumes differences between these scenarios – slight at first – will quickly diverge leading to markedly different environmental outcomes.

The scenarios suggest that the principal difference that are likely to arise will be in rural areas, small settlements and areas at a remove from the Strategic Transportation Corridors. In Scenario One and Scenario Two the plans for these areas will be less effective – leading to higher environmental pressures. Scenario Three, by contrast, envisages plan-led development that will significantly improve synergies causing increased, but balanced and more sustainable growth – throughout the County – with least impacts on the environment.

Scenario One 'Business as Usual' Trend Change

There will be very strong, but weakly co-ordinated growth within and adjacent to major settlements within the Strategic Transportation Corridor and the Metropolitan Areas of the North East. Elsewhere there will be markedly weaker growth due to the lack of integrated provision of services and accommodation. There will be strong and persistent patterns of social and economic imbalance between the north-east and southern parts of the county.

Scenario Two 'Mixed Planning' Uneven Outcomes

There will be very strong growth within the Strategic Transportation Corridor and the Metropolitan Areas of the North East. The need to co-ordinate key infrastructural resources – especially energy, water services and transportation – will enforce very strong planning and co-ordination in these areas. Elsewhere a variety of very local interests will militate against an

orderly or sustainable provision of services which will produce uneven patterns of settlement and enterprise.

Scenario Three 'Strong Planning' Balanced Outcomes

This Scenario envisages an effective County Development Plan ensuring that the Metropolitan areas of the North East will continue to grow strongly and quickly – but with increased connectivity into the strengthening urban centres of Kildare – rather than Dublin.

This Scenario also envisages that through the planning framework provided by the County Development Plan, the new Kildare Local Economic and Community Plan will make a difference in bringing higher levels of economic development and prosperity to more peripheral settlements and rural areas outside of the Strategic Transportation Corridors and in the south of the county.

Section 7 Evaluation of Alternative Scenarios

7.1 Introduction

This section provides a comparative evaluation of the environmental effects of implementing the three alternative scenarios. 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

The description of the environmental baseline together with the maps provided in Section 4 of this report (including the Environmental Sensitivity Overlay Mapping) is used in the evaluation.

Strategic Environmental Objectives (SEOs) identified in Section 5 and reproduced overleaf are also used.

The provisions of the alternatives are evaluated using compatibility criteria (see Table 8.1 below) in order to determine how they would be likely to affect the status of the SEOs. The SEOs and the alternatives are arrayed against each other to identify which interactions - if any - would cause effects 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 the SEO likely to be affected - in this instance 'to ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species'²⁵.

The interactions identified are reflective of likely significant environmental effects²⁶:

1. Interactions that would be likely to improve the status of a particular SEO would be likely to result in a significant

positive effect on the environmental component to which the SEO relates. The extent of positive effects which would be likely to occur varies and there are three 'likely to improve columns' (see Table 7.2)

2. Interactions that would potentially conflict with the status of an SEO and would be likely to be mitigated are divided into three groups (see Table 7.2):
 - o Interactions that would conflict the least with the status of SEOs - these would be likely to be mitigated to a greater degree and significant adverse effects would be less likely;
 - o Interactions that would conflict more with status of SEOs - these would be likely to be mitigated to an intermediate degree and significant adverse effects would be more likely.
 - o Interactions that would conflict the most with status of SEOs - these would be likely to be mitigated to a lesser degree and significant adverse effects would be more likely.

The degree of significance of effects occurring cannot be fully determined at this level of decision making due to the lack of exact detail available with regard to the type or scale of development that will be permitted under the Plan. Nonetheless a comparative evaluation of the various alternatives can be provided.

²⁵ 'Annexed habitats and species refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

²⁶ These effects include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

Table 7.1 Strategic Environmental Objectives

Environmental Component	SEO Code	Strategic Environmental Objectives
Biodiversity, Flora and Fauna	SEO B1	To ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species ²⁷
	SEO B2	To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function act as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species
	SEO B3	To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites and to ensure compliance with the Wildlife Acts 1976-2010 with regard to the protection of listed species
Population and Human Health	SEO PHH1	To protect populations and human health from exposure to incompatible land uses
Soil	SEO S1	To avoid damage to the hydrogeological and ecological function of the soil resource
Water	SEO W1	To maintain and improve, where possible, the quality and status of surface waters
	SEO W2	To prevent pollution and contamination of ground water
	SEO W3	To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG, 2009)
Material Assets	SEO M1	To serve new development with adequate and appropriate waste water treatment
	SEO M2	To serve new development with adequate drinking water that is both wholesome and clean
	SEO M3	To reduce waste volumes, minimise waste to landfill and increase recycling and reuse
Air and Climatic Factors	SEO C1	To reduce travel related emissions to air and to encourage modal change from car to more sustainable forms of transport
Cultural Heritage	SEO CH1	To protect archaeological heritage including entries to the Record of Monuments and Places and/or their context
	SEO CH2	To protect architectural heritage including entries to the Record of Protected Structures and Architectural Conservation Areas and their context
Landscape	SEO L1	To minimise significant adverse visual impacts within and adjacent to the County

Table 7.2 Criteria for appraising the effect of Alternatives on SEOs

Likely to Improve status of SEOs to a greater degree	Likely to Improve status of SEOs to an intermediate degree	Likely to Improve status of SEOs to a lesser degree	Least Potential Conflict with status of SEOs - likely to be mitigated to greater degree, significant adverse effects less likely	More Potential Conflict with status of SEOs - likely to be mitigated to an intermediate degree, significant adverse effects more likely	Most Potential Conflict with status of SEOs - likely to be mitigated to lesser degree, significant adverse effects more likely
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²⁷ 'Annexed habitats and species refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

7.3 Cumulative Effects

Cumulative effects are one of the types of effects which have been considered by the assessment of the alternatives. Cumulative effects can be described as the addition of many small impacts to create one larger, more significant, impact.

There are 2 types of potential cumulative effects that have been considered, namely:

- Potential *intra-Plan* cumulative effects - these arise from the interactions between different types of potential environmental effects resulting from a plan, programme, etc. Where there are elevated levels of environmental sensitivities (such as those indicated on the overlay mapping on Figure 4.13 in Section 4.11), future development could result in environmental conflicts and lead to a deterioration in environmental integrity. The interrelationships between environmental components that help determine these potential effects are identified on Table 8.3 in Section 8 e.g. interrelationships between: human health and water quality; human health and air quality; human health and flood risk; and ecology and water quality; and,
- Potential *inter-Plan* cumulative effects - these arise when the effects of the implementation of one plan occur in combination with those of other plans, programmes, developments, etc.

Effects that may arise as a result of implementing the Plan have been mitigated to the extent that the only residual adverse effects likely to occur as a result of implementation of the Plan are those which are identified under Section 8.5.

With regard to potential *inter-Plan* cumulative environmental effects, these occur as a result of the combination of: potential environmental effects which are identified by the assessment; and the effects arising from other legislation, plans, programmes or developments arising.

In considering the relationship with legislation and other plans and programmes it is important to note that the Plan will be implemented within areas that have existing plans and programmes (see Sections 2.5, 4 and 5 and Appendix I) for a range of sectors at a range of levels (e.g. National, River Basin District, Regional, County and Local) that are already subject to more specific higher and lower tier SEA and AA.

The assessment of the likely *inter-Plan* cumulative environmental effects requires knowledge of the likely effects of all plans/developments under consideration. The assessment is limited in this instance as there has been limited assessment of the likely types of developments provided for by other policies, plans and programmes that could occur in combination with the implementation of the County Development Plan. Where they exist, the SEA recognises the existence of other environmental assessments with a view to avoid duplication of assessment, in compliance with the SEA Directive.

The SEA undertaken for the Plan has taken account of the Council's obligation to comply with all environmental legislation and align with and cumulatively contribute towards – in combination with other users and bodies and their plans etc. – the achievement of the objectives of the regulatory framework for environmental protection and management.

Cumulative effects that have been considered include those resulting from the Plan and:

- Other land use Plans (e.g. South Dublin, Wicklow, Carlow, Laois, Offaly and Meath County Development Plans and lower tier land use plans within Kildare);
- Water services, transport and energy infrastructure plans (e.g. Irish Water's Water Services Strategic Plan and associated Capital Investment Plan 2014-2016, the National Transport Authority's Greater Dublin Area Transport Strategy 2016-2035 and Grid25 and associated Implementation Programme) and the emerging County Kildare Local Economic and Community Development Plan; and
- Environmental protection and management plans (e.g. Eastern and South-Eastern River Basin Management Plans and flood risk management plans).

Such potential cumulative effects include the following (note that potential adverse cumulative effects will be mitigated by provisions which have been integrated into the Plan):

- Contributions towards reductions in travel related greenhouse gas and other emissions to air (in combination with plans and programmes from all sectors, including transport and land use planning) as a result of facilitating sustainable mobility/a shift from motorised transport modes to more sustainable and non-motorised transport modes.
- Contributions towards travel related greenhouse gas and other emissions to air (in combination with plans and programmes from all sectors, including transport and land use planning) as a result of facilitating development which must be accompanied by road capacity.
- Facilitation of new development which is accompanied by appropriate levels of water services thereby contributing towards environmental protection.
- Need for and use of water and wastewater treatment capacity arising from new developments and associated potential adverse effects.
- Potential cumulative effects upon surface and ground water status as a result of housing, employment, agricultural and forestry – loadings and abstractions;
- Potential cumulative effects (habitat damage, enhancing ecological connectivity, contributing towards sustainable mobility) arising from linear developments, such as those relating to Green Infrastructure, including beyond the County border;
- Potential cumulative effects on flood risk by, for example, development of greenfield lands or obstruction of flood paths adjacent to the County Kildare border;
- In combination with plans and programmes from all sectors potential adverse effects on all environmental components arising from all development in greenfield and brownfield areas (e.g. infrastructural, residential, economic, agricultural etc.). The type of these effects is consistent with those described on Table 7.3. These plans and programmes from other sectors undergo SEA and comply with environmental legislation while projects are subject to EIA and AA, as relevant.

A variety of the issues covered by the Plan provisions are regional issues which are considered: at Regional Assembly level, in the Regional Planning Guidelines for the Greater Dublin Area 2010-2022 and by planning authorities across the Region. The solutions to these issues are often regional solutions which are subject their own consenting procedures. Works arising outside of the Plan as a result of providing for new development within the Plan area including those arising as a result of the cumulative provision of development in the wider Dublin region would potentially conflict with a number of environmental components, across the wider Dublin region and beyond, including: ecology, soil function, the status of water bodies and the landscape. Some of these conflicts would be mitigated by measures which have been integrated into the Plan while some will be mitigated by measures arising out of separate consent procedures.

The SEA for the Regional Planning Guidelines for the Greater Dublin Area 2010-2022 makes particular reference to the potential cumulative effects in association with other relevant plans and programmes within the Greater Dublin Area such as: the proposed 2030 Vision for Greater Dublin Transport; the Greater Dublin Strategic Drainage Study; the Water Supply Project; and the relevant River Basin Management Plans.

7.4 Detailed Evaluation of Alternatives²⁸

7.4.1 Effects Common to all alternatives

A number of potentially significant adverse environmental effects are common to all alternatives and these are described in Table 7.3 below. A number of potentially significant adverse effects are

²⁸ Footnotes like this are used in this section in order to identify instances where interactions between the relevant alternative and the relevant SEOs occur. The nature of these interactions is identified on Table 7.4.

common to all alternatives arising from development in both urban and rural areas. For the Plan, these effects will be mitigated by measures which have been integrated into the Plan.

Table 7.3 Potentially Significant Adverse Environmental Effects common to all alternatives

Environmental Component	Potential Effect
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> o Loss of biodiversity with regard to Natura 2000 Sites and Annexed habitats and species (see baseline Section 4.3)²⁹ o Loss of biodiversity with regard to ecological connectivity and stepping stones (see baseline Section 4.3)³⁰ o Loss of biodiversity with regard to designated sites including Wildlife Sites and listed species (see baseline Section 4.3)³¹
Population and Human Health	<ul style="list-style-type: none"> o Spatially concentrated deterioration in human health (see baseline Section 4.4)³²
Soil	<ul style="list-style-type: none"> o Damage to the hydrogeological and ecological function of the soil resource (see baseline Section 4.5)³³
Water	<ul style="list-style-type: none"> o Adverse impacts upon the status and quality of water bodies, including downstream bathing waters (see baseline Section 4.6)³⁴ o Increase in the risk of flooding (see baseline Section 4.6)³⁵
Material Assets	<ul style="list-style-type: none"> o Failure to provide adequate and appropriate waste water treatment (see baseline Section 4.8.1; water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)³⁶ o Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (see baseline Section 4.8.1; water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)³⁷ o Increases in waste levels (see baseline Section 4.8.2)³⁸
Air and Climatic Factors	<ul style="list-style-type: none"> o Failure to contribute towards sustainable transport and associated impacts (see baseline Section 4.7; transport infrastructure investment is needed to ensure the mitigation of potential conflicts)³⁹
Cultural Heritage	<ul style="list-style-type: none"> o Effects on entries to the Record of Monuments and Places and other archaeological heritage (see baseline Section 4.9)⁴⁰ o Effects on entries to the Records of Protected Structures and other architectural heritage (see baseline Section 4.9)⁴¹
Landscape	<ul style="list-style-type: none"> o Occurrence of adverse visual impacts (see baseline Section 4.10)⁴²

7.4.2 Scenario 1: 'Business as Usual' Trend Change

Under this Scenario 1, strong economic and demographic growth (within and adjacent to major settlements within the Strategic Transportation Corridor and the Metropolitan Areas of the North East) causes demand-led land-use patterns to overwhelm planning controls overtime.

Some development occurs within designated settlements however a diffuse concentration of development occurs throughout the north-eastern part of the County, especially within Strategic Transportation Corridors.

This scenario would lead to noticeably less development in rural and less advantaged areas and pressure on environmental resources throughout the county.

²⁹ SEO B1

³⁰ SEO B2

³¹ SEO B3

³² SEO PHH1

³³ SEO S1

³⁴ SEO W1 W2

³⁵ SEO W3

³⁶ SEO M1

³⁷ SEO M2

³⁸ SEO M3

³⁹ SEO C1

⁴⁰ SEO CH1

⁴¹ SEO CH2

⁴² SEO B1

Excess and inappropriate development would occur within the wider environs of larger settlements – especially in more rural or underdeveloped settlements.

The extent of development occurring within designated settlements will contribute somewhat to levels of sustainable development and environmental protection and management. This development would be accompanied by infrastructure thereby contributing towards appropriate levels of environmental protection and management especially with respect to the provision of water services (and associated positive effects on the status of waters, ecology and human health)⁴³ and the provision of transport infrastructure integrated with land use planning – and associated interactions with sustainable mobility, emissions and energy usage⁴⁴. Such development would contribute towards:

- An uptake in smarter, more sustainable modes of transport and minimise transport related emissions (including indirect benefits with regard to the protection of human health, energy usage and emissions targets)⁴⁵;
- The protection of many environmental components outside of the settlement boundaries of growth towns that would otherwise occur. Such components include biodiversity and flora and fauna, soil, water (including interactions with population and human health), landscape designations and cultural heritage⁴⁶; and
- Maximising the use of existing water services and drainage infrastructure, subject to capacity being provided (including indirect benefits with regard to the protection of water, biodiversity and flora and fauna, soil and human health)⁴⁷.

This scenario will place most pressure on environmental resources throughout the County due to the dispersed and uncoordinated expenditure on important infrastructure – which will lessen its effectiveness. Further environmental pressure would result from the overwhelming of the provisions of Local Area Plans by excess (unplanned) and inappropriate development within the immediate environs of larger settlements. This will lead to increasing development taking place outside a strong and well-regulated planning framework. These factors would lead to mixed – occasionally poor – environmental outcomes in other areas – especially in more rural or underdeveloped settlements. This scenario has the greatest potential to result in significant adverse effects upon the following:

- Provision of water and wastewater services (there would be an increase in private waste water treatment plants and private wells and effects on other environmental components arising would be dependent upon a variety of factors including how individual private waste water treatment plants are maintained and how private wells are used)⁴⁸;
- Protection of human health⁴⁹;
- Protection of surface and ground water resources (including that which is used for drinking water)⁵⁰;
- Protection of biodiversity, flora and fauna⁵¹; and
- Efforts to improve sustainable mobility and associated interactions with emissions, human health and energy usage (a dispersed population would lead to an increase in the proportion of car based trips, increased commuting patterns to major towns and out of the County, reduced overall use of public transport and unsustainable mobility)⁵².

⁴³ SEOs M1 M2 W1 W2 B1 B2 B3 PHH1

⁴⁴ SEOs C1 PHH1

⁴⁵ SEOs C1 PHH1

⁴⁶ SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1

⁴⁷ SEOs M1 M2 W1 W2 W3 B1 B2 B3 S1 PHH1

⁴⁸ SEO M1 M2

⁴⁹ SEOs PHH1

⁵⁰ SEO W1 W2

⁵¹ SEOs B1 B2 B3

⁵² SEOs C1 PHH1

7.4.3 Scenario 2: 'Mixed Planning' Uneven Outcomes

Strong market forces combined with increasing pressure for more local economic autonomy leads to pressure to resist excessive national/regional planning controls. Robust local plans give rise to pockets of stability and coordination around existing major settlements.

Growth is diffused throughout the Strategic Transportation Corridors of the north-east with some concentrations around the strongest existing settlements.

Some stronger rural areas will prosper under this scenario – especially near major settlements and transportation corridors.

Along with Scenario 3, Scenario 2 results in least pressure on environmental resources in the north-east and within the immediate environs of larger settlements because development will take place within a strong and well-regulated planning framework. In these areas, development would be accompanied by infrastructure thereby contributing towards appropriate levels of environmental protection and management especially with respect to the provision of water services (and associated positive effects on the status of waters, ecology and human health)⁵³ and the provision of transport infrastructure integrated with land use planning – and associated interactions with sustainable mobility, emissions and energy usage⁵⁴. Such development in the north-east and in the immediate environs of larger settlements would contribute towards:

- An uptake in smarter, more sustainable modes of transport and minimise transport related emissions (including indirect benefits with regard to the protection of human health, energy usage and emissions targets)⁵⁵;
- The protection of many environmental components outside of the settlement boundaries of growth towns that would otherwise occur. Such components include biodiversity and flora and fauna, soil, water (including interactions with population and human health), landscape designations and cultural heritage⁵⁶; and
- Maximising the use of existing water services and drainage infrastructure, subject to capacity being provided (including indirect benefits with regard to the protection of water, biodiversity and flora and fauna, soil and human health)⁵⁷.

Environmental outcomes would be mixed in other areas – especially in more rural or underdeveloped settlements. In these areas development, would be less orderly and not accompanied by relevant services.

This would be likely to lead to an increase in private waste water treatment plants and private wells⁵⁸. These strains would be likely to cumulatively conflict with – and result in adverse impacts upon – all environmental components within the County including those upon ecology, surface and groundwater resources, soil, human health, sensitive landscapes and cultural heritage⁵⁹. The significance of such effects would be dependent upon a variety of factors including how individual private waste water treatment plants and private wells are used and maintained. This less orderly development would hinder to efforts aiming to maximise sustainable mobility. A lack of investment in transport infrastructure and a dispersed population would, in these areas, lead to an increase in the proportion of car based trips, increased commuting patterns to major towns and out of the County, reduced overall use of public transport and unsustainable mobility⁶⁰.

The construction and operation of all development has the potential to result in adverse effects (these are detailed under Table 7.3⁶¹) however such effects would be mitigated.

⁵³ SEOs M1 M2 W1 W2 B1 B2 B3 PHH1

⁵⁴ SEOs C1 PHH1

⁵⁵ SEOs C1 PHH1

⁵⁶ SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1

⁵⁷ SEOs M1 M2 W1 W2 W3 B1 B2 B3 S1 PHH1

⁵⁸ SEO M1 M2 L1

⁵⁹ SEO B1 B2 B3 W1 W2 PHH1 L1 CH1 CH2

⁶⁰ SEO C1 PHH1

⁶¹ SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1

7.4.4 Scenario 3: 'Strong Planning' Balanced Outcomes

This Scenario envisages an effective County Development Plan ensuring that the Metropolitan areas of the North East will continue to grow strongly and quickly – but with increased connectivity into the strengthening urban centres of Kildare – rather than Dublin.

This Scenario also envisages that through the planning framework provided by the County Development Plan, the new Kildare Local Economic and Community Plan will make a difference in bringing higher levels of economic development and prosperity to more peripheral settlements and rural areas outside of the Strategic Transportation Corridors and in the south of the county.

This scenario provides for a high integration with regional plans and service providers which will confer advantages for enterprise within the county.

Self-interest leads development into strategically and environmentally robust locations that confer advantages of high certainty and service.

Strategic, planned concentrations of development would occur within established settlements.

Co-ordination and integration offers regional competitive advantage to complementary rural enterprises throughout the County.

There is least pressure on natural resources or water-based infrastructure throughout the County and lowest overall impacts on other environmental resources (ranging from air quality and landscape through to cultural heritage) because development will take place within a strong and well-regulated planning framework.

Under this scenario development would be accompanied by infrastructure thereby contributing towards appropriate levels of environmental protection and management especially with respect to the provision of water services (and associated positive effects on the status of waters, ecology and human health)⁶² and the provision of transport infrastructure integrated with land use planning – and associated interactions with sustainable mobility, emissions and energy usage⁶³.

Planned concentrations of development within established settlements and appropriate growth in rural areas, with restrictions on rural housing would contribute towards:

- An uptake in smarter, more sustainable modes of transport and minimise transport related emissions (including indirect benefits with regard to the protection of human health, energy usage and emissions targets)⁶⁴;
- The protection of many environmental components outside of the settlement boundaries of growth towns that would otherwise occur. Such components include biodiversity and flora and fauna, soil, water (including interactions with population and human health), landscape designations and cultural heritage⁶⁵; and
- Maximising the use of existing water services and drainage infrastructure, subject to capacity being provided (including indirect benefits with regard to the protection of water, biodiversity and flora and fauna, soil and human health)⁶⁶.

The construction and operation of all development has the potential to result in adverse effects (these are detailed under Table 7.3⁶⁷), however such potential would be reduced with this scenario and effects would be mitigated.

⁶² SEOs M1 M2 W1 W2 B1 B2 B3 PHH1

⁶³ SEOs C1 PHH1

⁶⁴ SEOs C1 PHH1

⁶⁵ SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1

⁶⁶ SEOs M1 M2 W1 W2 W3 B1 B2 B3 S1 PHH1

⁶⁷ SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1

7.5 Summary Evaluation against SEOs

Table 7.4 provides a comparative evaluation of alternative scenarios against the SEOs.

Table 7.4 Evaluation of Alternative Scenarios against SEOs

	Likely to Improve status of SEOs to a greater degree	Likely to Improve status of SEOs to an intermediate degree	Likely to Improve status of SEOs to a lesser degree	Least Potential Conflict with status of SEOs - likely to be mitigated to greater degree, significant adverse effects less likely	More Potential Conflict with status of SEOs - likely to be mitigated to an intermediate degree, significant adverse effects more likely	Most Potential Conflict with status of SEOs - likely to be mitigated to lesser degree, significant adverse effects more likely
Scenario 1:	This scenario will place most pressure on environmental resources throughout the County due to the dispersed and uncoordinated expenditure on important infrastructure – which will lessen its effectiveness. Further environmental pressure would result from the overwhelming of the provisions of Local Area Plans by excess (unplanned) and inappropriate development within the immediate environs of larger settlements. This will lead to increasing development taking place outside a strong and well-regulated planning framework. These factors would lead to mixed – occasionally poor – environmental outcomes in other areas – especially in more rural or underdeveloped settlements.					
			B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1			B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1
Scenario 2:	Along with Scenario 3, Scenario 2 results in least pressure on environmental resources in the north-east and within the immediate environs of larger settlements because development will take place within a strong and well-regulated planning framework. Environmental outcomes would be mixed in other areas – especially in more rural or underdeveloped settlements. In these areas development, would be less orderly and not accompanied by relevant services.					
		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1			B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Scenario 3:	Strategic, planned concentrations of development would occur within established settlements results in: higher levels of sustainable development and environmental protection and management; least pressure on natural resources or water-based infrastructure throughout the County; and lowest overall impacts on other environmental resources (ranging from air quality and landscape through to cultural heritage) because development will take place within a strong and well-regulated planning framework.					
	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1			B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		

7.6 Overall Findings

Alternative Scenario 3 contributes the greatest extent towards sustainable development and environmental protection and management is the preferred and selected alternative scenario which has been developed for the strategy for the Plan which focuses on building strong urban centres while protecting the rural hinterlands. The focus which is provided for by the various provisions evaluated in Section 8 of this report is on achieving:

- Critical mass in the Metropolitan urban areas (Maynooth, Leixlip, Celbridge, Kilcock) and in key towns and villages in the Hinterland (Naas, Newbridge, Athy, Kildare, Monasterevin and Kilcullen);
- Establishing a hierarchy of smaller rural settlements to develop rural centres capable of providing a range of services and employment to their local populations;
- Managing development in rural areas with a focus on agricultural diversification, appropriate rural enterprise, (e.g. renewable energy production) and the strengthening of existing towns and villages;
- Protecting the environment by implementing an environmental protection policy which recognises the various environmentally sensitive zones within the county but not to mutually exclude appropriate and otherwise acceptable uses and development.

Table 7.5 details the overall findings of the assessment with respect to this preferred and selected alternative scenario.

By complying with appropriate mitigation measures - including those which have been integrated into the Plan (see Section 9 of this report) – potentially significant adverse environmental effects which could arise as a result of implementing the Plan would be likely to be avoided, reduced or offset.

Table 7.5 Overall Findings – Effects arising from the Preferred Alternative Scenario for the Plan

Environmental Component	Significant Positive Effect, likely to occur	Potential Effect, if unmitigated	Residual Adverse Effects
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> • Facilitates lower overall effects on ecology (including designated sites, ecological connectivity, habitats) – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. • Facilitates protection of ecology with respect to the provision of water services. • Facilitates contribution towards the protection of ecology as a result of contributing towards the protection of environmental vectors, including air and water. 	<ul style="list-style-type: none"> • Arising from both construction and operation of development and associated infrastructure: loss of/damage to biodiversity in designated sites (including Natura 2000 Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna • Habitat loss, fragmentation and deterioration, including patch size and edge effects. • Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species. 	<ul style="list-style-type: none"> • Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces. • Losses or damage to ecology (these would be in compliance with relevant legislation).
Population and Human Health	<ul style="list-style-type: none"> • Facilitates protection of human health with respect to the provision of water services and the provision of transport infrastructure integrated with land use planning – and associated interactions with sustainable mobility, emissions and energy usage. • Facilitates contribution towards the protection of human health as a result of contributing towards the protection of environmental vectors, including air and water. 	<ul style="list-style-type: none"> • Potential interactions if effects upon environmental vectors such as water and air are not mitigated 	<ul style="list-style-type: none"> • Potential interactions with residual effects on environmental vectors. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility and infrastructural provision.

Environmental Component	Significant Positive Effect, likely to occur	Potential Effect, if unmitigated	Residual Adverse Effects
Soil	<ul style="list-style-type: none"> Facilitates lower overall effects on soil – due to increased utilisation of lands within existing development boundaries and use of existing utilities and brownfield sites. Facilitates protection of soil with respect to the provision of water services. 	<ul style="list-style-type: none"> Damage to the hydrogeological and ecological function of the soil resource. 	<ul style="list-style-type: none"> Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces.
Water	<ul style="list-style-type: none"> Facilitates lower effects on ground and surface waters due to higher levels of development within established and serviced settlement centres that have installed/upgraded water services capable of delivering Water Framework Directive targets. 	<ul style="list-style-type: none"> Adverse impacts upon the status of water bodies, including downstream bathing waters, arising from changes in quality, flow and/or morphology. Increase in the risk of flooding. 	<ul style="list-style-type: none"> Increased loadings as a result of development to be in compliance with River Basin Management Plans. Flood related risks remain due to uncertainty with regard to extreme weather events.
Material Assets	<ul style="list-style-type: none"> Provides for planned infrastructure including water services infrastructure and transport infrastructure. Make most use of existing water services and drainage infrastructure. 	<ul style="list-style-type: none"> Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts). Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts) Increases in waste levels 	<ul style="list-style-type: none"> Residual wastes to be disposed of in line with higher level waste management policies.
Air and Climatic Factors	<ul style="list-style-type: none"> Facilitates contribution towards a shift from car to more sustainable and non-motorised transport modes. Facilitates contribution towards reducing congestion and associated adverse effects on air quality. Facilitates contribution towards reductions in travel related greenhouse gas and other emissions to air. 	<ul style="list-style-type: none"> Emissions to air including greenhouse gas emissions and other emissions. 	<ul style="list-style-type: none"> An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility.
Cultural Heritage	<ul style="list-style-type: none"> Contribution towards the protection of cultural heritage by facilitating compliance with protection legislation. 	<ul style="list-style-type: none"> Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities. 	<ul style="list-style-type: none"> Potential alteration to the context and setting of architectural heritage however these will occur in compliance with legislation. Potential alteration to the context and setting of archaeological heritage however this will occur in compliance with legislation. Potential loss of unknown archaeology however this loss will be mitigated by measures integrated into the Plan.
Landscape	<ul style="list-style-type: none"> Contribution towards the protection of cultural heritage by facilitating compliance with objectives relating to landscape management and protection. 	<ul style="list-style-type: none"> Occurrence of adverse visual impacts and conflicts with the appropriate protection of statutory designations relating to the landscape. 	<ul style="list-style-type: none"> None. The Plan contributes towards the protection of landscape designations. The County's landscapes will change overtime as a result of natural changes in vegetation cover combined with new developments.

Section 8 Evaluation of Plan Provisions

8.1 Methodology

This section evaluates the detailed provisions of the Plan. The description of the environmental baseline together with the maps provided in Section 4 of this report (including the Environmental Sensitivity Overlay Mapping) is used for this purpose. Strategic Environmental Objectives (SEOs) identified in Section 5 and reproduced overleaf are also used.

The provisions of the Plan are evaluated using compatibility criteria (see Table 8.1 below) in order to determine how they would be likely to affect the status of the SEOs. The SEOs and the provisions of the Plan are arrayed against each other to identify which interactions - if any - would cause effects 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 the 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 Annexed habitats and species'⁶⁸.

The interactions identified are reflective of likely significant environmental effects⁶⁹;

1. Interactions that would be likely to improve the status of a particular SEO would be likely to result in a significant positive effect on the environmental component to which the SEO relates.
2. Interactions that would potentially conflict with the status of an SEO and would be likely to be mitigated would be likely to result in potential significant negative effects however these effects would be likely to be mitigated by measures which have been integrated into the Plan – these interactions are termed 'mitigated conflicts'.
3. Interactions that would probably conflict with the status of an SEO and would be unlikely to be mitigated would be likely to result in a significant negative effect on the environmental component to which the SEO relates.

The degree of significance of effects occurring cannot be fully determined at this level of decision making due to the lack of exact detail available with regard to the type or scale of development that will be permitted under the Plan.

Mitigation measures to prevent or reduce significant adverse effects posed by the Plan are identified in Section 9 (the Council have integrated all recommendations arising from the SEA and AA processes into the Plan - see Section 9). Both the Planning and the assessment teams contributed towards the mitigation which was developed over multiple iterations and reviews and was informed by, inter alia, various communications through the SEA, AA and SFRA processes.

In accordance with the established European principle of subsidiarity, more detailed assessment will be undertaken as appropriate at lower tiers of decision making. More detailed environmental measures would be likely to emanate from such assessments, further facilitating the mitigation of adverse effects.

⁶⁸ 'Annexed habitats and species refers to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

⁶⁹ These effects include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

Table 8.1 Criteria for appraising the effect of Plan provisions on SEOs

Likely to Improve status of SEOs	Mitigated Conflicts	Probable Conflict with status of SEOs- unlikely to be mitigated	No Likely interaction with status of SEOs
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Table 8.2 Strategic Environmental Objectives⁷⁰

Environmental Component	SEO Code	Strategic Environmental Objectives
Biodiversity, Flora and Fauna	SEO B1	To ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species ⁷¹
	SEO B2	To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function act as stepping stones (designated or not) - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species
	SEO B3	To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites and to ensure compliance with the Wildlife Acts 1976-2010 with regard to the protection of listed species
Population and Human Health	SEO PHH1	To protect populations and human health from exposure to incompatible land uses
Soil	SEO S1	To avoid damage to the hydrogeological and ecological function of the soil resource
Water	SEO W1	To maintain and improve, where possible, the quality and status of surface waters
	SEO W2	To prevent pollution and contamination of ground water
	SEO W3	To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG, 2009)
Material Assets	SEO M1	To serve new development with adequate and appropriate waste water treatment
	SEO M2	To serve new development with adequate drinking water that is both wholesome and clean
	SEO M3	To reduce waste volumes, minimise waste to landfill and increase recycling and reuse
Air and Climatic Factors	SEO C1	To reduce travel related emissions to air and to encourage modal change from car to more sustainable forms of transport
Cultural Heritage	SEO CH1	To protect archaeological heritage including entries to the Record of Monuments and Places and/or their context
	SEO CH2	To protect architectural heritage including entries to the Record of Protected Structures and Architectural Conservation Areas and their context
Landscape	SEO L1	To minimise significant adverse visual impacts within and adjacent to the County

⁷⁰ See Section 5 for a description of Strategic Environmental Objectives.

⁷¹ Annexed habitats and species refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

8.2 Appropriate Assessment and Strategic Flood Risk Assessment

Appropriate Assessment (AA) Screening and Strategic Flood Risk Assessment (SFRA) have both been undertaken alongside the preparation of the Plan.

The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DECLG, 2009).

The AA concluded that the Plan will not affect the integrity of the Natura 2000 network⁷².

Various policies and objectives have been integrated into the Plan through the SEA, SFRA and AA processes (see Section 9). The preparation of the Plan, SEA, AA and SFRA has taken place concurrently and the findings of the AA and SFRA have informed both the Plan and the SEA.

8.3 Interrelationship between Environmental Components

The SEA Directive requires the Environmental Report to include information on the likely significant effects on the environment, including on issues such as biodiversity, fauna, flora, population, human health, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.

Likely significant effects on environmental components which are identified include those which are interrelated; implementation of the Plan will not affect the interrelationships between these components. The presence of significant interrelationships between environmental components is identified on Table 8.3.

⁷² Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

- (a) no alternative solution available;
- (b) imperative reasons of overriding public interest for the plan/programme/project to proceed; and
- (c) adequate compensatory measures in place.

Table 8.3 Presence of Interrelationships between Environmental Components

Component	Biodiversity, flora and fauna	Population and human health	Soil	Water	Air and Climatic factors	Material assets	Cultural heritage	Landscape
Biodiversity, flora and fauna		No	Yes	Yes	Yes	Yes	No	Yes
Population and human health			Yes	Yes	Yes	Yes	No	No
Soil				Yes	No	Yes	No	No
Water					No	Yes	No	No
Air and Climatic factors						Yes	No	No
Material assets							Yes	Yes
Cultural heritage								Yes
Landscape								

8.4 Potential Impacts and their Determination

Environmental impacts which occur, if any, will be determined by the nature and extent of multiple or individual projects and site specific environmental factors.

Avoidance of conflict with SEOs and the environment is dependent upon compliance with the mitigation measures which have emerged through the SEA, AA and SFRA processes and which have been integrated into the Plan. The potentially significant adverse environmental effects arising from implementation of the Plan are detailed in Table 8.4 below.

Table 8.4 Potentially Significant Adverse Environmental Effects arising from Plan

Environmental Component	Potential Effect, if unmitigated
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> • Arising from both construction and operation of development and associated infrastructure: loss of/damage to biodiversity in designated sites (including Natura 2000 Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna • Habitat loss, fragmentation and deterioration, including patch size and edge effects • Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species
Population and Human Health	<ul style="list-style-type: none"> • Potential interactions if effects upon environmental vectors such as water and air are not mitigated
Soil	<ul style="list-style-type: none"> • Damage to the hydrogeological and ecological function of the soil resource
Water	<ul style="list-style-type: none"> • Adverse impacts upon the status of water bodies, including downstream bathing waters, arising from changes in quality, flow and/or morphology • Increase in the risk of flooding
Material Assets	<ul style="list-style-type: none"> • Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts) • Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts) • Increases in waste levels
Air and Climatic Factors	<ul style="list-style-type: none"> • Emissions to air including greenhouse gas emissions and other emissions
Cultural Heritage	<ul style="list-style-type: none"> • Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities
Landscape	<ul style="list-style-type: none"> • Occurrence of adverse visual impacts and conflicts with the appropriate protection of statutory designations relating to the landscape

Cumulative effects considered by the assessment include those detailed under Section 7.3.

8.5 Residual Adverse Effects

Section 9 outlines the measures that will mitigate the potential effects that are detailed under the subsections below. Residual adverse effects likely to occur - considering the extent of detail provided by the Plan and assuming that all mitigation measures are complied with by development - are identified for each of the environmental components on Table 8.5.

Table 8.5 Residual Adverse Effects

Environmental Component	Residual Adverse Effects
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> • Loss of an extent of non-protected habitats and species arising from the replacement of semi-natural land covers with artificial surfaces • Losses or damage to ecology (these would be in compliance with relevant legislation)
Population and Human Health	<ul style="list-style-type: none"> • Potential interactions with residual effects on environmental vectors. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility and infrastructural provision
Soil	<ul style="list-style-type: none"> • Loss of an extent of soil function arising from the replacement of semi-natural land covers with artificial surfaces
Water	<ul style="list-style-type: none"> • Increased loadings as a result of development shall be in compliance with River Basin Management Plans • Flood related risks remain due to uncertainty with regard to extreme weather events
Material Assets	<ul style="list-style-type: none"> • Residual wastes to be disposed of in line with higher level waste management policies
Air and Climatic Factors	<ul style="list-style-type: none"> • An extent of travel related greenhouse gas and other emissions to air. This has been mitigated by provisions which have been integrated into the Plan, including those relating to sustainable mobility
Cultural Heritage	<ul style="list-style-type: none"> • Potential alteration to the context and setting of architectural heritage however these will occur in compliance with legislation • Potential alteration to the context and setting of archaeological heritage however this will occur in compliance with legislation • Potential loss of unknown archaeology however this loss will be mitigated by measures integrated into the Plan
Landscape	<ul style="list-style-type: none"> • Visual impacts to be in compliance with the protection of landscape designations as detailed in the Plan. The County's landscapes will change overtime as a result of changes in vegetation combined with new developments.

8.6 Detailed Evaluation

For an explanation of SEO codes e.g. **B1**, **B2**, **B3**, **PHH1**, etc. refer to Table 8.2 on page 68.

8.6.1 Chapter 2: Core Strategy

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
<p>Chapter 2 provides the aim and the various policies of the Core Strategy.</p> <p>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.</p> <p>CS 1: To provide new housing provision in accordance with the County Settlement Hierarchy.</p> <p>CS 2: To direct appropriate levels of growth into the designated growth centres and moderate sustainable growth towns.</p> <p>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.</p> <p>CS 4: To deliver sustainable compact urban areas through a plan-led approach</p> <p>CS 5: To support the development of the identified strategic growth centres of Naas, Maynooth, Leixlip and Newbridge as focal points for regional critical massing and employment growth.</p> <p>CS 6: To encourage and facilitate new employment opportunities within economic clusters and the hinterland towns.</p> <p>CS 7: To promote and attract economic activity at appropriate locations throughout the county.</p> <p>CS 8: To address commuting patterns by building up the local economy to a more sustainable level.</p> <p>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.</p> <p>CS 10: To ensure that developments are accessible to and meet the needs of all individuals and local community groups.</p> <p>CS 11: To seek the delivery of physical and community infrastructure including strategic open space and recreational areas in conjunction with high quality residential developments to create quality living environments.</p> <p>CS 12: To protect and conserve the natural environment.</p> <p>CS 13: To protect and conserve nationally important and EU designated sites.</p> <p>CS 14: To promote and enhance biodiversity throughout the county.</p> <p>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.</p> <p>CS 16: It is the policy of the Council to support the implementation of the National Climate Change Strategy and the National Climate Change Adaption Framework Building Resilience to Climate Change 2012 through the County Development Plan and through the preparation of a Climate Change Adaptation Plan in conjunction with all relevant stakeholders.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

Commentary:

The aim and various policies of the Core Strategy reflect the preferred scenario for the Plan and the evaluation against Strategic Environmental Objectives (SEOs) that is provided above is consistent with the evaluation of the preferred scenario which is provided in Section 7. The aim and various policies of the Core Strategy are expanded upon through the provisions of other Chapters within the County Development Plan.

Many of these Core Strategy provisions contribute towards both sustainable development and the protection and management of the environment, namely Core Strategy Aim and Policies CS 9 to CS 16.

The provision of all necessary infrastructure in advance of development would facilitate both of the following:

- The achievement of balanced and orderly development - as set out by higher level planning objectives; and
- Appropriate levels of environmental protection and management especially with respect to the provision of water services (and associated positive effects on the status of waters, ecology and human health - **SEOs M1 M2 W1 W2 B1 B2 B3 PHH1**) and the provision of transport infrastructure integrated with land use planning – and associated interactions with sustainable mobility, emissions and energy usage (**SEOs C1 PHH1**).

Development which contributes towards a consolidated and compact urban form would mean a concentration of growth in urban centres and appropriate growth in rural areas: towns would develop within settlement boundaries and rural areas would be supported by larger urban centres and a control of sporadic rural housing. This approach would both:

- Help to maximise the uptake in smarter, more sustainable modes of transport and minimise transport related emissions (including indirect benefits with regard to the protection of human health **SEOs C1 PHH1**);
- Contribute towards the protection of many environmental components outside of the settlement boundaries of growth towns that would otherwise occur. Such components include biodiversity and flora and fauna, soil, water (including interactions with population and human health), landscape designations and cultural heritage (**SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1**); and
- Make most use of existing water services and drainage infrastructure, subject to capacity being provided (including indirect benefits with regard to the protection of water, biodiversity and flora and fauna, soil and human health) (**SEOs M1 M2 W1 W2 W3 B1 B2 B3 S1 PHH1**).

The construction and operation of all infrastructure and economic and housing development has the potential to result in adverse effects upon all environmental components however these effects have been mitigated by provisions which have been integrated into the Plan, including those which are identified in Section 9 of this report. The potential adverse effects (if unmitigated) include the following:

- Loss of biodiversity with regard to Natura 2000 Sites and Annexed habitats and species (**SEO B1**)
- Loss of biodiversity with regard to ecological connectivity and stepping stones (**SEO B2**)
- Loss of biodiversity with regard to designated sites including Wildlife Sites and listed species (**SEO B3**)
- Spatially concentrated deterioration in human health (**SEO PHH1**)
- Damage to the hydrogeological and ecological function of the soil resource (**SEO S1**)
- Adverse impacts upon the status and quality of water bodies (**SEOs W1 W2**)
- Increase in the risk of flooding (**SEO W3**)
- Failure to provide adequate and appropriate waste water treatment (**SEO M1**; water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)
- Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (**SEO M2**; water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)
- Increases in waste levels (**SEO M3**)
- Failure to contribute towards sustainable transport and associated impacts (**SEO C1**; transport infrastructure investment is needed to ensure the mitigation of potential conflicts)
- Effects on entries to the Record of Monuments and Places and other archaeological heritage (**SEO CH1**)
- Effects on entries to the Records of Protected Structures and other architectural heritage (**SEO CH2**)
- Occurrence of adverse visual impacts (**SEO L1**)

8.6.2 Chapter 3: Settlement Strategy

For an explanation of SEO codes e.g. **B1**, **B2**, **B3**, **PHH1**, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
Aim, Policies and Objectives				
<p>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.</p> <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.</p> <p>SS2: 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 3: To ensure that the zoning of lands is in accordance with the Core Strategy and settlement strategy.</p> <p>SS 4: To review the zoning of lands in instances where there is an over supply of land for housing and to consider alternative land use zoning objectives to reduce the quantum of housing lands in the first instance. The phased development of housing lands will be considered as a secondary solution only. SS 5: To implement through appropriate policies, the principles and guidance set out in:</p> <ul style="list-style-type: none"> o the DoEHLG Guidelines '<i>Sustainable Residential Development in Urban Areas</i>' (May 2009) and accompanying '<i>Urban Design Manual – A Best Practice Guide</i>' (May 2009): and o The Design Manual for Urban Roads and Streets (March 2013) <p>in the preparation and review of town, village and settlement plans.</p> <p>SO 1: To support the sustainable long-term growth of the Metropolitan Area towns of Leixlip, Maynooth, Celbridge and Kilcock and zone additional lands, where appropriate, to meet the requirements of the Core Strategy and settlement Hierarchy of this Plan.</p> <p>SO 2: To carry out a strategic Land Use, Employment and Transportation Study of north east Kildare including the Metropolitan area towns of Leixlip (and Collinstown), Maynooth, Celbridge and Kilcock. The preparation of the study will have regard to existing and emerging local area plans. It is envisaged that the study will involve the participation of all strategic stakeholders, including the National Transportation Authority, adjoining local authorities (i.e. Meath, Fingal and South Dublin County Councils), the Regional Assembly, transportation providers, Waterways Ireland, Government Departments and Environmental Agencies.</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 Capital Works Programme 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 their position within the overall settlement hierarchy set out in Table 3.1 (Settlement Hierarchy). Due regard will be given to the DoEHLG Guidelines '<i>Sustainable Residential Development in Urban Areas</i>' (May 2009), the accompanying '<i>Urban Design Manual –A Best Practice Guide</i>' (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 Acts 2000-2015 as appropriate which states "there shall be no presumption in law that any land zoned in a 13pre Draft Kildare County Development Plan 2017-2023 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, strategic and local amenities, community facilities, schools, public transport etc.</p>	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

<p>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 in Chapters 4, 10 and 17 as may be appropriate.</p> <p>SO 9: To sequentially develop lands within towns and villages in accordance with the Development Plan Guidelines (DoEHLG, 2007)</p> <p>SO 10: 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 Planning and Development Acts 2000-2015)</p> <p>SO 11: To assess as part of the mid-term review of this Plan (in accordance with Section 15 (2) of the Planning and Development Acts 2000-2015), the implications of the 2016 Census data for the county, the forthcoming National Planning Framework and the Regional Spatial and Economic Strategy and any revised national population projections/allocations issued by the DECLG and to consider revisions if appropriate to the Settlement Strategy by way of variation of this Plan</p> <p>SO 12: To investigate, in consultation with government departments, statutory agencies and stakeholders, options for the future growth of Leixlip, including the feasibility of developing a new residential district to the north of the Dublin – Sligo rail corridor. The Regional Planning Guidelines designate Leixlip as a Large Growth Town II within the metropolitan area of Dublin. The future growth strategy for Leixlip should be consistent with emerging regional and national spatial planning policy, represent efficient use of public investment in infrastructure and facilities (transport, water, waste water and roads) and seek to minimise impacts on the environment.</p> <p>SO 13: To carry out a review of residential zonings in villages following the adoption of the Regional Spatial and Economic Strategy or prior to the publication of the Chief Executive's Two Year Progress Report on the County Development Plan, or whichever is sooner. Where, taking into account national and regional planning policy, a shortfall of zoned land is identified, the Chief Executive shall initiate steps to address this.</p>				
<p>Commentary:</p> <p><i>These Settlement Strategy provisions reflect the preferred alternative scenario for the Plan and the evaluation against Strategic Environmental Objectives (SEOs) that is provided above is consistent with the evaluation of the preferred scenario which is provided in Section 7.</i></p> <p><i>The commentary provided under Section 8.6.1 above should also be referred to.</i></p> <p><i>Many of the Settlement Strategy provisions contribute towards both sustainable development and the protection and management of the environment, for example:</i></p> <ul style="list-style-type: none"> • <i>Aim ("protecting the rural environment");</i> • <i>SO 6 ("identify and retain green belt separation areas");</i> • <i>SO 8 ("sustainable manner");</i> • <i>SO 10 ("prepare a preliminary monitoring evaluation report");</i> • <i>SO 12 ("minimise impacts on the environment")</i> <p><i>The adoption as County Council policy of any recommendations arising from a strategic Land Use and Transportation Study would be required to be subject to Strategic Environmental Assessment (SEA), Appropriate Assessment (AA) and Strategic Flood Risk Assessment processes as relevant.</i></p>				

8.6.3 Chapter 4: Housing

For an explanation of SEO codes e.g. **B1**, **B2**, **B3**, **PHH1**, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
<p>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 a variety of household needs and to promote balanced and sustainable communities.</p>	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
<p>Commentary:</p> <p><i>The Housing provisions in this chapter reflect the preferred alternative scenario for the Plan and provide a planning framework for housing development in County Kildare that is line with the provisions of the Core Strategy. The evaluation against Strategic Environmental Objectives (SEOs) that is provided above is consistent with the evaluation of the preferred scenario which is provided in Section 7.</i></p> <p><i>The commentary provided under Section 8.6.1 above should also be referred to.</i></p> <p><i>The housing development provisions contain requirements – including those relating to the location of development, sustainable communities, phasing, densities, rural housing and the design of new development – which will contribute towards both sustainable development and beneficial effects upon the protection/management of all environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1).</i></p> <p><i>As the housing provisions provide for new development, they present the potential for significant adverse environmental effects to arise with regard to all environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). These effects would be mitigated by both the parts of the policies requiring development to be sustainable – including those relating to the location of development, sustainable communities, phasing, densities, rural housing and the design of new development – and the measures which have been integrated into the Plan (see Section 9).</i></p>				
<p>Policies and Objectives</p>				
<p>HS 1: To implement the Housing Strategy 2017-2023 (and any superseding Housing Strategy agreed by the Council) and to carry out a review of the Housing Strategy following adoption of the Regional Spatial and Economic Strategy. Where this review outlines that new or revised housing needs have been identified since the adoption of the County Development Plan, the Council will take appropriate steps to adjust the Housing Strategy.</p> <p>HCO 1: To secure the implementation of the Housing Strategy 2017-2023.</p> <p>HCO 2: To apply a 10% social housing requirement, pursuant to Part V of the Planning and Development Acts 2000-2015 to all sites that are zoned solely for residential use, or for a mixture of residential and other uses.</p> <p>HCO 3: To increase the stock of social housing within the county in order to meet the long-term housing needs of those households on the local authority housing list.</p> <p>HCO 4: To promote social integration and facilitate a diverse range of dwelling tenures within housing developments, including social housing in all Municipal District Areas of the county.</p> <p>HCO 5: To build and support the delivery of new housing appropriate to the needs of the county in terms of the demand for social housing, the needs of older people, homeless peoples, students, people with disabilities, and the traveller community.</p> <p>HCO 6: To meet the county's housing need for social housing provision through a range of mechanisms, including Part V of the Planning and Development Acts 2000-2015, a social housing building programme, acquisition, leasing, Housing Assistance Payment (HAP) scheme, Rental Accommodation Schemes (RAS) and the utilisation of existing housing stock.</p> <p>HCO 7: To work in partnership with statutory and voluntary agencies in assessing and addressing the needs and requirements of individuals for housing in Kildare.</p> <p>HCO 8: To ensure that appropriate mix of housing types and sizes are provided in each residential development.</p> <p>HU 1: To seek to ensure that sufficient zoned land continues to be available at appropriate locations to fulfil the housing requirements of the county as set out in the Core Strategy.</p> <p>HUO 1: To ensure that sufficient and appropriately located land is zoned to satisfy development needs within the county,</p>	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

<p>in compliance with the core strategy and settlement strategy set out in this plan.</p> <p>HC 1: To support the development of sustainable communities and to ensure that new housing development is carried out in accordance with Government policy in relation to the development of housing and residential communities.</p> <p>HCO 1: 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 and the use of scarce natural resources in construction, maintenance and management of dwellings.</p> <p>HCO 2: 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.</p> <p>HCO 3: 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>HCO 4: 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> <p>HD 1: Ensure that all new residential development within the County is of high quality design and complies with Government Guidance on the design of sustainable residential development and urban streets</p> <p>HDO 1: To ensure that residential development contributes to the creation of sustainable communities in accordance with the requirements of the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas, DEHLG (2009) and the companion Urban Design Manual- A Best Practice Guide, DEHLG (2009).</p> <p>HDO 2: To ensure that residential development provides an integrated and balanced approach to movement, place making and streetscape design in accordance with the requirements of the Design Manual for Urban Roads and Streets, DEHLG (2013).</p> <p>HDO 3: To encourage appropriate design and densities for new residential development while recognising the need to protect existing residential communities and the established character of the area. Where appropriate local area plans may incorporate additional guidance in the form of design briefs for important, sensitive or larger development sites.</p> <p>LD 1: To promote residential densities appropriate to its location and surrounding context.</p> <p>LDO 1: To ensure that the density of residential development maximises the value of existing and planned physical and social infrastructure and makes efficient use of zoned lands in accordance with the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas, DEHLG (2009).</p> <p>LDO 2: To require higher residential densities at appropriate locations as set out in the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas, DEHLG (2009).</p> <p>LDO 4: To recognise that lower densities /serviced sites in certain towns and villages may be considered on serviced land where the demand for the development of single houses in the rural area is particularly high.</p> <p>MD 1: Ensure that a wide variety of adaptable housing types, sizes and tenures are provided in the County in accordance with the Guidelines on Sustainable Residential Development in Urban Areas and the accompanying Urban Design Manual to support a variety of household types.</p> <p>MDO 1: To require that new residential developments provide for a wide variety of housing types, sizes and tenures.</p> <p>MDO 2: To require that applications for residential or mixed use development proposals with a residential element are accompanied by a design statement to address the mix of dwelling types. The design statements should demonstrate a need for such accommodation, based on local demand and the demographic profile of the area</p> <p>SN 1: To seek to ensure that groups with special housing needs, such as the elderly, people with disabilities, the homeless, those in need of emergency accommodation and Travellers are accommodated in a way suitable to their specific needs.</p> <p>SN 2: To support the provision of accommodation for older people in established residential and mixed use areas that offer a choice and mix of accommodation types to older people for independent, semi-independent living and assisted living.</p> <p>SN 3: To provide for and facilitate the provision of accommodation to meet the needs of older people 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.</p> <p>SN 4: To implement the Draft Kildare County Traveller Accommodation Programme 2014-2018 (and any superseding programmes agreed by the Council) in accordance with the principles of proper planning and sustainable development.</p>				
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<p>SNO1: To support:</p> <p>(a) The provision of housing for groups with specific housing needs, including the elderly, people with disabilities, the homeless, those in need of emergency accommodation and travellers, at appropriate locations and in accordance with the policies and objectives of this Plan.</p> <p>(b) Geographical balance in the provision of housing for groups with specific housing needs.</p> <p>SNO 2: To ensure the housing mix of new residential schemes takes account of the needs of older people in terms of appropriate designed, located and sized units.</p> <p>SNO 3: To provide for the sub division of large houses or amalgamation of smaller houses within established areas for the purpose of providing semi-independent or nursing home accommodation. Such development should be subject to the normal development management standards set out in Chapter 17 of this plan.</p> <p>SNO 4: To identify locations in local area plans, small town plans and village plans to cater for the needs of the elderly and promote co-location of other facilities where appropriate.</p> <p>SNO 5: To carry out, during the lifetime of this Plan, a comprehensive study of options for housing for older people in those parts of the County with the highest proportions of older people and to make specific recommendations for housing provision in these areas.</p> <p>SNO 6: To facilitate the development of appropriately located and designed student accommodation to allow Maynooth University to continue to develop as a national and international centre for education and research.</p> <p>SNO 7: To ensure that Traveller Accommodation is located in proximity to key services including education, community, health, recreation and public transport facilities.</p> <p>SNO 8: To provide longer term sustainable Traveller Accommodation development, while ensuring proper provision of infrastructure for all accommodation including halting sites.</p> <p>SNO 9: To facilitate the provision of purpose built standalone dwellings and within mixed schemes for people with special needs in conjunction with voluntary groups and other agencies.</p> <p>SNO 10: To facilitate the provision of accommodation close to key services and public transport facilities appropriate to the needs of persons with disabilities in conjunction with other voluntary bodies and the private sector.</p> <p>DL 1: Promote a high quality of design and layout in new residential development and to ensure a high-quality living environment for residents, in terms of the standard of individual dwelling units and the overall layout and appearance of the development.</p> <p>DLO 1: To create high quality living environments for residents in terms of individual dwelling units and the overall layout, design and function of the developments through the implementation of the standards set out in Chapter 17 Development Management Standards and the principles set out in the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (2009) and the companion Urban Design Manual – A Best Practice Guide (2009) and the Apartment Guidelines (2016).</p> <p>DLO 2: To promote new residential developments that take account of energy efficient and renewable energy opportunities.</p> <p>DLO 3: To support dwellings that are designed to be sufficiently adaptable to enable people to live comfortable through different stages of their lives and changing household needs.</p> <p>DLO 4: To develop typologies for adaptable housing types that meet the life cycle needs of communities having regard to CSO socio demographic data.</p> <p>DLO 5: To promote the carrying out of basic habitat assessments by the applicant to inform the design of new developments in order to ensure that proposals for development integrate the protection and enhancement of green infrastructure, biodiversity and landscape features (including trees and hedgerows) wherever possible, by minimising adverse impacts on existing habitats (whether designated or not), by including mitigation and/or compensation measures, as appropriate.</p> <p>OS 1: To ensure that all dwelling units have access to high quality, functional private open space that is carefully integrated into the design of new residential developments.</p> <p>OSO 1: To ensure that all private open spaces for dwellings, apartments and duplexes are design in accordance with the standards set out in the Draft Apartment Guidelines 2016, the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas 2009 and the companion Urban Design Manual – A Best Practice Guide 2009.</p> <p>PS 1: To ensure that all residential development is served by a clear hierarchy and network of high quality public open spaces that enhances the visual character, identity and amenity of the area.</p>				
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<p>PSO 1: To ensure that public and semi-private open space in new residential development complies with the quantitative and qualitative standards set out in the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas and in Chapter 17 of this plan.</p> <p>PSO 2: To ensure that there is a clear definition between public, semi-private and private open space and that all public and semi-private open spaces benefit from passive surveillance from residential development.</p> <p>SR 1: To support sustainable residential development in established urban areas at appropriate locations, to support the ongoing viability of social and physical infrastructure and services and to meet the future housing needs of the County. Standards in relation to residential development in established urban areas are set out under Chapter 17 of this plan.</p> <p>SRO 1: Encourage the consolidation of existing settlements 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>SRO 2: To consider back land development generally only where development is carried out in a planned redevelopment of back land areas to secure a coordinated scheme.</p> <p>SRO 3: To facilitate the extension of existing dwellings in accordance with the standards set out in Chapter 17 of this Plan.</p> <p>SRO 4: To facilitate the provision of a family flat or mews type development in circumstances where the planning authority is satisfied that the proposal complies with the standards set out in Chapter 17 of this Plan.</p> <p>SRO 5: To facilitate sub division of larger dwellings on extensive sites in urban areas that are well served by public transport and subject to adherence to the relevant standards set out in Chapter 17 of this Plan.</p> <p>SRO 6: To support and facilitate the provision of new or refurbished residential development in town centres, particularly at upper floor locations, where such proposals positively contribute to the overall vitality and vibrancy of the particular town/village, and to operate flexibility in relation to the open space and car parking standards set out in Chapter 17 of this Plan where it can be demonstrated that the amenities of future occupants and the surrounding area will not be compromised and subject to compliance with specific policy objectives and / or standards contained in Guidelines issued under Section 28 of the Planning and Development Act 2000 (as amended).</p>				
<p>Commentary:</p> <p><i>See commentary under 'Aim' above. Also, many of these Housing provisions contribute towards both sustainable development and the protection and management of the environment, for example:</i></p> <ul style="list-style-type: none"> • HUO 1 ("appropriately located land") • HC 1 ("sustainable communities") • HCO 1 ("have regard to the DoEHLG Guidelines 'Quality Housing for Sustainable Communities – Design Guidelines'") • HCO 3 ("high design quality") • HDO 1 ("To ensure that residential development contributes to the creation of sustainable communities") • LDO 1 ("maximises the value of existing and planned physical and social infrastructure") • SNO 7 ("proximity to key services") • DLO 5 ("ensure that proposals for development integrate the protection and enhancement of green infrastructure, biodiversity and landscape features (including trees and hedgerows) wherever possible") • SRO 1 ("Encourage the consolidation of existing settlements") 				
<p>Rural Housing Policies and Objectives</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.</p> <p>RH 2: To manage the development of one off housing in conjunction with the rural housing policy zone map (Map 4.4) and accompanying Schedules of Category of Applicant and Local Need Criteria set out in Table 4.3. Documentary evidence of compliance with the rural housing policy must be submitted as part of the planning application.</p> <p>RH 3: To require applicants to demonstrate that they are seeking to build their home in a rural area in Kildare for their own full time occupation. Applicants will be required to demonstrate that they do not own or 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, save in exceptional circumstances.</p> <p>RH 4: To restrict residential development on a landholding, where there is a history of development through the speculative sale or development of sites, notwithstanding the applicant's compliance with the local need criteria.</p> <p>RH 5: To restrict occupancy of the dwelling as a place of permanent residence for a period of seven years to the</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>applicant / occupant who complies with the relevant provisions of the local need criteria.</p> <p>RS 6: To recognise and promote the agricultural and landscape value of the rural area and prohibit the development of urban generated housing in the rural area.</p> <p>RS 7: To encourage the appropriate re-use and adaptation of the existing rural residential building stock in preference to new build.</p> <p>RH 8: To recognise that exceptional health circumstances, supported by relevant documentation from two registered medical practitioners, may require a person to live in a particular environment. Housing in such circumstances will generally be encouraged in areas close to existing services and facilities and in Rural Settlements. All planning permissions for such housing granted in rural areas shall be subject to an occupancy condition.</p> <p>RH 9: To ensure that, notwithstanding compliance with the local need criteria, applicants comply with all other normal siting and design considerations (Refer to Chapter 16 for further guidance) including the following:</p> <ul style="list-style-type: none"> (i) 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 and respect the character of the area. Development shall have regard to Chapter 16, Rural Design Guidelines and any subsequent changes to these guidelines. (ii) Appropriate landscaping of proposed development using predominantly native species as per Table 19.5 of this plan. (iii) The protection of features that contribute to local attractiveness including; landscape features, hedgerows, trees, historic and archaeological landscapes, water bodies, ridges, skylines, topographical features, geological features and important views and prospects. (iv) The capacity of the area to absorb further development. In particular, the following factors will be examined; the extent of existing development in the area, the extent of ribbon development in the area, the degree of existing haphazard or piecemeal development in the area and the degree of development on a single original landholding. (v) The ability to provide safe vehicular access to the site without the necessity to remove extensive stretches of native hedgerow and trees. The need for the removal of extensive roadside hedgerow may indicate that the site is unsuitable for development. (vi) The ability of a site in an un-serviced 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; (vii) 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); (viii) The need to comply with the requirements of <i>"The Planning System and Flood Risk Management Guidelines for Planning Authorities"</i> published by the Department of the Environment, Heritage and Local Government in November 2009. <p>RH 10: 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"> (i) The orderly and efficient development of newly developing areas on the edges of towns and villages; (ii) The future provision of infrastructure such as roads and electricity lines; and (iii) The potential to undermine the viability of urban public transport due to low density development. <p>RH 11: To preserve and protect the open character of transitional lands outside of settlements in order to prevent linear sprawl near towns, villages and settlements and to maintain a clear demarcation and distinction between urban areas and the countryside. This will not apply to persons building on family land where another family site is not available to them.</p> <p>RH 12: To discourage ribbon development (defined as five or more houses alongside 250 metres of road frontage)⁷³. The Council will assess whether a given proposal will exacerbate such ribbon development, having regard to the following:</p>				
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⁷³ Appendix 4 - Sustainable Rural Housing - Guidelines for Planning Authorities (2005).

<p>(i) The type of rural area and circumstances of the applicant;</p> <p>(ii) The degree to which the proposal might be considered infill development;</p> <p>(iii) The degree to which existing ribbon development would coalesce as a result of the proposed development; and</p> <p>(iv) Local circumstances, including the planning history of the area and development pressures.</p> <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 dwellings with 5 or more houses alongside 250 metres of road frontage.</p> <p>RH 13: To consider applications for the provision of a recessed cluster form of development. The cluster shall be designed in such a way that is appropriate to the rural context and shall be set back into the landscape from the public road. Clusters shall not exceed five houses and will be subject to normal, planning, siting, design and local need 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 consider family members for back land development. 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 (including attic accommodation) type houses only will be allowed in such back-land locations to limit visual impact and overlooking.</p> <p>RH 15: 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>RH16: 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> <p>RH 17: The design of entrance gateways should be in keeping with the rural setting. All applications for a dwelling in a rural area should include detailed drawings and specifications for entrance treatments. The roadside boundary should ideally consist of a sod/earth mound/fencing planted with a double row of native hedgerow species e.g. Hawthorn, field maple, holly, blackthorn, hazel etc. High block walls and gates and ornamental features will not be permitted.</p> <p>RH 18: To ensure that planning applications for a rural dwelling on the basis of the establishment of a fulltime viable commercial equine or other rural enterprise on site will generally be favourably considered, having regard to the following criteria:</p> <p>(i) The landholding shall comprise a minimum of 5ha.</p> <p>(ii) All other siting and design considerations will be taken into account in assessing the application).</p> <p>It must be demonstrated that the nature of the enterprise is location dependent and intrinsically linked to a rural location.</p> <p>RH 19: To protect the vernacular building stock in the rural areas of the county.</p> <p>RH 20: 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) and any other design guidelines issued during the period of the Plan.</p> <p>RH 21: To encourage the sensitive restoration of a derelict traditional vernacular structure as an alternative to the construction of a one-off dwelling elsewhere subject to the following:</p> <ul style="list-style-type: none"> - The vernacular dwelling must be capable of being suitably restored to habitable accommodation in keeping with its original character without the necessity to demolish or significantly alter it. - Documentary evidence to include a structural survey and photographs. - The distinctive character and original historic fabric of the structure is retained using appropriate traditional construction methods and materials. 				
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<p>- The applicants or proposed occupants will not be required to comply with local need criteria, identified in the Plan (Table 4.5).</p> <p>- Normal planning, siting and design considerations will be taken into consideration.</p> <p>RH 22: To accept the replacement of a dwelling other than a vernacular dwelling in circumstances where such a dwelling house is habitable, subject to the following:</p> <ul style="list-style-type: none"> (i) The structure must last have been used as a dwelling and the internal and external walls and roof must be intact. (ii) 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. (iii) Documentary evidence of the most recent date of occupation should be submitted with the application. (iv) The design of the proposed replacement house shall be of a high standard and its scale and character appropriate to the site and to existing development in the vicinity and to the rural area. (v) Normally a condition to demolish the existing dwelling will be included in any grant of permission. (vi) To require applicants to comply with local need criteria identified in Table 4.5 of the Plan. Normal planning considerations will be taken into account in the assessment of planning applications for replacement dwellings. <p>In cases where an applicant/occupant wishes to replace an existing habitable dwelling on the same footprint and of the same or similar floor area (with an allowance of up to 25% increase of floor area for modern living requirements) there will be no requirement to comply with local need criteria identified in this plan.</p> <p>RH 23: To facilitate the sensitive replacement of a structurally unsound derelict dwelling⁷⁴ 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 shall comply with local need criteria identified in the Plan and shall be subject to an occupancy condition.</p> <p>RH 24: 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 located in Zone 1 and up to 8km located in Zone 2, from the county boundary. Applicants will be required to demonstrate, to the satisfaction of the planning authority, that no suitable family owned site is available in the adjoining county and that all other aspects of rural housing policy including local need⁷⁵, siting and 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.</p> <p>RH 25: To facilitate the following types of applications for housing in the rural nodes:</p> <ul style="list-style-type: none"> • Individual one-off houses subject to applicants meeting the local need criteria identified in the Plan (refer to Map 4.4 and Table 4.5). • 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 4.4 and Table 4.5), and subject to the provision of appropriate physical infrastructure. <p>RH 26: To ensure that all new developments in the rural nodes particularly cluster development, contribute to and integrate successfully with the existing settlement and to promote the development of central brownfield sites, if existing, as appropriate.</p> <p>RH 27: 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.</p> <p>RH 28: To manage the provision of specialized 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.</p> <p>RH 29: 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.</p>				
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⁷⁴ Structure in a ruinous or dangerous condition.

⁷⁵ Applicants will be required to demonstrate that their genuine local need albeit relevant to the adjoining county, is similar to that required under Table 4.5 (Schedule of Local Need Criteria), with appropriate supporting documentation demonstrating same.

<p>RH 30: 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:</p> <ol style="list-style-type: none"> i. 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. ii. Housing for tourists at golf courses, established equestrian centres, or as part of a major integrated tourism development proposals 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. <p>RH 31: To require applications for holiday home development in demesne areas to be accompanied by an overall Masterplan for the entire demesne landscape.</p> <p>RH 32: To require planning permission for holiday home and tourist development on unzoned lands to be subject to an agreement pursuant to Section 47 of the Planning and Development Act 2000, as amended, prohibiting the sale of individual units.</p> <p>RO 1: To prepare a 'Kildare Single Rural Houses Design Guide' over the lifetime of the Plan. Until such time as this is prepared, all new housing in the rural countryside shall achieve the highest quality of layout and design in accordance with the standards set out in Chapter 16 of this Plan.</p> <p>RO 2: To continue to monitor and map, in conjunction with All Island Research Observatory (AIRO), Maynooth University, the level and pattern of one off housing in rural areas and rural nodes during the period of the Development Plan as a means of monitoring and informing the rural housing policy.</p> <p>RO 3: To implement the provisions of the Rural Housing Policy through the management of the provision 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.</p> <p>RO 4: To investigate the feasibility of providing/facilitating services sites in rural nodes, villages, settlements and small town to cater for rural generated housing demand for persons who meet the criteria set out in Table 4.3 Schedule of Local Need, as an alternative to housing in the rural countryside.</p>				
<p>Commentary:</p> <p><i>See commentary under 'Aim' above. Although the development of rural housing has the potential to result in various adverse impacts, these provisions control rural housing and support the overall strategy selected for the Plan which will contribute towards the sustainable development and environmental protection in County Kildare. Furthermore, many of these Housing provisions contribute towards the protection and management of the environment, for example:</i></p> <ul style="list-style-type: none"> • RH 1 ("protecting natural and man-made assets") • RH 2 ("Documentary evidence of compliance with the rural housing policy must be submitted as part of the planning application") • RS 6 ("prohibit the development of urban generated housing in the rural area") • RS 7 ("encourage the appropriate re-use and adaptation of the existing rural residential building stock") • RH 9 ("predominantly native species"; "protection of features that contribute to local attractiveness"; "in accordance with the EPA Code of Practice for Wastewater Treatment Systems for single houses (2009) the County Kildare Groundwater Protection Scheme"; "in accordance with the policies of the Greater Dublin Strategic Drainage Study (2005), in particular those of Sustainable urban Drainage Systems (SuDS)"; "comply with the requirements of The Planning System and Flood Risk Management Guidelines for Planning Authorities") • RH 10 ("control the level of piecemeal and haphazard development of rural areas close to urban centres and settlements") • RH 11 ("preserve and protect the open character of transitional lands") • RH 12 ("discourage ribbon development") • RH 27 ("protect the architectural and environmental quality") • RH 30 ("restrict tourist accommodation on greenfield sites in the rural countryside") • RH 31 ("to require applications for holiday home development in demesne areas to be accompanied by an overall Masterplan for the entire demesne landscape") • RO 3 ("protect the physical, environmental, natural and heritage resources of the county") 				

8.6.4 Chapter 5: Economic Development, Enterprise and Tourism

For an explanation of SEO codes e.g. **B1**, **B2**, **B3**, **PHH1**, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
Aim: To provide for the future wellbeing of the residents of the county and the region by facilitating economic development; to promote the growth of employment opportunities in all sectors including tourism in accordance with the principles of sustainable development; to achieve a reduction in the unsustainable levels of commuting from the county; to provide a greater focus on community building and improving quality of life	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
<p>Commentary:</p> <p>The economic development provisions in this chapter are consistent with the preferred alternative scenario for the Plan and provide a planning framework for economic development in County Kildare that is in line with the provisions of the Core Strategy. The evaluation against Strategic Environmental Objectives (SEOs) that is provided above is consistent with the evaluation of the preferred scenario which is provided in Section 7.</p> <p>The provision of all necessary infrastructure in advance of development would facilitate both of the following:</p> <ul style="list-style-type: none"> The achievement of balanced and orderly development - as set out by higher level planning objectives; and Appropriate levels of environmental protection and management especially with respect to the provision of water services (and associated positive effects on the status of waters, ecology and human health - SEOs M1 M2 W1 W2 B1 B2 B3 PHH1) and the provision of transport infrastructure integrated with land use planning – and associated interactions with sustainable mobility, emissions and energy usage (SEOs C1 PHH1). <p>Development which contributes towards a consolidated and compact urban form would mean a concentration of growth in urban centres and appropriate growth in rural areas: towns would develop within settlement boundaries and rural areas would be supported by larger urban centres and a control of sporadic rural housing. This approach would both:</p> <ul style="list-style-type: none"> Help to maximise the uptake in smarter, more sustainable modes of transport and minimise transport related emissions (including indirect benefits with regard to the protection of human health SEOs C1 PHH1); Contribute towards the protection of many environmental components outside of the settlement boundaries of growth towns that would otherwise occur. Such components include biodiversity and flora and fauna, soil, water (including interactions with population and human health), landscape designations and cultural heritage (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1); and Make most use of existing water services and drainage infrastructure, subject to capacity being provided (including indirect benefits with regard to the protection of water, biodiversity and flora and fauna, soil and human health) (SEOs M1 M2 W1 W2 W3 B1 B2 B3 S1 PHH1). <p>The construction and operation economic developments has the potential to result in adverse effects upon all environmental components however these effects have been mitigated by provisions which have been integrated into the Plan, including those which are identified in Section 9 of this report. The potential adverse effects (if unmitigated) include the following:</p> <ul style="list-style-type: none"> Loss of biodiversity with regard to Natura 2000 Sites and Annexed habitats and species (SEO B1) Loss of biodiversity with regard to ecological connectivity and stepping stones (SEO B2) Loss of biodiversity with regard to designated sites including Wildlife Sites and listed species (SEO B3) Spatially concentrated deterioration in human health (SEO PHH1) Damage to the hydrogeological and ecological function of the soil resource (SEO S1) Adverse impacts upon the status and quality of water bodies (SEOs W1 W2) Increase in the risk of flooding (SEO W3) Failure to provide adequate and appropriate waste water treatment (SEO M1; water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts) Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (SEO M2; water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts) Increases in waste levels (SEO M3) Failure to contribute towards sustainable transport and associated impacts (SEO C1; transport infrastructure investment is needed to ensure the mitigation of potential conflicts) Effects on entries to the Record of Monuments and Places and other archaeological heritage (SEO CH1) Effects on entries to the Records of Protected Structures and other architectural heritage (SEO CH2) 				

- Occurrence of adverse visual impacts (*SEO L1*)

Economic Development Strategy Policies and Objectives

ECD 1: To facilitate and support the growth of the economy in Kildare and the Greater Dublin Area in a sustainable manner, and in accordance with the RPGs economic strategy (or the forthcoming Regional Spatial and Economic Strategy).

ECD 2: To support and facilitate the economic development of the county in accordance with the economic development strategy of the County Development Plan, across a range of sectors. There will be a general presumption against development that would prejudice the achievement of the Economic Development Strategy.

ECD 3: To ensure that sufficient land is zoned for economic activity through the development plan and Local Area Plans in accordance with the Regional Planning Guidelines and the Regional Spatial and Economic Strategy. Such land will, normally, be protected from inappropriate development that would prejudice its long-term development for employment and economic activity.

ECD 4: To seek, in so far as is possible, to locate people intensive employment development close to the strategic public transport network for the region that is outlined in the Transport Strategy for the Greater Dublin Area 2016-2035 and other Regional Plans.

ECD 5: It is a Policy of the Council:

(i) To promote and facilitate regional scale employment development as a priority in the Primary Economic Growth Centres of Maynooth and Leixlip/ Collinstown supported by Celbridge and Kilcock in the Metropolitan area; and Naas/Newbridge in the Hinterland area supported by Kilcullen and the Secondary Economic Growth Towns of Athy and Kildare.

(ii) To recognise the supporting role of economic clusters (Celbridge and Kilcock to Maynooth and Leixlip, and Kilcullen to Naas and Newbridge) in the delivery of critical mass to deliver employment opportunities on a regional scale.

(iii) To promote the development of the Moderate Sustainable Growth town of Monasterevin as a district employment centre.

(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.

(v) To promote rural economic development by adopting a policy framework that recognises the need to promote the long-term sustainable social and environmental development of rural areas, encourages economic diversification and facilitates the growth of rural enterprises.

ECD 6: To support the development of an environment that fosters innovation, enterprise and entrepreneurship.

ECD 7: To support and promote proposals for SME business development in centres where existing infrastructural facilities are available or where they can be provided with services and good communications.

ECD 8: To support start-up businesses and small scale industrial enterprises, particularly those that have a creative and innovative dimension.

ECD 9: To encourage and facilitate small indigenous industries at appropriate locations, in recognition of their increasing importance in providing local employment and helping to stimulate economic activity within small communities.

ECD 10: 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 11: To encourage the provision of live-work 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. Such development should be of suitable design so as to protect the amenity of adjacent residents.

ECD 12: To facilitate the development of agriculture, bloodstock, horticultural and rural related enterprises in the county.

ECD 13: To facilitate home-working and innovative forms of working which reduce the need to travel.

ECD 14: 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 reduce long distance commuter trends and congestion.

ECD 15: To continue to develop, encourage and create an environment for innovation, enterprise and entrepreneurship within the county.

B1 B2 B3 PHH1
S1 W1 W2 W3 M1
M2 M3 C1 CH1
CH2 L1

B1 B2 B3 PHH1
S1 W1 W2 W3 M1
M2 M3 C1 CH1
CH2 L1

<p>ECD 16: To ensure a high-quality living environment in Kildare which will help to retain the county's indigenous skilled population and to attract additional high skilled labour into the county.</p> <p>ECD 17: To identify and promote a range of locations within the county for different types of enterprise activity including international business and technology parks, to small and medium enterprises (SME) and micro enterprise centres.</p> <p>ECD 18: To support the use of town centre locations for new service focused enterprises; and</p> <p>ECD 19: To support the development of the microbrewery industry in appropriate industrial areas and in town or village centre locations where it is directly associated with the sale of the product for consumption on or off the premises, subject to normal safeguards and the protection of the amenity of the area.</p> <p>ECD 20: The Council will ensure that zoning for employment uses will be carried out in a manner which protects investment in the national road network, in accordance with Chapter 2 of the DECLG guidelines on 'Spatial Planning and National Roads'.</p> <p>Objectives: Economic Development Strategy It is an objective of the Council:</p> <p>EO 1: To promote initiatives with relevant agencies, such as Solas and KWETB, to expand training and education services that will support business skills development in the county.</p> <p>EO 2: To work with Irish Water, to support the provision of water, wastewater treatment and waste management facilities to accommodate future economic growth of the county and to seek to reserve capacity in water services infrastructure for employment generating uses.</p> <p>EO 3: To continue to promote Kildare as a strategically located economic and employment hub within the Greater Dublin Area.</p> <p>EO 4: To continue to develop North Kildare as a digital economy hub and leadership "hot spot" by:</p> <ul style="list-style-type: none"> • Building on an existing critical mass in the IT and digital sector and attracting further significant investment, and so further develop the sector to its maximum potential. • Development of Collinstown as an employment hub in northeast Kildare and ensure that sufficient lands are zoned for enterprise and employment uses in this Plan and/or in local area plans. • Capitalising on the other assets and resources of North Kildare, i.e. quality of life, education and skill set of its workforce. • Mobilising support for, and active involvement in, efforts to pursue these objectives on the part of leaders in the ICT, Education / Research sectors and the economic development agencies by establishing a network or forum. • Promoting innovation and facilitating the development of advanced technologies across enterprises generally. • Promoting linkage between the ICT and Research sectors, and other relevant sectors and enterprises to achieve synergy between these groups. • Availing of funding opportunities under all relevant programmes, particularly by maximising the potential to combine opportunities in a complementary manner that will better support relevant projects and initiatives. <p>EO 5: To work closely with local, regional and national enterprise authorities, notably IDA and Enterprise Ireland, and establish a regular joint meeting on a six-monthly basis to co-ordinate activities and supports so as to maximise resources and avoid duplication.</p> <p>EO 6: To facilitate the development of, and upgrade to, the broadband and fibre network for the county.</p> <p>EO 7: To integrate relevant actions from the Mid-Eastern Economic Development Action Plan (2013) into any economic development strategy for the county, including the forthcoming Regional Spatial and Economic Strategy for the Eastern and Midlands Region.</p> <p>EO 8: To carry out an audit of business/enterprise/industrial parks in Kildare to identify the existing range of facilities, as well as infrastructural and service deficits, and so plan for current and future needs.</p> <p>EO 9: To acquire suitable land (subject to the availability of funding), including where appropriate, disused sites in State ownership, for creative and innovative entrepreneurial initiatives and the provision of clustered incubator units.</p> <p>EO 10: To support the further development of Maynooth University as a leading third level research and educational facility, and to work with Maynooth University and other third level institutes (e.g. Tallaght and Carlow IT) to develop and improve linkages between the third level sector and relevant employment providers in the surrounding sub region and county in general.</p> <p>EO 11: To work in conjunction with Maynooth University and other third level education institutions, in the creation and fostering of enterprise, research, and development.</p>				
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<p>EO 12: To continue to work with key state agencies and other stakeholders to seek opportunities for employment creation in the county.</p> <p>EO 13: To support initiatives targeting unemployed people to access training, education and re-skilling that fits with business and employer needs.</p>				
<p>Commentary:</p> <p><i>See commentary under 'Aim' above. Also refer to Cumulative Effects under Section 7.3. Policy ECD 3 places an emphasis on "sufficient" zoned land - this will have various benefits on the protection and management of the environment and will contribute towards maximising sustainable mobility and associated interactions with emissions to air, energy usage and human health (SEO C1 PHH1).</i></p>				
<p>Enterprise Development Objectives</p>				
<p>EO 14: To seek to ensure that the Councils planning and other functions support economic development, including business start-up companies, so as to maximise their business potential, and to promote a best practice enterprise culture that makes it easier to do business in Kildare.</p> <p>EO 15: To provide supports, guidance and solutions that equip entrepreneurs, owners and managers with the skills to identify and exploit business opportunities, and compete successfully within a competitive business environment.</p> <p>EO 16: To carry out a strategic assessment of employment lands in the County to inform the Regional Spatial and Economic Strategy, and in particular to assess the need for new employment sites in the economic growth centres of County Kildare.</p> <p>EO 17: To serve as a champion and advocate for the establishment of a best practice enterprise culture among start-ups, micro, and small businesses, and promote enterprise and self-employment as a viable career option among the wider population, and particularly among school and college leavers.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>Enterprise development cumulatively contributes towards the effects referred to under the Aim above; see commentary under 'Aim' above.</i></p>				
<p>Prevention of Major Accidents Policies</p>				
<p>ECD 21: To comply with the SEVESO III Directive, to reduce the risk of accidents, and to 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>ECD 22: To have regard to:</p> <ul style="list-style-type: none"> • The Major Accidents Directive (SEVESO III, 2012/18/EU 96/82/EC); • Potential adverse impacts on public health and safety; • HSA Technical advice; • The need to maintain appropriate safe distances between residential areas, areas of public use and areas of natural sensitivity; • The need to minimize risk to strategic infrastructure • The specialist advice of the Fire Authority <p>In the preparation of spatial plans and in assessing planning applications for new development, or the expansion of existing development involving hazardous substances</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>See commentary under 'Aim' above. These provisions would contribute towards the protection of human health (PHH1) and various environmental components including air, soil, water, and ecology (SEOs B1 B2 B3 C1 W1 W2 S1).</i></p>				
<p>Regeneration Objectives</p>				
<p>EO 18: To identify and implement flagship projects in conjunction with each Municipal District for urban renewal in the centres of towns and villages. These will seek to strengthen the economic and social fabric of these towns/villages and increase their capacity to support the economic and social well-being of their rural hinterland.</p> <p>EO 19: To address derelict sites in towns and villages by invoking the powers of the Derelict Sites Act.</p> <p>EO 20: To promote the sustainable development of vacant residential and regeneration sites in towns that are the subject of a statutory Local Area Plan the urban centres of Naas, Maynooth, Leixlip, Newbridge, Celbridge, through the application of the Urban Regeneration and Housing Act 2015, Vacant Site Levy, on lands zoned for Town Centre, Regeneration and Residential uses.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>EO 21: To progress involvement in the EU funded, Urbact III Project "City Centre Doctor" and strengthen partnership with other European cities so as to inform future development strategies for retail innovation in Naas town centre. This project will be assessed as a pilot project with a view to adoption a similar approach in other towns in the County, as appropriate.</p> <p>EO 22: To manage and deliver the Shop Front / Town Centre Improvement Grant Scheme to financially assist and support independent business owners to improve the appearance of their shop fronts / commercial properties.</p> <p>EO 23: To establish a programme to work with property owners and the community to improve facades and streetscapes in towns and villages in Kildare.</p>				
<p>Commentary:</p> <p><i>Regeneration cumulatively contributes towards the effects referred to under the Aim above; see commentary under 'Aim' above. The regeneration and improvement of urban areas can contribute towards the achievement of sustainable mobility as well as the avoidance of adverse environmental effects by reducing the need to develop greenfield lands.</i></p>				
<p>Agriculture</p>				
<p>EO 24: To promote the 'Smart Farming' initiative to farmers across Kildare to inform them of environmental sustainability and resource management so as to reduce CO2 production on farms.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>Agriculture cumulatively contributes towards the effects referred to under the Aim above; see commentary under 'Aim' above.</i></p> <p><i>Agriculture is essential to the sustenance of rural populations and associated existing sustainable rural management practices which can often sustain biodiversity (SEOs B1 B2 B3). The development of agriculture has the potential to adversely affect various environmental components including biodiversity and flora and fauna (SEOs B1 B2 B3), water and human health (SEOs W1 W2 PHH1), the provision of appropriate water and waste services (SEOs M1 M2 M3), cultural heritage (SEOs CH1 CH2), the landscape (SEO L1) and sustainable mobility patterns (SEO C1).</i></p> <p><i>Environmental sustainability, resource management and reductions in emissions would contribute towards the achievement of environmental objectives.</i></p>				
<p>Energy Production and the Green Economy Policies and Objectives</p>				
<p>ECD 23: To seek to ensure that any significant future employment developments in the vicinity of the strategic road network will be accompanied by a mobility management plan that seeks to provide for an appropriate level of non car based transport options, utilising the strategic public transport network.</p> <p>ECD 24: To facilitate and encourage the development of the alternative energy sector and to work with relevant agencies to support the development of alternative forms of energy where such developments are in accordance with proper planning and sustainable development of the area.</p> <p>EO 25: To work with Sustainable Energy Authority of Ireland (SEAI) to:</p> <ul style="list-style-type: none"> • Undertake energy master planning and compile a sustainable energy action plan and heat map for the county • Develop a Local Authority Renewable Energy Strategy (LARES) incorporating EU guidelines and training. • Promote the SEAI publication "Passive Homes - Guidelines for the Design and Construction of Passive House Dwellings in Ireland". <p>EO 26: To improve the efficiency of residential housing stock in the county by promoting the take up of:</p> <ul style="list-style-type: none"> • The Energy Efficiency Insulation (Phase 1) scheme and any future programmes for retrofit. • The Better Energy Home Grants. <p>EO 27: To support and promote the operations of Kildare County Council and public sector buildings as exemplars of energy efficient buildings, smart energy management and green procurement.</p> <p>EO 28: To investigate the establishment of an Energy Agency/Not for Profit Organisation for County Kildare and other adjacent counties e.g. Meath and Wicklow to enable EU and Irish funding and financing to be obtained for the development of a sustainable economy and green infrastructure.</p> <p>EO 29: To explore the formation of a best practice learning network between KCC and the FDI sector in the county, many of which are leaders in sustainability</p> <p>EO 30: To work with relevant stakeholders to understand the potential of rural Kildare to deliver services and employment to meet the county's urban demands (e.g. energy, food, natural resources) in line with a local development strategy</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

EO 31: To actively work with the LEO, EPA, SEAI, local and national business and social enterprise partners to support entrepreneurship and investment in innovation, technology and services for the development of a green economy in key sectors.				
<p>Commentary:</p> <p><i>Energy production and the green economy cumulatively contributes towards the effects referred to under the Aim above; see commentary under 'Aim' above. The development of renewable energy sources would contribute towards achieving various government objectives relating to the amount of energy to be consumed from renewable sources and reducing greenhouse gas emissions. Such development has, however, the potential to impact upon various environmental components. Further general commentary on the types of potential effects arising from different renewable energies is provided at the evaluation of Chapter 8 provision below.</i></p> <p><i>The adoption as County Council policy of any recommendations arising from energy master planning would be required to be subject to Strategic Environmental Assessment (SEA), Appropriate Assessment (AA) and Strategic Flood Risk Assessment processes as relevant.</i></p>				
Equine Objectives				
ECD 25: To actively promote and support the equine industry as an economic driver for Kildare. ECD 26: To support the redevelopment and upgrading of the Curragh, Punchestown and Naas racecourses and their associated facilities.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
<p>Commentary:</p> <p><i>Equine industry related development cumulatively contributes towards the effects referred to under the Aim above; see commentary under 'Aim' above.</i></p>				
Rural Enterprise Policies and Objectives				
ECD 27: To support the development of indigenous industry and business start-ups in rural employment centres (villages and settlements) of Kildare, subject to compliance with siting, design and environmental considerations. ECD 28: To support and facilitate sustainable agriculture, agri-food, horticulture, forestry, renewable energy and other rural enterprises at suitable locations in the County. EO 32: To commence implementation of the Athy Regeneration Strategy as a Rural Economic Development Zone (REDZ). EO 33: To identify other potential REDZ zones across the county and assist them to prepare for future funding opportunities. EO 34: To commence implementation of the new LEADER Rural Development Strategy for the county. EO 35: To support a programme of Agri-Innovation – Agri-Tech, Agri-Green, Food Innovation, and Niche Food for consumers.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
<p>Commentary:</p> <p><i>Rural enterprise related development cumulatively contributes towards the effects referred to under 'Aim' above; see commentary under 'Aim' above.</i></p>				
Tourism-related Policies and Objectives				
ECD 29: To promote, protect, improve, encourage and facilitate the development of tourism throughout the county as an important contributor to job creation in accordance with the proper planning and sustainable development of the area. ECD 30: To direct tourism based development where appropriate, into existing settlements where there is adequate infrastructure to service activity and where it can contribute to the maintenance of essential services. ECD 31: To maintain a clean and attractive environment, to protect tourism amenities within the county from insensitive or inappropriate development, particularly any development that threatens the tourism resources and tourism employment in the county. ECD 32: 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 transport system. ECD 33: 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. These facilities should avail of shared infrastructure and services where possible. ECD 34: To facilitate the development of tourism infrastructure such as accommodation, restaurants, car and coach	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

<p>parking and toilet facilities in the designated hubs throughout the county.</p> <p>ECD 35: To facilitate the expansion of existing and the development of new tourism and recreation related development subject to the protection of the receiving environment.</p> <p>ECD 36: To facilitate the erection of standardised signage for tourism facilities and tourist attractions as part of national and regional initiatives.</p> <p>ECD 37: To consider suitable sites for caravanning, camping, and hostelling, in consultation with Fáilte Ireland.</p> <p>ECD 38: To identify strategic sites capable of accommodating new tourism ventures while also ensuring the preservation of the natural landscape of the area having regard to economic, environmental and social sustainability considerations.</p> <p>EO 36: To introduce, develop, and support a rural "Tourism Cluster" (comprised of ten member micro-enterprises) that will trade on-line as an aggregated virtual tourism entity.</p> <p>EO 37: To encourage clustering of tourism products and services within identified hubs and nodes and to avail of shared infrastructure and services where possible, to increase linkages within and reduce leakage from the local economy.</p> <p>EO 38: To support the expansion and development of tourism in Kildare, investigating the feasibility of key opportunities such as those centred on the racing industry, retail, golf and eco-tourism to include: Arthur's Way, Dublin- Galway Greenway, Barrow Blueway, Shackleton Trail, the Gordon Bennett Route, the Grand Canal Greenway and other opportunities.</p> <p>EO 39: To develop innovative marketing campaigns to promote Kildare's heritage, culture, attractions and festivals and events.</p> <p>EO 40: To strengthen and support Kildare's digital tourism marketing capability, online presence and social media platforms</p> <p>EO 41: To develop an implementation strategy to maximise Kildare's potential to become a dedicated and recognised location for recreational and cultural tourism within the Greater Dublin Area</p> <p>EO 42: To work with adjoining local authorities and tourism bodies to develop the tourism potential of the county and region.</p> <p>EO 43: To work with Fáilte Ireland on the development of Ireland's Ancient East, as well as any smaller scale plans or programmes that are prepared to give effect to the strategy. Kildare County Council will consult with Fáilte Ireland as required, on the assessment of any such plans, programmes or policies to ensure that they are adequately screened or assessed in full compliance with Directives including the SEA Directive and the Habitats Directive..</p> <p>EO 44: To support and facilitate Fáilte Ireland and Kildare Fáilte initiatives for the development of tourism in the county including the Kildare-Wicklow Destination 'Grand Tour'.</p> <p>EO 45: To work with Kildare Fáilte to:</p> <ul style="list-style-type: none"> • Implement a tourism development strategy in the county and identify the particular role and competence of all partner agencies; • Develop an appropriate and compelling marketing proposition and plan for Kildare as a tourism destination. • Develop a suite of training programmes that will ensure that tourism businesses in the county can recruit staff with appropriate skills and provide for career development; and • Promote the Green Hospitality Programme. <p>EO 46: To continue to work closely with key stakeholders in the tourism industry including Kildare Fáilte, Fáilte Ireland, Waterways Ireland and the National Parks and Wildlife Services, in order to develop the Barrow Blueway and Grand Canal for tourism and recreation.</p> <p>EO 47: To work with the National Transport Authority (in conjunction with relevant objectives in Chapter 6), Kildare Fáilte, Fáilte Ireland, Waterways Ireland and all stakeholders to develop a co-ordinated approach to the selection, delivery and servicing of and delivery of future greenways, blueways, trails and routes throughout the county.</p> <p>EO 48: To promote the development of walking and cycling routes throughout the county as an activity for both international visitors and local tourists, in a manner that is compatible with nature conservation and other environmental policies.</p> <p>EO 49: To investigate the feasibility of developing a walkway/cycleway along the former (Tullow) railway line in County Kildare.</p> <p>EO 50: To promote and develop the towpaths along the Grand Canal, the Royal Canal (including from Maynooth to the Dublin County Boundary as part of the Dublin to Galway Greenway project), the Barrow Line and the Corbally Line as cycleways, in co-operation with Waterways Ireland and neighbouring Local Authorities.</p>				
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<p>EO 51: To investigate the feasibility of a River Liffey Greenway from the Dublin to Wicklow borders, including a section between Newbridge and Kilcullen.</p> <p>ECD39: To work with stakeholders including the OPW, the Heritage Council, the Arts Council, local communities and businesses to support the development of heritage and cultural tourism in County Kildare.</p> <p>ECD 40: To support and promote existing festivals and sporting events to increase the cultural, heritage and lifestyle profile of the county, and where appropriate to promote and facilitate the development of new events and venues to host these events.</p> <p>ECD 41: To support agri-tourism initiatives including but not limited to 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.</p> <p>ECD 42: 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.</p> <p>ECD 43: To support the sustainable tourist related development of the Bloodstock and Equine Industries.</p> <p>ECD 44: To recognise the importance of angling and the golf industry to tourism in the county.</p> <p>ECD 45: To support the development of tourism activities on and adjacent to waterways, subject to normal planning and environmental criteria and in accordance with the requirements of the Birds and Habitats Directive, Water Framework Directive and all other relevant European Directives.</p> <p>ECD 46: To promote the development of international and Olympic class sporting facilities in County Kildare.</p> <p>EO 52: To support the development of appropriate Integrated Tourism/Leisure facilities in Palmerstown Demesne.</p> <p>EO 53: To recognise the importance of the Kildare Hotel and Country Club Straffan as a tourism facility of national and international significance. The Council will support and encourage further appropriate development of tourism and recreational facilities at the Kildare Hotel and Country Club.</p> <p>EO 54: 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 is 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.</p> <p>EO 55: To recognise the sensitive and unique quality and importance of Castletown House and 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. ECD 38: 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 and community groups to develop the infrastructure, quality and amenity of these waterways.</p> <p>ECD 47: To facilitate infrastructure for water based activities such as boating, canoeing, angling, cruising, bathing and other sustainable water based interests.</p> <p>ECD 48: To facilitate Waterways Ireland in the restoration of the Grand Canal and Royal Canal.</p> <p>ECD 49: 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>ECD 50: 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.</p> <p>EO 56: 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>Commentary: <i>Tourism related development cumulatively contributes towards the effects referred to under 'Aim' above; see commentary under 'Aim' above.</i></p> <p><i>Various mitigation and benefits to environmental protection and management are facilitated by these provisions, for example:</i></p> <ul style="list-style-type: none"> • <i>ECD 29, ECD 33, ECD 42 "proper planning and sustainable development"</i> • <i>ECD 30 "adequate infrastructure to service activity"</i> • <i>ECD 31 "maintain a clean and attractive environment, to protect tourism amenities within the county from insensitive or inappropriate development"</i> 				

- ECD 38 "preservation of the natural landscape of the area"
- ECD 35 "subject to the protection of the receiving environment"
- EO 20, ECD 24, ECD 32 "sustainable development"
- ECD 37 "sustainable development"

The development of new and existing walking, cycling and driving routes/trails and the development of linkages between trails in Kildare and adjoining counties – including those identified by Objectives EO37 – have the potential to contribute towards a better management of tourism in sensitive areas and thereby benefitting various environmental components including habitats at certain locations (SEOs B1 B2 B3). The reference to protecting environmental quality and landscapes and to sustainable development would contribute towards beneficial effects upon the protection/management of all environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). As with other developments and uses, those related to tourism and recreation would present the potential for significant adverse environmental effects to arise with regard to all environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1).

The development of walkways, cycleways, trails and routes (e.g. Arthur's Way, Dublin- Galway Greenway, Barrow Blueway, Shackleton Trail, the Gordon Bennett Route) presents a variety of potentially adverse effects (upon environmental components including soil, water, landscape, cultural heritage and emissions to air and waste) that would be likely to arise from both the construction and operation of such developments and/or their ancillary infrastructure. These types of infrastructure are often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Lower tier considerations is likely to find that the highest concentrations of ecological constraints to both the construction and operation of development are located within water bodies or close to the edge water bodies and that more ecologically appropriate locations for new development are located away from the water's edge (including for example GI 18: "To maintain a biodiversity zone of not less than 10 metres from the top of the bank of all watercourses in the county...") and necessitate the undertaking of lower tier studies. Lower tier studies would be required to undertake new ecological survey work ((where necessary, to be determined on a project by project basis) as well as consider information on the various designations to which the baseline data provided in this SEA Environmental Report relates. Potential adverse effects would be mitigated both by measures which have been integrated into the Plan which provide for and contribute towards environmental protection, environmental management and sustainable development (see Section 9) and by measures arising from lower tier assessments (including those for the preparation of lower tier strategies, plans or programmes).

8.6.5 Chapter 6: Movement and Transportation

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	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 the 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 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Movement and Transport Policies and Objectives				
MT 1: To promote the sustainable development of the County through the creation of an appropriately phased integrated transport network that services the needs of communities and businesses. MT 2: To support sustainable modes of transport by spatially arranging activities around existing and planned high quality public transport systems. MT 3: To influence people's travel behaviour and choices towards more sustainable options by working closely with relevant organisations in improving and accessing public transport facilities. MT4: To develop sustainable transport solutions within and around the major towns in the county that encourage a transition towards more sustainable modes of transport, whilst also ensuring sufficient road capacity for trips which continue to be taken by private vehicles. MT 5: To prioritise the development of new urban distributor/link/arterial roads to provide access to new communities and employment development to support the economic development of the County. MT 6: To co-operate with and support the National Transport Authority and relevant regional agencies to facilitate the planning and delivery and implementations of improvements to the transport network of the County and the Greater Dublin Area. MT 7: To focus on improvements to the national, regional, local road and street network that provide additional capacity in order to reduce congestion and provide for current and future demand. MT 8: To seek to address urban congestion with particular emphasis on facilitating improved bus transport movement	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

<p>and reliability and improved links to bus and railway stations.</p> <p>MT 9: To preserve free from development, proposed public transport and road corridors (including cycle corridors) where development would prejudice the implementation of projects identified by TII, NTA, DTTS and KCC.</p> <p>MT 10: To provide better connectivity across the River Liffey, River Barrow, the canals and the railways.</p> <p>MT 11: To focus on improvements to the local road and street network that better utilise existing road space and encourage a transition toward more sustainable modes of transport, while ensuring sufficient road capacity exists for trips which will continue to be taken by private vehicle.</p> <p>MT 12: To assess all rail, road and river/canal bridges and underpasses for capacity to meet transport needs and develop solutions to address any identified deficits in conjunction with all relevant authorities.</p> <p>MT 13: To support the N7 Newlands Cross to Naas (TEN-T) Study and the N4 Junction 1 (M50) to N4 Junction 1 (Leixlip) (TEN-T) and to facilitate, where appropriate, any improvements/measures that may arise as a result of the studies.</p> <p>MT 14: To support the sustainable development of aviation travel in a manner that is consistent with the proper planning and sustainable development of the county.</p> <p>MT 15: (i) To seek to channel HGV traffic associated with landfill and extractive sites onto the regional and national road networks insofar as possible.</p> <p>(ii) To seek appropriate and proportionate contributions towards the cost of road improvements which benefit the development, in accordance with Sections 48 or 49 of the Planning and Development Act 2000, as amended.</p> <p>MTO 1: To prepare a County Mobility Plan that addresses the long-term mobility needs of communities and businesses in the County. The Plan should address urban and rural transport issues, the integration of transport modes and public transport connections between key settlements of the County, including the primary growth towns.</p> <p>MTO 2: To prepare a Strategic Land Use and Transportation Study for:</p> <p>(a) North East Kildare including the Metropolitan area towns of Leixlip, Maynooth, Celbridge and Kilcock; and</p> <p>(b) The central towns of Naas, Newbridge, Kilcullen, Kildare Town and Clane, in consultation with the NTA, DTTS, TII and other stakeholders to inform the strategic development of these areas and identify the roads and transport infrastructure that is needed to support the future development of these areas.</p> <p>MTO 3: To review and implement Integrated Transport Studies for Maynooth, Leixlip, Celbridge, Naas, Newbridge, Kildare and Athy in conjunction with the DTTS, TII and NTA and to prepare new Integrated Transport Studies for other towns, villages and settlements as required, to provide a framework to cater for the movement of pedestrians, cyclists, public transport and private vehicles.</p> <p>MTO 4: To work with all relevant stakeholders and agencies (including the NTA and An Taisce Green Schools) to identify appropriate opportunities to provide 'Park and Stride' facilities within towns and villages at locations that allow safe pedestrian access to school sites. 'Park and Stride' locations should seek to reduce traffic movements in the vicinity of schools and allow parents to park or drop children off at the edge of a town or village and to walk safely to schools.</p>				
<p>Commentary:</p> <p><i>The provisions of the Plan relating to transport will primarily contribute towards maximising sustainable mobility and associated interactions with emissions to air, energy usage and human health (SEOs C1 PHH1). Directly (from the construction and operation of transport infrastructure) and indirectly (from facilitating non-transport development) these provisions have the potential to result in significant adverse effects (including in-combination effects across County borders) upon most environmental components including ecology (SEOs B1 B2 B3), soil function (SEO S1), the status of water bodies (SEOs W1 W2), flood risk (SEO W3 PHH1), cultural heritage (SEOs CH1 CH2), the landscape (SEO L1) and emissions and energy usage (SEOs C1 PHH1).</i></p> <p><i>The provisions of the Plan relating to transport would also contribute towards and support the preferred alternative scenario (see details and evaluation at Section 7). Therefore, the effects arising from implementation of the preferred alternative scenario – both beneficial and potentially adverse - are contributed towards by these provisions. Potential adverse effects would be mitigated by the measures which have been integrated into the Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.</i></p> <p><i>The adoption as County Council policy of any recommendations arising from studies (e.g. MTO 2 "prepare a Strategic Land Use and Transportation Study" and MTO 3 "To review and implement Integrated Transport Studies") would be required to be subject to Strategic Environmental Assessment, Appropriate Assessment and Strategic Flood Risk Assessment processes as relevant.</i></p>				
<p>Public Transport Policies and Objectives</p>				
<p>PT 1: To promote the sustainable development of the county by supporting and guiding national agencies including the National Transport Authority in delivering major improvements to the public transport network and to encourage public transport providers to provide an attractive and convenient alternative to the car.</p> <p>PT 2: To generate additional demand for public transport services by strengthening development around existing and</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>planned high capacity transport routes and interchanges throughout the county.</p> <p>PT 3: To support rural public transport initiatives.</p> <p>PT 4: To support sustainable transport initiatives in Kildare that are consistent with the goals of Smarter Travel – A sustainable Transport Future, A new transport policy for Ireland 2009- 2020 and other government investment programmes.</p> <p>PT 5: To facilitate the provision of bus parking on suitable sites in towns to improve access to tourism and heritage facilities.</p> <p>PT 6: To facilitate the provision of taxi and hackney services and appropriately located parking where required.</p> <p>PT 7: To improve access to public transport as part of road improvement projects where possible.</p> <p>PT 8: To increase the catchment of public transport services by reducing walking and cycling distances through the implementation of Local Permeability Improvements.</p> <p>PT 9: To facilitate the provision of park and ride facilities in appropriate locations within convenient reach of transport nodes and along strategic transport corridors.</p> <p>PT 10: To support and encourage the development and expansion of rural transport initiatives in conjunction with other statutory and development agencies.</p> <p>PT 11: To promote access to bus and rail services for people with disabilities.</p> <p>PT 12: To liaise with and encourage transport providers and other agencies (e.g. NTA, developers etc) to provide appropriate bus shelters and real time information panels at bus stops.</p> <p>PT 13: To liaise with and encourage transport providers and other agencies (e.g. NTA, developers etc) to provide appropriate waiting rooms and real time information panels at all train stations.</p> <p>PTO 1: To actively seek funding for projects under the NTA’s “Sustainable Transport Measures Grants” programme that contribute to improving the transport offer for those choosing alternatives to the private car.</p> <p>PTO 2: To support and encourage the development and expansion of rural transport initiatives and bus shelters in conjunction with other statutory and development agencies.</p> <p>PTO 3: To support the delivery of the NTAs Greater Dublin Area Transport Strategy (2016-2035) in Kildare.</p> <p>PTO 4: To work with statutory agencies and stakeholders to promote and facilitate the development of a public transport hub near Naas which will connect road, rail transport and public bus transport.</p> <p>PTO 5: To investigate, in co-operation with Irish Rail and the National Transport Authority, the provision of new railway stations in the county and the upgrading/relocation of existing stations, to rectify existing constraints in the network.</p> <p>PTO 6: To examine existing public transport links within the county with a view to promoting and facilitating improvements where feasible.</p> <p>PTO 8: To promote and support the upgrading of, the Maynooth rail line and the Kildare rail line, in accordance with the Transport Strategy for the Greater Dublin Area 2016-2035 and in co-operation with the NTA.</p>				
<p>Commentary:</p> <p><i>These Public Transport provisions would contribute towards maximising sustainable mobility and associated interactions with emissions to air, energy usage and human health (SEOs C1 PHH1) and facilitate the preferred scenario for the Plan (see Section 7) and associated beneficial environmental effects (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1).</i></p> <p><i>Directly (from the construction and operation of transport infrastructure) and indirectly (from facilitating non-transport development) these provisions have the potential to result in significant adverse effects upon most environmental components including ecology (SEOs B1 B2 B3), soil function (SEO S1), the status of water bodies (SEOs W1 W2), flood risk (SEO W3 PHH1), cultural heritage (SEOs CH1 CH2) and the landscape (SEO L1). Although improving provision of rail services would facilitate net reductions in emissions to air (SEOs C1 PHH1) both new infrastructure and intensifying the use of existing infrastructure would be likely to result in increases at local level (SEOs C1 HH1). Such effects would be mitigated by the measures which have been integrated into the Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.</i></p> <p><i>Development arising from these provisions – including the delivery of the NTA strategy Greater Dublin Area Transport Strategy (2016-2035) which itself has been subject to SEA and AA – would be required to comply with, as relevant, the mitigation measures which have been integrated into the Plan, including those measures concerning compliance with legislation such as the Habitats and Water Framework Directives (see Section 9).</i></p>				

Walking and Cycling Policies and Objectives				
<p>WC 1: To prioritise sustainable modes of travel by the development of high quality walking and cycling facilities within a safe street environment.</p> <p>WC 2: To promote the development of safe and convenient walking and cycling routes' 3: To ensure that connectivity for pedestrians and cyclists is maximised in new communities and improved within the existing areas in order to maximise access to town centres, local shops, schools, public transport services and other amenities.</p> <p>WC 4: To ensure that all new roads and cycle routes implement the National Cycle Manual, with a focus on a high level of service for cyclists and encouraging a modal shift from car to cycling.</p> <p>WC 5: To identify new walking and cycling routes and linkages on all sites where new development is proposed and to ensure that all streets and street networks are designed to prioritise the movement of pedestrians and cyclists.</p> <p>WC 6: To ensure that all roads in existing and new developments are designed in accordance with the principles, approaches and standards contained in the Design Manual for Urban Roads and Streets 2013, the NTA National Cycle Manual and other appropriate standards.</p> <p>WC 7: To provide for safer routes to schools within the county and to walking and cycling as suitable modes of transport as part of the Green Schools Initiative Programme and other local traffic management improvements.</p> <p>WC 8: To require the provision of secure cycle parking facilities in towns, at public service destinations and in all new residential and commercial developments.</p> <p>WC 9: To minimise wait-times for pedestrians and cyclists at junctions.</p> <p>WC 10: To support the implementation of the Greater Dublin Area Cycle Network Plan, NTA, 2015, in a balanced way in County Kildare.</p> <p>WC 14: (a) To recognise the strategic importance of the Eastern Regional Water Supply Scheme and co-operate with Irish Water, the Department of Housing, Planning, Community and Local Government and other statutory agencies in finalising the route.</p> <p>(b) To preserve the emerging corridor of the Eastern Regional Water Supply Scheme free from development.</p> <p>WCO 1: To prepare a Cycle Network Study for each of the major towns in Kildare consisting of primary links identified in the Greater Dublin Area Cycle Network and local links, all in accordance with the National Cycle Manual. The report shall also identify pinch points on the links and propose draft widths and level of service facilities.</p> <p>WCO 2: To seek funding to develop Local Permeability Schemes in established areas in order to promote active modes of travel in conjunction with the NTA.</p> <p>WCO 3: To carry out local traffic management improvements to provide safer routes to schools in order to encourage students where possible to walk and cycle as a sustainable alternative to the car. These improvements may be carried out in conjunction with the NTA, through the Sustainable Transport Grants Scheme.WCO 4: To secure the development of the following specific cycle schemes (subject to funding from the NTA) as part of GDA Cycle Networks Projects:</p> <ul style="list-style-type: none"> • Greater Dublin Area Cycle Network Plan Urban and Inter Urban Schemes; • Dublin Road Corridor Scheme Naas; • Maynooth Town North South Corridor; • Naas to Sallins; • North Kildare Cycleway (Dublin – Galway Route); • Barrow Blueway (Waterways Ireland) • Kilcullen Road • Kill to Naas. <p>WCO 5: To support green and Blueway projects that promote walking and cycling in conjunction with the relevant organisations and bodies including:</p> <ul style="list-style-type: none"> • The delivery of the Barrow Blueway by Waterways Ireland and associated works to enhance the amenity use of the river and canal area. • The delivery of Greenway projects as specified in the Greater Dublin Cycle Network. • The development of further Sli na Sláinte routes in the county. <p>WCO 6: To provide secure cycle parking facilities in towns and at public service destinations.</p> <p>WCO 7: To identify a palette of path surfaces that optimise pedestrian safety and are efficient for street cleaning and take a consistent approach in the implementation of same in the civic realm.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>WCO 8: To actively support the implementation of the National Cycle Policy Framework, with a focus on encouraging a modal shift from vehicular to cycling modes.</p> <p>WCO 9: To identify off-site school drop off points as appropriate during the preparation of Local Area Plans, Small Town Plans and Village Plans, to reduce traffic congestion and facilitate and encourage walking to and from school.</p>				
<p>Commentary:</p> <p><i>These provisions relating to cycling and walking will primarily contribute towards maximising sustainable mobility and associated interactions with emissions to air, energy usage and human health (SEOs C1 PHH1). These provisions would also facilitate the preferred scenario for the Plan (see Section 7) and associated beneficial environmental effects (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1).</i></p> <p><i>Note that the development of parts of the walking and cycling network (including the Barrow Blueway, the Dublin to Galway Greenway and other cycle schemes) adjacent to water courses may present, in particular, an increased potential for adverse effects upon certain environmental components such as ecology (SEOs B1 B2 B3) and the status of water bodies (SEO W1) to arise, however; these effects will be mitigated by various measures which have been integrated into the Plan. Directly (from the construction and operation of transport infrastructure) and indirectly (from facilitating non-transport development) these provisions have the potential to result in significant adverse effects upon most environmental components including ecology (SEOs B1 B2 B3), soil function (SEO S1), the status of water bodies (SEOs W1 W2), flood risk (SEO W3 PHH1), cultural heritage (SEOs CH1 CH2) and the landscape (SEO L1). Such effects would be mitigated by the measures which have been integrated into the Plan (see Section 9) and any additional requirements arising through lower tier assessments (including the required Appropriate Assessments) or granting of permission.</i></p>				
<p>Road and Street Network Policies and Objectives</p>				
<p>RS 1: To ensure the ongoing competitiveness and the efficient movement of people and goods in the county through the improvement and expansion of the road and street network within the county to support economic development and provide access to existing communities, new communities, employment areas and development.</p> <p>RS 2: To improve safety on the road and street network and manage congestion.</p> <p>RS 3: To ensure that all new developments in proximity to Motorway Routes, National and Regional Routes provide suitable noise protection measures to protect sensitive noise receptors from traffic noise.</p> <p>RS 4: To restrict development which cannot ensure adequate noise reduction in areas where noise levels are predicted to rise above limits set out in the NRA guidelines for the treatment of noise and vibration in national road schemes over the following 15 years.</p> <p>RS 5: To ensure that all existing and new developments in proximity to Motorways, National and Regional routes are designed in such a way as to prevent light overspill onto adjacent un-light public roads.</p> <p>RS 6: To secure the implementation of major road projects as identified within the Transport Strategy for the Greater Dublin Area 2016-2035 subject to the 'Principles of Road Development' criteria set out in Section 5.8.3 of the Transport Strategy for the Greater Dublin Area 2016-2035..</p> <p>RS 7: To secure the implementation of major road projects that are consistent with the 'Principles of Road Development' criteria set out in Section 5.8.3 of the Transport Strategy for the Greater Dublin Area 2016-2035, and are identified within this County Development Plan (Table 6.1 and Table 6.2) and Local Area Plans.</p> <p>RS 8: To ensure that the planning, design and implementation of all road and street networks within urban areas across the county accord with the principles set out in the Design Manual for Urban Roads and Streets (2013), the National Cycle Manual and other relevant standards where appropriate.</p> <p>RS 9: To co-operate with adjoining authorities and other public authorities to secure new and/or improved road infrastructure at towns bordering the county boundary including Blessington, Kilcock, Maynooth and Leixlip.</p> <p>RS 10: To will ensure the protection of the strategic transport function of national roads, including motorways, in line with national policy as set out in the 'Spatial Planning & National Road Guidelines for Planning Authorities (2012).</p> <p>RSO 1: To develop a Road Safety plan in line with the National Road Safety Strategy and in consultation with the Road Safety Authority and relevant stakeholders.</p> <p>RSO 2: To ensure the planning, design and completion of the Athy Distributor route along a new corridor to reduce congestion on the existing urban road network (N78 National Secondary Arterial route through Athy town centre).</p> <p>RSO 3: To implement the recommendations of the Kildare Noise Action Plan 2013-2018, to seek to reduce, where necessary, the harmful effects of traffic noise, through appropriate mitigation measures that meet the best environmental options not entailing excessive cost or BATNEEC (best available technology not entailing excessive cost).</p> <p>RSO 4: To identify long term road corridors suitable for the development of high capacity roads within the developable area of towns and villages within the county, that are consistent with the 'Principles of Road Development' criteria set out in Section 5.8.3 of the Transport Strategy for the Greater Dublin Area 2016-2035 and implement the short to</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>medium term road improvement programme over the life of the County Development Plan.</p> <p>RSO 5: To maintain corridors free from development to facilitate future roads, cycle facilities and other transport infrastructure improvement in order to facilitate the following road and bridge projects set out in Table 6.1, with the further progression of those roads projects subject to assessment against the 'Principles of Road Development' criteria set out in Section 5.3.3 of the Transport Strategy for the Greater Dublin Area 2016-2035. Where the road project is an orbital road around a town centre, its development needs to be accompanied by and facilitate enhanced public transport, cycling and pedestrian facilities in the relevant centre, as required by Section 5.8.2 of the Transport Strategy for the Greater Dublin Area 2016-2035.</p>				
<p>Commentary:</p> <p><i>Arising both directly from the construction and operation and indirectly from facilitating non-transport related development, these projects would have the potential to give rise to a range of adverse impacts including contributing towards the motorised transport and associated emissions and energy usage (SEOs C1 PHH1), ecology (SEOs B1 B2 B3), archaeological and architectural heritage, including context (SEOs CH1 CH2), visual impacts (SEO L1), waste levels (SEO M3), human health (SEO HH1), soil and the status of water bodies (SEOs S1 W1 W2), flood risk (SEO W3). Potential conflicts would be mitigated by the measures which have been integrated into the Plan and are identified in Section 9 of this report and any additional requirements arising through lower tier assessments or granting of permission. These projects would also facilitate public transport, improving sustainable mobility and associated interactions (SEOs C1 HH1) as well as facilitating the preferred scenario for the Plan (see Section 7) and associated beneficial environmental effects (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). Potential adverse effects would be mitigated by the measures which have been integrated into the Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.</i></p>				
<p>Motorway Policies and Objectives</p>				
<p>M 1: To work with Transport Infrastructure Ireland to develop the motorway network through the County.</p> <p>M 2: To ensure that the capacity, efficiency and safety of the motorway network is maintained and improved in conjunction with Transport Infrastructure Ireland (TII).</p> <p>M 3: To ensure that the capacity, efficiency and safety of motorway routes and their interchanges is protected and to prevent development that could hinder the future upgrading of motorway routes and interchanges.</p> <p>M 4: 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>M 5: To support and facilitate the adequate provision of Motorway Service Stations identified in the Spatial Planning and National Roads Guidelines for Planning Authorities DECLG (2012) and the NRA Motorway Service Area Policy guidance document (2014).</p> <p>MO 1: To complete the development of the third lane in each direction along the M7 including improvement of interchanges as the need arises.</p> <p>MO 2: To complete an additional interchange along the M7 Naas by-pass providing access to Millennium Park.</p> <p>MO 3: To complete the upgrade and improvement of the M7 Newhall Interchange (Junction 10) and preserve that area free from development.</p> <p>MO 4: To examine the feasibility of the provision of a connection between the M7 and the east side of Newbridge in consultation with the TII and having regard to the requirements of the Spatial Planning and National Road Guidelines (DECLG 2012).</p> <p>MO 5: To improve safety and capacity at the M7 Monasterevin Interchange (Junction 14) by providing an upgrade of the interchange.</p> <p>MO 6: To improve safety and capacity at the M4 Maynooth Interchange (Junction 7) and to investigate the provision of a future improved connection to the M4, at this location or elsewhere near Maynooth.</p> <p>MO 7: To examine the feasibility of delivering an overpass of the M7 from the Cherry Ave site in Kildare town to the Irish National Stud in consultation with TII.</p> <p>MO 8: To examine the feasibility of delivering an overpass of the M4 to link the Wonderful Barn at Leixlip to Castletown Demesne in Celbridge in consultation with TII.</p> <p>MO 9: To provide for "all vehicle movements" at the M7 (Junction 11) / M9 (Junction 1) Interchange.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>Arising both directly from the construction and operation and indirectly from facilitating non-transport related development, these projects would have the potential to give rise to a range of adverse impacts including contributing towards the motorised transport and associated emissions and energy usage (SEOs C1 PHH1), ecology (SEOs B1 B2 B3), archaeological and architectural heritage, including context (SEOs CH1 CH2), visual impacts (SEO L1), waste levels (SEO M3), human health (SEO HH1), soil and the status of water bodies (SEOs S1 W1 W2), flood risk (SEO W3). Potential conflicts would be mitigated by the measures which have been integrated into the Plan and are identified in Section 9 of this report and any additional requirements arising through lower tier assessments or granting of permission.</i></p>				

permission. These projects would also facilitate public transport, improving sustainable mobility and associated interactions (SEOs C1 HH1) as well as facilitating the preferred scenario for the Plan (see Section 7) and associated beneficial environmental effects (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). Potential adverse effects would be mitigated by the measures which have been integrated into the Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.

National Roads Policies and Objectives

NR 1: 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 the Core Strategy, the Spatial Planning and National Roads Guidelines 2012 and the Transport Strategy for the Greater Dublin Area 2016-2035.

NR 2: (a) To avoid the creation of any additional access points from new development or the generation of increased traffic from existing access points to National Roads, to which a speed limit of greater than 60 kph applies in accordance with the requirements set out in the Spatial Planning and National Road Guidelines, DECLG, 2012.

(b) New access to facilitate orderly urban development on appropriately zoned land on the approach to or exist from towns, villages or settlements that are subject to a speed limit of 60 kph before a lower 50 km limit is encountered may be permitted subject to road safety audit carried out in accordance with the requirements set out in the Spatial Planning and National Road Guidelines, DECLG, 2012.

(c) New access to lands adjoining national roads within the 50 kph speed limits may be considered in accordance with normal road safety traffic management and urban design criteria for built up areas.

NR 3: To recognise the strategic importance of the proposed Leinster Orbital Route (linking Drogheda, Navan, Trim and Naas) and co-operate with the NTA, TII and other Local Authorities in clarifying and finalising the route proposed in the Regional Planning Guidelines for the Greater Dublin Area 2010 and the NTA Transport Strategy for the Greater Dublin Area 2016-2035. This is important in order to protect and preserve the corridor free from development. NR 4: To identify the future needs of the national route network and co-operate in fulfilling these needs in conjunction with TII.

NR 5: To improve connectivity between the local road network and the national / regional road network. The Council will ensure that any future development in this regard complies with the guidance to safeguard the overall operational function of the national road network as set out in the Spatial Planning and National Roads Guidelines (DECLG, 2012).

NR 6: 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.

NR 7: To protect the capacity, efficiency and safety of the national road network.

NRO 1: To provide an alternative road to the arterial (National Secondary) N78 road through Athy which connects the N78 south of the town with the improved N78 link road north of Athy which connects to the M9 motorway. This is necessary to reduce congestion on the national road system and within the town, improve safety and reduce the vulnerability of the national road network at this river crossing.

NRO 2: To preserve the N7 Johnstown Interchange (Junction 8) area free from development for the provision of future access to Naas.

NRO 3: To upgrade the section of the N81 National Secondary Road (Tallaght/Baltinglass) that is contained in County Kildare.

B1 B2 B3 PHH1 S1
W1 W2 W3 M1 M2
M3 C1 CH1 CH2
L1

B1 B2 B3 PHH1 S1
W1 W2 W3 M1 M2
M3 C1 CH1 CH2
L1

Commentary:

Arising both directly from the construction and operation and indirectly from facilitating non-transport related development, these projects would have the potential to give rise to a range of adverse impacts including contributing towards the motorised transport and associated emissions and energy usage (SEOs C1 PHH1), ecology (SEOs B1 B2 B3), archaeological and architectural heritage, including context (SEOs CH1 CH2), visual impacts (SEO L1), waste levels (SEO M3), human health (SEO HH1), soil and the status of water bodies (SEOs S1 W1 W2), flood risk (SEO W3). Potential conflicts would be mitigated by the measures which have been integrated into the Plan and are identified in Section 9 of this report and any additional requirements arising through lower tier assessments or granting of permission. These projects would also facilitate public transport, improving sustainable mobility and associated interactions (SEOs C1 HH1) as well as facilitating the preferred scenario for the Plan (see Section 7) and associated beneficial environmental effects (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). Potential adverse effects would be mitigated by the measures which have been integrated into the Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.

The Transport Strategy for the Greater Dublin Area does not provide for the development of the Leinster route however it does recommend that the protection of the route corridor from development. A route corridor for the Leinster Outer Orbital Route has not been finalised to date. Policy NR 3 will help to achieve the preservation free of development of any future route corridor – preservation of the route corridor would facilitate the avoidance of future disturbance of development areas and associated potential effects upon various environmental components. The progression of the Leinster Outer Orbital Route by others would need to be subject to tiers of environmental assessments including SEA, EIA and AA.

Regional Roads Policies and Objectives				
<p>RR 1: To maintain and improve the capacity, safety and function of the Regional road network (as finance becomes available) and to ensure that it is planned for and managed to enable the sustainable economic development of the county and wider area while encouraging a shift towards more sustainable travel and transport in accordance the Core Strategy, the Spatial Planning and National Roads Guidelines 2012 and the Transport Strategy for the Greater Dublin Area 2016-2035.</p> <p>RR 2: To restrict new access onto regional roads where the 80km per hour speed limit currently applies, except in the following exceptional circumstances. Developments of strategic, local, regional or national importance, where there is a significant gain to the county through employment creation of other economic benefit. Where applicants comply with Policy RH (Chapter 4), are proposing to build a home on their family landholding and cannot provide access onto a nearby county road. In this instance, applicants will only be permitted to maximise the potential of existing entrances. The onus will be on the applicants to demonstrate that there are no other accesses or suitable sites within the family landholding (See also Policy RH 18). 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> <p>RR 3: To identify the strategic road network needed for the future development of County Kildare and an order of priority for future road improvements.</p> <p>RR 4: To improve and re-align where necessary and as funds allow, the Regional Roads.</p> <p>RR 5: To preserve free from development proposed transport routes (or optional routes) identified in Local Area Plans, including those identified in the Naas and Athy Town Plans.</p> <p>RR 6: To identify and preserve free from development routes for additional crossings of the river Liffey in order to accommodate increased traffic (between the Dublin Metropolitan Area and the population and employment centres in Kildare).</p> <p>RR 7: To improve connectivity across the railways and canals in Kildare.</p> <p>RRO 1: To ensure the planning, design and completion of the Athy Distributor route along a new corridor to reduce congestion on the existing urban road network (N78 National Secondary Arterial route through Athy town centre). (NRO 8).</p> <p>RRO 2: To seek to progress the Regional Roads identified for improvement as set out in Table 6.2 subject to funding.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
Commentary:				
<p><i>Arising both directly from the construction and operation and indirectly from facilitating non-transport related development, these projects would have the potential to give rise to a range of adverse impacts including contributing towards the motorised transport and associated emissions and energy usage (SEOs C1 PHH1), ecology (SEOs B1 B2 B3), archaeological and architectural heritage, including context (SEOs CH1 CH2), visual impacts (SEO L1), waste levels (SEO M3), human health (SEO HH1), soil and the status of water bodies (SEOs S1 W1 W2), flood risk (SEO W3). Potential conflicts would be mitigated by the measures which have been integrated into the Plan and are identified in Section 9 of this report and any additional requirements arising through lower tier assessments or granting of permission. These projects would also facilitate public transport, improving sustainable mobility and associated interactions (SEOs C1 HH1) as well as facilitating the preferred scenario for the Plan (see Section 7) and associated beneficial environmental effects (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). Potential adverse effects would be mitigated by the measures which have been integrated into the Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.</i></p>				
Local Roads Policies and Objectives				
<p>LR 1: To ensure that the safety and capacity of the local road network is maintained and improved where funding allows and to ensure that local streets and roads within the county are designed to a suitable standard to accommodate the future needs of the county. The design of these roads and streets should balance the needs of place and movement with providing a safe street environment for all road users.</p> <p>LR 2: To seek to improve the quality of the pavement of local roads.</p> <p>LR 3: To improve all county roads to an appropriate standard subject to availability of resources.</p> <p>LR 4: To ensure that all new streets in housing and mixed use schemes are designed, in accordance with: Design Manual for Urban Roads and Streets 2013; 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); Any new Guidance / Standards from the DECLG; and Any other relevant design standards.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>LR 5: To ensure that all streets and street network within urban areas are designed to passively calm traffic through the creation of a self-regulating street environment.</p> <p>LR 6: To ensure that all developments can provide full connectivity to the adjacent road network (pedestrian, cycle and vehicular).</p> <p>LR 7: To ensure that all developments allow for and ensure full connectivity (pedestrian, cycle and vehicular) to the adjacent lands which are zoned for development and lands which may be zoned for development in the future.</p> <p>LRO 1: To maintain and improve all local roads as per the annual Road Work Programme.</p>				
<p>Commentary:</p> <p><i>Arising both directly from the construction and operation and indirectly from facilitating non-transport related development, these projects would have the potential to give rise to a range of adverse impacts including contributing towards the motorised transport and associated emissions and energy usage (SEOs C1 PHH1), ecology (SEOs B1 B2 B3), archaeological and architectural heritage, including context (SEOs CH1 CH2), visual impacts (SEO L1), waste levels (SEO M3), human health (SEO HH1), soil and the status of water bodies (SEOs S1 W1 W2), flood risk (SEO W3). Potential conflicts would be mitigated by the measures which have been integrated into the Plan and are identified in Section 9 of this report and any additional requirements arising through lower tier assessments or granting of permission. These projects would also facilitate public transport, improving sustainable mobility and associated interactions (SEOs C1 HH1) as well as facilitating the preferred scenario for the Plan (see Section 7) and associated beneficial environmental effects (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). Potential adverse effects would be mitigated by the measures which have been integrated into the Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.</i></p>				
<p>Parking, Road and Street Design and Traffic and Transportation Management Policies and Objectives</p>				
<p>PK 1: To take a balanced approach to the provision of parking with the aim of meeting needs of businesses and communities</p> <p>PK 2: To design car parking layouts in accordance with DMURS 2013.</p> <p>PK 3: To carefully consider the number of parking spaces provided to service the needs of new development.</p> <p>PK 4: 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 good vehicles.</p> <p>PK 5: To seek to ensure that all new private car parking facilities are provided to an appropriate standard, proximate to the development which it serves.</p> <p>PK 6: To seek the provision of designated HGV parking areas within new industrial developments, as appropriate.</p> <p>PK 7: To ensure that car parking does not detract from the comfort and safety of pedestrians and cyclists or the attractiveness of the landscape.</p> <p>PK 7: To minimise the impact of out of town parking on urban centre regeneration.</p> <p>PKO 1: To prepare parking strategies and investigate the appropriate locations for vehicular, bicycle and 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 processes / mechanisms. In relation to proposed new park and ride sites, the Council will ensure such facilities are plan led in a co-ordinated strategy for such sites in consultation with the NTA and TII where appropriate.</p> <p>PKO 2: To identify areas for the provision of public car parking spaces, including adequate and appropriately located spaced for people with disabilities.</p> <p>RS 1: To ensure that streets and road within the county are deigned to balance the needs of place and movement, to provide a safe traffic calmed street environment in accordance with the principles set out in the DMURS 2013 while meeting the needs of all road users.</p> <p>RS 2: To ensure that all streets and street networks are designed to passively calm traffic through the creation of a self-regulating street environment, through a multi-disciplinary team approach (e.g. engineers, planners, architects, landscape architects, urban designers).</p> <p>RS 3: To ensure that all new roads and streets within urban areas are designed in accordance with the principles approaches and standards contained within the DMURS 2013 and other appropriate standards.</p> <p>RS 4: To actively pursue and advance national and local initiatives in relation to road design and safety.</p> <p>RS 5: To ensure that the design and speed limits of street networks and associated junctions in new residential estates facilitate the implementation of:</p> <p>Speed limits in accordance with the Guidelines for Setting and Managing Speed Limits in Ireland DTTS (2015); and Design Manual for Urban Roads and Streets, DTTS and DECLG 2013.</p> <p>RSO 1: To set and apply speed limits taking into account the function of the road or street, the characteristics of the surrounding area, the design of the street environment and the presence of vulnerable users. The speed limits shall be</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>in accordance with the Road Traffic Act 2004 (as amended) and subject to the requirements of the Guidelines for Setting and Managing Speed Limits in Ireland (2015)</p> <p>TM 1: To manage traffic in urban areas and prioritise the movement of pedestrians, cyclists and public transport particularly at key junctions.</p> <p>TM 2: To manage traffic so as to minimise the impact of queues on the road network with priority as follows: motorways (highest), national roads, regional roads, local roads, entrances to developments (lowest).</p> <p>TM 3: To effectively manage the flow of through traffic along the strategic road network and maximise the efficient use of existing resources.</p> <p>TM 4: To minimise the impact of new developments on the county road and street network by implementing mobility management initiatives.</p> <p>TM 5: To support the use of Intelligent Transport Systems (ITS) technology for pedestrian, cyclist and vehicular traffic, public transport and parking management in all new developments.</p> <p>TM 6: To require all major developments to submit Traffic Impact Assessments and Mobility Management Plans</p> <p>TM 7: To require the inclusion of a Road Safety Impact Assessment as part of any proposed development/project of a significant scale which may have potential implications on major transport infrastructure. Such assessments shall be in accordance with the TII publication 'NRA HD 18 Road Safety Impact Assessment'.</p> <p>TMO 1: To maintain existing vehicle actuated (VA) traffic signals to MOVA⁷⁶ or SCOOT⁷⁷ traffic signals as appropriate and improve energy efficiency of signals through use of ELV or LED lights.</p> <p>TMO 2: To carry out a review of Traffic Management Plans including the following towns in conjunction with the NTA:</p> <p>(a) Maynooth Town (b) Naas Town (c) Newbridge Town (d) Kildare Town (e) Celbridge Town (f) Athy Town</p>				
<p>Commentary:</p> <p><i>Arising both directly from the construction and operation and indirectly from facilitating non-transport related development, these projects would have the potential to give rise to a range of adverse impacts including contributing towards the motorised transport and associated emissions and energy usage (SEOs C1 PHH1), ecology (SEOs B1 B2 B3), archaeological and architectural heritage, including context (SEOs CH1 CH2), visual impacts (SEO L1), waste levels (SEO M3), human health (SEO HH1), soil and the status of water bodies (SEOs S1 W1 W2), flood risk (SEO W3). Potential conflicts would be mitigated by the measures which have been integrated into the Plan and are identified in Section 9 of this report and any additional requirements arising through lower tier assessments or granting of permission. These projects would also facilitate public transport, improving sustainable mobility and associated interactions (SEOs C1 HH1) as well as facilitating the preferred scenario for the Plan (see Section 7) and associated beneficial environmental effects (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). Potential adverse effects would be mitigated by the measures which have been integrated into the Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.</i></p>				
<p>Public Lighting Policies and Objectives</p>				
<p>PL 1: To ensure street lighting is provided in accordance with Kildare County Councils 'Street lighting and planning guidance' policy document in either draft or adopted form. The document outlines the general principles and requirements for street lighting in the county.</p> <p>PL2: To ensure that all new developments are connected into the public footpath network and that adequate public lighting is provided.</p> <p>PL 3: To ensure that planned landscape planting takes cognisance of the need to protect the area surrounding street light installations to avoid possible adverse effects on the delivery of effective street lighting.</p> <p>PL 4: To ensure future street lighting installations are not adversely impacting on sensitive physical, environmental, natural and heritage resources within the county.</p> <p>PL 5: To remove inappropriate and unnecessary street lighting and cabling following a full and appropriate assessment.</p> <p>PL 6: To ensure that future street lighting provisions in the county will comprise 'white light' delivered by LED luminaries. The LED lights will provide greater colour rendering and provide sharper contrast and improved safety for road users.</p> <p>PL0 1: To focus expansion of the public lighting network in areas where there will be maximum return on investment.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

⁷⁶ Microprocessor Optimized Vehicle Actuation is control software to self-optimize the control system for traffic signals.

⁷⁷ SCOOT (Split Cycle Offset Optimization Technique) is a tool for managing and controlling traffic signals in urban areas.

<p>PLO 2: To improve the efficiency of public lighting assets in order to minimise electricity usage.</p> <p>PLO 3: To remove inappropriate and unnecessary street lighting and cabling in public areas following a full and appropriate assessment.</p> <p>PLO 4: To ensure that the county's public lighting installations are planned and managed in a sustainable manner.</p>				
<p>Commentary:</p> <p><i>These provisions would contribute towards the achievement of the preferred alternative scenario for the Plan. The evaluation against Strategic Environmental Objectives (SEOs) that is provided above is consistent with the evaluation of the preferred scenario which is provided in Section 7, including contributing towards sustainable development and the protection of the environment. Lighting has the potential to disturb sensitive species such as bats.</i></p>				
<p>General Aviation Policies and Objectives</p>				
<p>GA 1 To support the safe and efficient navigation of aircraft in the vicinity of established Aerodromes.</p> <p>GA 2: To restrict the development of new aerodromes or the intensification of established aerodromes where the operational, safety and technical requirements associated with the proposed development conflict with the achievement of the Core Strategy or the proper planning and sustainable development of the area.</p> <p>GA 3: To carefully consider the impact of new Aerodromes or of an intensification of use of existing Aerodromes on the established character and amenities of an area. There will be a general presumption against development where the technical and safety requirements associated with such development would conflict with the achievement of the Core Strategy and/or the proper planning and sustainable development of the County including the development of sustainable transport.</p> <p>GA 4: To consult with the Irish Aviation Authority on all applications in the vicinity of aerodromes for development that exceed 45 metres in height, or where it is considered appropriate.</p> <p>GA 5 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.</p> <p>GA 6 (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. (ii) That Eirgrid 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> <p>GA 7 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 8 To seek, when necessary, 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 9: To restrict the development of buildings, overhead lines or structures in the Inner Approach Areas of aerodromes.</p> <p>GA 10: To consider, in conjunction with relevant agencies and bodies, the introduction of Public Safety Zones¹ in the vicinity of aerodromes within or affecting Kildare by way of variation of this development plan.</p> <p>GA 11: To support the sustainable development of aviation travel in a manner that is consistent with the proper planning and sustainable development of the area.</p> <p>KA 1: To safeguard the operational, safety and technical requirements of Kilrush Aerodrome.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

¹ 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>KAO 1: To work to ensure that any further development within a 2.7km radius of Kilrush Aerodrome's runways 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>WA 1: To have regard to the advice of the statutory bodies responsible for the control and safety of operations at Weston Aerodrome, to prevent encroachment of development around the Aerodrome which may interfere with its safe operation in the context of proper planning and sustainable development of the area and the protection of amenities.</p> <p>WAO 1: To prevent encroachment of development in the vicinity of Weston Aerodrome which may interfere with its safe operation.</p> <p>WAO 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>WAO3: To refer any development within 3.6km of Weston Aerodrome's runway (i.e. within the area of its Horizontal and Conical Surfaces) to the Irish Aviation Authority, and also to refer to the IAA any development of 50m or greater in height above ground level within a 10km radius of Weston Aerodrome (i.e. within the area of its Outer Horizontal Surface)."</p> <p>WA 4: To seek to develop a common protocol with South Dublin County Council to guide the consideration of applications at Weston.</p> <p>CA 1: To safeguard the current and future operational, safety and technical requirements of Casement Aerodrome and to facilitate its ongoing development for military and ancillary uses within a sustainable development framework.</p> <p>CAO 1 To refer significant / major new development within approximately 6km of Casement Aerodrome) or at Killeel, to the Department of Defence.</p> <p>AF 1: To consult with the Irish Aviation Authority in relation to proposed developments in these airfields and in the vicinity of these airfields.</p>				
<p>Commentary:</p> <p><i>Development of greenfield lands at aerodromes would have the potential to significantly affect water, soil, ecology, landscape and cultural heritage resources (SEOs W1 W2 W3 S1 B1 B2 B3 L1 CH1 CH2). An increase in flights could generate additional amounts of greenhouse gas emissions and noise emissions which could interact with human health (SEOs C1 PHH1). Lower tier assessments would have to give consideration to flight paths utilised by flights to and from existing airports. The development of aerodromes often has to be accompanied by amounts of public and private transport infrastructure and services and water services (SEOs M1 M2). These provisions would contribute towards the achievement of the preferred alternative scenario for the Plan. The evaluation against Strategic Environmental Objectives (SEOs) that is provided above is consistent with the evaluation of the preferred scenario which is provided in Section 7, including contributing towards sustainable development and the protection of the environment.</i></p>				

8.6.6 Chapter 7: Infrastructure Development

For an explanation of SEO codes e.g. **B1**, **B2**, **B3**, **PHH1**, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
<p>Aim: To develop, protect, improve and extend water, waste water and flood alleviation and environmental services throughout the county in conjunction with other statutory bodies 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.</p>	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
<p>Commentary:</p> <p><i>The provision of these services will contribute towards the achievement of the preferred alternative scenario for the Plan. The evaluation against Strategic Environmental Objectives (SEOs) that is provided above is consistent with the evaluation of the preferred scenario which is provided in Section 7, including contributing towards sustainable development and the protection of the environment.</i></p>				
<p>Water Supply Policies</p>				
<p>WS 1 To work in conjunction with Irish Water to protect existing water infrastructure and to promote investment in the water network to support environmental protection and facilitate the sustainable development of the county</p> <p>WS 2 To promote and support the implementation of the Irish Water's, Eastern and Midlands Water Supply Project to increase the water supply throughout the Dublin and Eastern and Midlands regions.</p> <p>WS 3 To maximise the use of existing capacity in water services in the planning of new development and to ensure that full consideration is given to the level of investment required in the provision of water services, particularly in environmentally sensitive areas, when zoning for new development;</p> <p>WS 4 To ensure that adequate water services will be available to service development prior to the granting of planning permission. Applicants that are proposing to connect to the public wastewater network should consult with Irish Water regarding available capacity prior to applying for planning permission;</p> <p>WS 5 To work in conjunction with Irish Water to protect, manage and optimise water supply networks in the County including the protection of wayleaves and buffer zones</p> <p>WS 6 To work in conjunction with Irish Water to promote the ongoing upgrade and expansion of water supply services to meet the future needs of the County and the Region including facilitating the provision/zoning of appropriate sites required for water services infrastructure as necessary.</p> <p>WS 7 To facilitate Irish Water's implementation of their Water Conservation Project targeting leakage reduction</p> <p>WS 8 To promote water conservation/demand management and best demand management practices in all developments, including rain water harvesting and grey water recycling and supporting the implementation of BS8515: 2009 Rainwater Harvesting Systems – Code of Practice.</p> <p>WS 9 To manage protect and enhance surface water and groundwater quality to meet the requirements of the EU Water Framework Directive.</p> <p>WS 10 To maintain, improve and enhance the environmental and ecological quality of the county's surface and groundwater by implementing the programme of measures set out in the River Basin Management Plans</p> <p>WS 11 To protect groundwater in the County from risk of pollution and ensure the implementation of the Kildare groundwater Protection Scheme and other relevant documents and legislation as may be introduced.</p> <p>WS 12: To promote the proper management of Group Water Schemes in accordance with the Rural Water Strategic Plan.</p> <p>WS13: To have regard to the requirements of the Habitats Directive, in all proposed projects or plans.</p>	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
<p>Commentary:</p> <p><i>In addition to facilitating the orderly development of the County as part of the preferred alternative scenario for the Plan (see Section 7), the provision of safe drinking water (SEO M2) would contribute towards the protection of human health (SEO PHH1). There would be potential for significant adverse environmental effects (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1) upon various environmental components to arise during both construction – if required – and operation (abstraction of water could conflict with the status of water bodies and aquatic ecology for example). Such</i></p>				

effects could be mitigated by measures including those which have been integrated into the Plan and any additional requirements arising through lower tier assessments.

Many of these provisions contribute towards the protection surface and ground waters with associated contributions towards the protection of human health and ecology:

- WS 1 "environmental protection"
- WS 7 "Water Conservation Project"
- WS 8 "water conservation/demand management"; "rain water harvesting and grey water recycling"
- WS 9 "manage protect and enhance surface water and groundwater quality to meet the requirements of the EU Water Framework Directive"
- WS 10 "maintain, improve and enhance the environmental and ecological quality of the county's surface and groundwater by implementing the programme of measures set out in the River Basin Management Plans"
- WS 11 "protect groundwater in the County from risk of pollution and ensure the implementation of the Kildare groundwater Protection Scheme and other relevant documents and legislation as may be introduced"
- WS 12 "promote the proper management of Group Water Schemes in accordance with the Rural Water Strategic Plan"
- WS13 "have regard to the requirements of the Habitats Directive, in all proposed projects or plans"

Existing and new development within the County will need to continue to be supplied by adequate and appropriate levels of water services infrastructure.

Much of the water supplied to County Kildare is supplied from outside of County Kildare – primarily from regional plants at Ballymore, Eustace (Dublin City Council) and Leixlip (Fingal County Council). Intensification of existing water abstractions or the development of new water abstractions has the potential, if unmitigated, to impact upon the environment including European sites.

The provision of potable water supplies has the potential to result in adverse effects on environmental components including European Sites. Potential adverse effects on European sites could occur as a result construction works (transportation or treatment) and new or intensified abstractions of water that could reduce the flow of waters that support surface or ground water dependent habitats and species. Where there are multiple abstractions, these have the potential to cumulatively contribute towards such adverse effects. Such potential effects include direct habitat loss (including loss of wetlands), habitat damage (e.g. damage to wetlands), reductions in water quality and disturbance to species including sensitive aquatic species.

Potential adverse effects will be mitigated by the various provisions that have been integrated into Plan, including those detailed at Section 4 of this report. Projects will be subjected their own consent procedures with associated Appropriate Assessment requirements as relevant and appropriate.

Water Quality Policies

<p>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 River Basin Management Plans.</p> <p>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.</p> <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 work in conjunction with Irish Water with the aim of improving the quality of drinking water and reducing the level of unaccounted for water through targeted leak reduction.</p> <p>WQ 5 To support the implementation of Irish Water's Water Safety Plans to ensure that public drinking water source and their contributing catchments are protected from pollution</p> <p>WQ 6 To protect recognised salmonid water courses in conjunction with Inland Fisheries Ireland such as the Liffey catchment, which are recognised to be exceptional in supporting salmonid fish species.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
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Commentary:

These provisions primarily contribute towards: the protection of the environment including water resources (SEOs W1 W2), soil (SEO S1), human health (SEO PHH1) and ecology (SEOs B1 B2 B3); the provision of infrastructure (SEOs M1 M2 M3); and improvements in flood risk management (SEO W3).

In addition to facilitating the orderly development of the County as part of the preferred alternative scenario for the Plan (see Section 7), the implementation of the River Basin Management Plans and their associated Programmes of Measures (including those relating to various types of infrastructure and management initiatives) would present conflicts with various environment components – such conflicts would be mitigated by the measures which have been integrated into Plan including those identified at Section 9 of this report.

Wastewater Policies				
<p>WW 1 To work in conjunction with Irish Water to protect drainage infrastructure and to promote investment in the drainage network to support environmental protection and facilitate the sustainable growth of the County</p> <p>WW 2 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 3 To maximise the use of existing capacity in wastewater services in the planning of new development and to ensure that full consideration is given to the level of investment required in the provision of wastewater services, particularly in environmentally sensitive areas, when zoning for new development;</p> <p>WW 4 To ensure that adequate wastewater services will be available to service development prior to the granting of planning permission and to require developers to consult with Irish Water regarding available capacity prior to applying for planning permission.</p> <p>WW 5 To work in conjunction with Irish Water to protect, manage and optimise wastewater drainage networks in the County including the protection of wayleaves and buffer zones.</p> <p>WW 6 To work in conjunction with Irish Water to promote the ongoing upgrade and expansion of wastewater services to meet the future needs of the County and the Region including facilitating the provision/zoning of appropriate sites required for wastewater services infrastructure as necessary.</p> <p>WW 7 To support Irish Water in delivering key waste water projects in the County including:</p> <ul style="list-style-type: none"> • Osberstown Wastewater Treatment Plant Upgrade, • Leixlip Wastewater Treatment Plant Upgrade • Upper Liffey Valley Sewerage Scheme • Kildare Town Network Upgrade • Local Network Reinforcement Projects <p>WW 8 To require all new development to provide a separate foul and surface water drainage system and to prohibit the discharge of additional surface water to combine sewers other than in exceptional circumstances</p> <p>WW 9 To support Irish Water in the promotion of effective management of trade discharges to sewers in order to maximise the capacity of existing sewer networks and minimise detrimental impacts on sewage treatment works</p> <p>WW 10 To refuse residential development that requires the provision of private waste water treatment facilities, other than single house systems;</p> <p>WW 11 To promote the changeover from septic tanks to collection networks in all cases where this is feasible and desirable (subject to connection agreements with Irish Water) and that all new developments utilise and connect to the public wastewater infrastructure. The provision of individual septic tanks and treatment plants in the plan area will be strongly discouraged to minimise the risk of groundwater pollution. Where such facilities are permitted, full compliance with the prevailing regulations and standards, including the EPA's Code of Practice Wastewater Treatment and Disposal Systems Serving Single Houses (PE. ≤10) (EPA 2009), as may be amended, will be required;</p> <p>WW 12 To ensure that existing / permitted private wastewater treatment plants, are operated in compliance with their wastewater discharge license, in order to protect water quality</p> <p>WW 13 To require existing developments that are in close proximity to a public sewer to connect to that sewer, subject to a connection agreement with Irish Water'</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>In addition to facilitating the orderly development of the County as part of the preferred alternative scenario for the Plan (see Section 7), the appropriate treatment of waste water (SEO M1) would contribute towards the protection of various environmental components including:</i></p> <ul style="list-style-type: none"> ○ <i>Human health (SEO PHH1);</i> ○ <i>Biodiversity, flora and fauna (SEO B1 B2 B3);</i> ○ <i>The status of waters (SEO W1 W2); and</i> ○ <i>Soil (SEO S1).</i> <p><i>There would be potential for significant adverse environmental effects (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1) upon various environmental components to arise during both construction and operation (outflow could conflict with various components including the status of water bodies, aquatic ecology and human health for example). Such effects could be mitigated by measures including those which have been integrated into the Plan.</i></p>				

SEA Environmental Report for the Kildare County Development Plan 2017-2023

Various towns within County Kildare utilise the same waste water treatment plants; Leixlip, serves Kilcock, Maynooth, Celbridge, Leixlip and Straffan and Osberstown serves Naas, Newbridge, Kilcullen, Athgarvan, Prosperous, Sallins, Clane and Kill, for example. As is the case with other applications within the County, applications within such settlements are required to be assessed against the provisions within the County Development Plan providing for the protection of European Sites and associated assessments.

Irish Water, being the Water Services body for the State and County Kildare, is responsible for the delivery, integration and implementation of water and wastewater projects and infrastructural improvements. Various provisions from the County Development Plan have been integrated into Plan committing the Council to work in conjunction with Irish Water in order to facilitate their provision of necessary water services infrastructure.

Irish Water is required to fulfil undertake its responsibilities in compliance with relevant legislation including the Habitats Directive and transposing Regulations and to comply with the provisions of the County Development Plan as relevant and appropriate. Irish water has prepared a "Water Services Strategic Plan" and associated "Capital Investment Plan 2014-2016", which have been subjected to their own environmental assessment processes as relevant and appropriate. In combination with the provisions in these higher-level documents, the County Development Plan will contribute towards sustainable development and the appropriate protection and management

The provision of wastewater treatment has the potential to result in adverse effects on environmental components including European Sites. Potential adverse effects on European sites could occur as a result construction works (transportation or treatment) and new or increased effluent discharges that could reduce deteriorate the quality of waters that support surface or ground water dependent habitats and species. Where there are multiple effluent discharges, these have the potential to cumulatively contribute towards such adverse effects. Such potential effects include direct habitat loss, reductions in water quality and disturbance to species including sensitive aquatic species.

Potential adverse effects will be mitigated by the various provisions that have been integrated into Plan, including those detailed at Section 4 of this report. Projects will be subjected their own consent procedures with associated Appropriate Assessment requirements as relevant and appropriate.

Surface Water and Flooding Policies

<p>SW 1 To manage protect and enhance surface water quality to meet the requirements of the EU Water Framework Directive.</p> <p>SW 2 To incorporate Flood Risk Management into the spatial planning of the County, to meet the requirements of the EU Floods Directive and the EU Water Framework Directive.</p> <p>SW 3 To support and co-operate with the Office of Public Works (OPW) in delivering the Catchment Based Flood Risk Assessment and Management Programme in particular the Eastern and South Eastern CFRAM studies and associated Flood Management Plans (FRMP). The recommendations and outputs arising from these studies shall be considered in preparing plans and assessing development proposals.</p> <p>SW 4 To support the implementation of the EU Flood Risk Directive (2007/60/EC) on the assessment and management of flood risks and the Flood Risk Regulations (SI No 122 of 2010)</p> <p>SW 5 To manage flood risk in the County in accordance with the requirements of the Planning System and Flood Risk Management Guidelines for Planning Authorities, DECLG and OPW (2009) and circular PL02/2014 (August 2014), in particular when preparing plans and programmes and assessing development proposals. For lands identified in the Strategic Flood Risk Assessment (SFRA) a site-specific Flood Risk Assessment to an appropriate level of detail, addressing all potential sources of flood risk, is required, demonstrating compliance with the aforementioned Guidelines or any updated version of these guidelines, paying particular attention to residual flood risks and any proposed site specific flood management measures.</p> <p>SW 6 To ensure effective management of residual risks for development permitted on floodplains.</p> <p>SW 7 To maintain and enhance the existing surface water drainage systems in the County and promote and facilitate the development of Sustainable Urban Drainage Systems (SUDS) including integrated constructed wetlands and to promote and support the retrofitting of SUDS in established urban areas.</p> <p>SW 8 To incorporate Sustainable Urban Drainage Systems (SUDS) as part of all plans and planning schemes to address the potential for sustainable urban drainage at district or site level.</p> <p>SW 9 To limit the surface water run-off from new developments through the use of Sustainable Urban Drainage Systems (SUDS) These systems should not adversely impact on open space provision in residential areas.</p> <p>SW 10 To liaise with the Office of Public Works (OPW) in delivering on the flood management works and schemes, as may arise, through the OPW Non-coastal Minor Works Programme and through the OPW's Capital Programme.</p> <p>SW 11: To ensure that all towns, villages and settlements are provided with adequate flood alleviation measures within the limits of cost effectiveness and the availability of finance.</p> <p>SW 12 To ensure that flood risk management is incorporated into the preparation of Local Area Plans in accordance with</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
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<p><i>'The Planning System and Flood Risk Management - Guidelines for Planning Authorities (2009)'</i></p> <p>SW 13 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 <i>'The Planning System and Flood Risk Management - Guidelines for Planning Authorities (2009)'</i>.</p> <p>SW14 to seek to ensure that development will not interfere with or interrupt existing surface water drainage systems.</p> <p>SW 15 To ensure that the reasonable requirements of Inland Fisheries Ireland are adhered to in the construction of flood alleviation measures in the county.</p> <p>SW 16 To recognise the important role of bog land and other wetland areas in flooding patterns. Development in these areas shall therefore be subject of a Flood Risk Assessment in accordance with the relevant guidance.</p> <p>SW 17 To require development proposals which may affect canals and their associated infrastructure to prepare a Flood Risk Assessment in accordance with the relevant guidance.</p> <p>SW 18 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 <i>'The Planning System and Flood Risk Management Guidelines for Planning Authorities'</i> published by the Minister for the Environment, Heritage and Local Government in November 2009 <p>SW 19 To liaise with the Office of Public Works (OPW) in delivering flood management and alleviation programmes to include, but not limited to, the following:</p> <ul style="list-style-type: none"> ○ South Eastern CRFRAMS and the recommendations therein ○ Eastern CFRAMS and the recommendations therein ○ Newbridge Surface Water Improvement Schemes ○ Morrell River Flood Management Scheme ○ Hazelhatch Flood Management Scheme <p>SW 20 To develop and resource a multi-annual programme for the maintenance of river channels under the responsibility of Kildare County Council, to include but not limited to:</p> <ul style="list-style-type: none"> • Barrow Drainage District • Greese Drainage District • Lerr Drainage district <p>SW 21 To ensure that rural one off residential developments maintain existing drainage systems, particularly at access points to the property.</p>				
<p>Commentary:</p> <p><i>In addition to facilitating the orderly development of the County as part of the preferred alternative scenario for the Plan (see Section 7), these provisions contribute towards: the protection of the environment including water resources (SEOs W1 W2), soil (SEO S1), human health (SEO PHH1) and ecology (SEOs B1 B2 B3); and the provision of infrastructure (SEOs M1 M2 M3); and improvements in flood risk management (SEO W3).</i></p> <p><i>Appropriate management of both storm and surface water and flood risk (SEO W3) would contribute towards the protection of various environmental components including:</i></p> <ul style="list-style-type: none"> • <i>Human health (SEO PHH1);</i> • <i>Biodiversity, flora and fauna and cultural heritage (SEOs B1 B2 B3 CH1 CH2); and</i> • <i>Existing infrastructure and services (SEOs M1 M2 M3) with resultant protection of the status of waters, soils, human health and ecology during flood events (SEOs W1 W2 S1 PHH1 B1 B2 B3).</i> <p><i>In addition, flood risk management infrastructure and the application of the Justification Test provided for by the 2009 'The Planning System and Flood Risk Management' Guidelines would allow for the</i></p>				

<i>development of areas which would improve sustainable mobility levels (SEO C1).</i>				
<i>Flood risk management infrastructure and the implementation of the River Basin Management Plans and their associated Programmes of Measures (including those relating to various types of infrastructure and management initiatives) have the potential to result in significant adverse environmental effects during construction and operation on most environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M2 M3 CH1 CH2 L1). These types of infrastructure are often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Plan (see Section 9) and by measures arising from lower tier assessments.</i>				
Environmental Services	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Aim: 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.				
Commentary:				
<i>The provision of these services will contribute towards the achievement of the preferred alternative scenario for the Plan. The evaluation against Strategic Environmental Objectives (SEOs) that is provided above is consistent with the evaluation of the preferred scenario which is provided in Section 7, including contributing towards sustainable development and the protection of the environment.</i>				
Waste Management Policies				
<p>WM 1 It is the policy of the Council to implement European Union, National and Regional waste related environmental policy, legislation, guidance and codes of practice to improve management of material resources and wastes.</p> <p>WM 2 It is a policy of the Council to have regard to European Union, National and Regional policy relating to air quality, light pollution and noise pollution and to seek to take appropriate steps to reduce the effects of air, noise and light pollution on environmental quality and residential amenity.</p> <p>WM 3 To support the implementation of the Eastern-Midlands Region Waste Management Plan 2015-2021 by adhering to overarching performance targets, policies and policy action.</p> <p>WM 4 To support waste prevention through behavioural change activities that disassociates economic growth with resource use.</p> <p>WM 5 To provide, promote and facilitate high quality sustainable waste recovery and disposal infrastructure / technology in keeping with the EU waste hierarchy and to adequately cater for a growing residential population and business sector.</p> <p>WM 6 To seek the provision of adequately sized public recycling facilities in association with new commercial developments and in tandem with significant change of use / extensions of existing commercial developments where appropriate.</p> <p>WM 7 To secure appropriate provision for the sustainable management of waste within developments, including the provision of facilities for the storage, separation and collection of such waste.</p> <p>WM 8 To require the submission of either a certificate of exemption or a valid planning permission for a Waste Facility Permit or a Certificate of Registration application, in accordance with the Waste Management (Facility Permit and Registration) Regulations 2007 as amended.</p> <p>WM 9 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 10 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 Acts 1996, as amended will be used as a means of ensuring specific national policies and regulations are adhered to.</p> <p>WM 11 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 12 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 Eastern-Midlands Region Waste Management Plan 2015-2021</p> <p>WM 13 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>WM 14 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</p>	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

<p>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 15 Support and facilitate the separation of waste at source into organic and non-organic streams or other waste management systems that divert waste from landfill and maximise the potential for each waste type to be reused and recycled or composted and divert organic waste from landfill, in accordance with the 'National Strategy on Biodegradable Waste 2006 and the Eastern – Midlands Region Waste Management Plan 2015-2021.</p> <p>WM 16 To work in conjunction with Government departments and agencies and all other relevant stakeholders to remediate Kerdiffstown landfill in a socially, economically and environmentally sustainable manner that will both manage and reduce environmental risk and accommodate an appropriate end – use that is compatible with the established character of the area.</p> <p>WM 17: To facilitate the development of waste management infrastructure that is of an appropriate scale and is related to the needs of the county and the Eastern and Midlands Waste Region, subject to the protection of the environment, landscape character, road network and the amenities of the area.</p> <p>WM 18: To facilitate the ongoing operation of the Drehid waste facility in so far as operations at the facility relate to the waste management needs of the County and the Eastern and Midlands Waste Region and subject to the protection of the environment, landscape character, road network and the amenities of the area.</p>				
<p>Commentary:</p> <p><i>These provisions provide for waste management. The implementation of these provisions, including the construction and operation of waste management infrastructure, would facilitate the reduction of waste levels (SEO M3) at the same time as presenting potential conflicts with various environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M2 CH1 CH2 L1). These conflicts would be mitigated by, inter alia, measures which have been integrated into the Plan and the Regional Waste Management Plan – compliance with these measures would contribute towards the protection of human health (PHH1) and various environmental components including air, soil, water, and ecology (SEOs B1 B2 B3 C1 W1 W2 S1)</i></p> <p><i>The provision of waste management facilities (SEO M3) in certain locations could reduce transport related emissions (SEOs C1 PHH1).</i></p> <p><i>The provisions would contribute towards and support the preferred alternative scenario (see details and evaluation at Section 7). Therefore, the effects arising from implementation of the preferred alternative scenario are contributed towards by these provisions.</i></p>				
<p>Pollution Control Policies – Water, Air and Noise</p>				
<p>PC 1 To implement the provisions of EU and National legislation on air, light and noise control and other relevant legislative requirements, as appropriate, in conjunction with all relevant stakeholders.</p> <p>PC 2 To implement the relevant spatial planning recommendations and actions of the Kildare Noise Action plan 2013-2018.</p> <p>PC 3 To ensure that future developments are designed and constructed to minimise noise disturbance and take into account the multi-functional uses of streets including movement and recreation as detailed in the Urban Design Manual (2009) and the Design Manual for Urban Roads and Streets (2013)</p> <p>PC 4 To ensure external lighting schemes minimise light spillage or pollution in the immediate surrounding environment and do not adversely impact on residential or visual amenity and biodiversity in the surrounding areas</p> <p>PC 5 To promote and support the ban on the use marketing, sale and distribution of bituminous coal in Naas-Newbridge and Celbridge- Leixlip-Maynooth.</p> <p>PC 6 To enforce, where applicable, the provisions of the Environmental Noise Regulations 2006.</p> <p>PC 7 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 8 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 9 To require activities likely to give rise to excessive noise, to install noise mitigation measures and monitors.</p> <p>PC 10 To ensure that all future development is in accordance with the EU Ambient Air Quality and Cleaner Air for Europe (CAFÉ) Directive (2008/50/EC).</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

Commentary:

These provisions are primarily concerned with environmental protection and management and would benefit the protection of the environment including human health (SEO PHH1) and ecology (SEOs B1 B2 B3). These provisions contribute towards the orderly development of the County as part of the preferred alternative scenario for the Plan (see Section 7).

Water and Drainage Objectives

WDO 1 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.

WDO 2 To acknowledge the strategic policy recommendations in relation to flood risk identified in the Regional Planning Guidelines for the Greater Dublin Area 2010-2022.

WDO 3 To liaise with adjoining Local Authorities, all relevant departments and agencies in the alleviation of flood risk in the county.

WDO 4 To promote rain water harvesting in all developments and in particular in larger schemes.

WDO 5 To liaise with Irish Water to promote the sustainable development of water supply and drainage infrastructure in the County and the Region, in accordance with the objectives and recommendations set out in the Greater Dublin Drainage Study, Irish Water's Water Services Strategic Plan and the Eastern and Midlands Water Supply Project.

WDO 6 To present business cases to Irish Water to secure capital investment for required infrastructural projects in the County based on the Core Strategy.

WDO 7 To protect the natural resources of the County which are the foundation for the Green Infrastructure network and a basis for growth and competitive advantage in the tourism, food and fisheries sectors

WDO 8 To work in conjunction with Irish Water to identify and facilitate the timely delivery of the water services required to realise the development objectives of this plan

B1 B2 B3 PHH1
S1 W1 W2 W3 M1
M2 M3 C1 CH1
CH2 L1

B1 B2 B3 PHH1
S1 W1 W2 W3 M1
M2 M3 C1 CH1
CH2 L1

Commentary:

In addition to facilitating the orderly development of the County as part of the preferred alternative scenario for the Plan (see Section 7), the provision of waste water treatment (SEO M1) and safe drinking water (SEO M2) would contribute towards the protection of human health (SEO PHH1), ecology (SEO B1 B2 B3), status of waters (SEO W1 W2), soil (SEO S1). There would be potential for significant adverse environmental effects (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1) upon various environmental components to arise during both construction – if required – and operation. For drinking water, abstraction of water could conflict with the status of water bodies and aquatic ecology, for example. For waste water, outflow could conflict with various components including the status of water bodies, aquatic ecology and human health, for example. Such effects could be mitigated by measures including those which have been integrated into the Plan and any additional requirements arising through lower tier assessments.

In addition to facilitating the orderly development of the County as part of the preferred alternative scenario for the Plan (see Section 7), the appropriate management of both storm and surface water and flood risk (SEO W3) would contribute towards the protection of various environmental components including:

- o Human health (SEO PHH1);
- o Biodiversity, flora and fauna and cultural heritage (SEOs B1 B2 B3 CH1 CH2); and
- o Existing infrastructure and services (SEOs M1 M2 M3) with resultant protection of the status of waters, soils, human health and ecology during flood events (SEOs W1 W2 S1 PHH1 B1 B2 B3).

In addition, flood risk management infrastructure and the application of the Justification Test provided for by the 2009 'The Planning System and Flood Risk Management' Guidelines would allow for the development of areas which would improve sustainable mobility levels (SEO C1).

Flood risk management infrastructure has the potential to result in significant adverse environmental effects during construction and operation on most environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M2 M3 CH1 CH2 L1). These types of infrastructure are often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects would be mitigated both by measures which have been integrated into the Plan (see Section 9) and by measures arising from lower tier assessments.

Environmental Services Objectives

EN 1 To promote environmental protection through education.

EN 2 To facilitate the implementation of the Eastern – Midlands Region Waste Management Plan 2015-2021.

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.

B1 B2 B3 PHH1 S1
W1 W2 W3 M1 M2
M3 C1 CH1 CH2
L1

B1 B2 B3 PHH1 S1
W1 W2 W3 M1 M2
M3 C1 CH1 CH2
L1

<p>EN 4 To facilitate the implementation of the Kildare Noise Action Plan 2013-2018 and Litter Management Plan 2016-2019 and any subsequent amendments during the period of this Plan.</p> <p>EN 5 To continue the monitoring of and review the trade effluent discharge licences 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 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 8 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> <p>EN 9 Implement the objectives of the National Waste Prevention Programme at a local level with businesses, schools, householders, community groups and within the Council's own activities.</p> <p>EN 10 Promote and increase in the amount of waste reused and recycled consistent with the Eastern – Midlands Region Waste Management Plan and Waste Hierarchy and facilitate recycling of waste through adequate provision of facilities and good design in new developments.</p> <p>EN 11 Complete and implement the Kildare Litter Management Plan 2016- 2019</p>				
<p>Commentary:</p> <p><i>In addition to facilitating the orderly development of the County as part of the preferred alternative scenario for the Plan (see Section 7), the implementation of provisions relating to waste management, including the construction and operation of waste management infrastructure, would facilitate the reduction of waste levels (SEO M3) at the same time as presenting potential conflicts with various environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M2 CH1 CH2 L1). These conflicts would be mitigated by, inter alia, measures which have been integrated into the Plan and the Regional Waste Management Plan – compliance with these measures would contribute towards the protection of human health (PHH1) and various environmental components including air, soil, water, and ecology (SEOs B1 B2 B3 C1 W1 W2 S1). The provision of waste management facilities (SEO M3) in certain locations could reduce transport related emissions (SEOs C1 PHH1).</i></p> <p><i>Many of the objectives above are primarily concerned with environmental protection and management and would benefit the protection of the environment including human health (SEO PHH1) and ecology (SEOs B1 B2 B3).</i></p>				

8.6.7 Chapter 8: Energy and Communications

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
<p>Aim: To encourage and support energy and communications efficiency and to achieve a reasonable balance between responding to EU and National Policies on climate change, renewable energy and communications and enabling resources to be harnessed in a manner consistent with the proper planning and sustainable development of the county.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>General Energy Policies and Objectives</p>				
<p>ER 1 To respond to the European and National Energy Programme through the County Development Plan – with policies and objectives that promote energy conservation, increased efficiency and growth of locally based renewable energy alternatives, in an environmentally and socially acceptable and sustainable manner</p> <p>ER 2 To support infrastructural renewal and development of electricity and gas networks in the county, subject to safety and amenity requirements.</p> <p>ER 3 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 and socially acceptable manner.</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, including the location of high voltage transmission power lines, is controlled</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>particularly adjoining existing dwellings, except where no other alternative can be shown to exist.</p> <p>ER 5 To seek the co-ordinated delivery of infrastructure and services to support sustainable communities.</p> <p>ER 6 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> <p>ER 7 To adopt a positive approach to renewable energy proposals, having regard to the proper planning and sustainable development of the area including community, environmental and landscape impacts and impacts on protected or designated heritage areas / structures</p> <p>ER 8 To have regard to the Renewable Electricity Policy and Development Framework once adopted when assessing any renewable energy proposals.</p> <p>ERO 1 To prepare and implement an Energy Strategy in tandem with the preparation of a Climate Change Adaptation Strategy following consultation with the Sustainable Energy Authority Ireland (SEAI), the Environmental Protection Agency (EPA) and other relevant stakeholders. The strategy will also be informed by relevant actions contained in the LECP. This will result in 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>				
<p>Commentary:</p> <p><i>The energy and communications provisions in this chapter are consistent with the preferred alternative scenario for the Plan and provide a planning framework for economic development in County Kildare that is in line with the provisions of the Core Strategy. The evaluation against Strategic Environmental Objectives (SEOs) that is provided above is consistent with the evaluation of the preferred scenario which is provided in Section 7, including contributing towards sustainable development and the protection of the environment.</i></p> <p><i>Energy and communications measures will help to provide a secure supply of energy to existing and new development. They will also contribute towards meeting renewable energy and greenhouse gas emission targets.</i></p> <p><i>Energy and communications related infrastructure and ancillary developments have the potential to result in a variety of impacts including:</i></p> <ul style="list-style-type: none"> • <i>Loss of biodiversity with regard to Natura 2000 Sites and Annexed habitats and species (SEO B1)</i> • <i>Loss of biodiversity with regard to ecological connectivity and stepping stones (SEO B2)</i> • <i>Loss of biodiversity with regard to designated sites including Wildlife Sites and listed species (SEO B3)</i> • <i>Spatially concentrated deterioration in human health (SEO PHH1)</i> • <i>Damage to the hydrogeological and ecological function of the soil resource (SEO S1)</i> • <i>Adverse impacts upon the status and quality of water bodies (SEOs W1 W2)</i> • <i>Increase in the risk of flooding (SEO W3)</i> • <i>Failure to provide adequate and appropriate waste water treatment (SEO M1; water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)</i> • <i>Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (SEO M2; water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)</i> • <i>Increases in waste levels (SEO M3)</i> • <i>Failure to contribute towards sustainable transport and associated impacts (SEO C1; transport infrastructure investment is needed to ensure the mitigation of potential conflicts)</i> • <i>Effects on entries to the Record of Monuments and Places and other archaeological heritage (SEO CH1)</i> • <i>Effects on entries to the Records of Protected Structures and other architectural heritage (SEO CH2)</i> • <i>Occurrence of adverse visual impacts (SEO L1)</i> 				
<p>Wind Energy Policies and Objectives</p>				
<p>WE 1 To have regard to the Department of the Environment, Heritage and Local Government's Guidelines for Planning Authorities on Wind Energy Development (or any update of this document) 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 and the Kildare Wind Energy Strategy.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</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 sensitivities of the county's landscapes; the visual impact on protected views, prospects, scenic routes, historic demesnes 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 those on residential properties such as 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 and any cumulative effects due to other projects; the impact of the proposed development on protected bird and mammal species. The county's Wind Energy Strategy (when adopted) The impact of the grid connection from the proposed wind farm to the ESB network. <p>WE 4 To encourage small to medium scale wind energy developments within industrial or business parks, and support small community based proposals in urban areas provided they do not negatively impact on the environmental quality, and visual or residential amenities of the area.</p> <p>WE 5 To adopt a positive approach to small scale wind energy developments for auto consumption purposes, having regard to the proper planning and sustainable development of the area including residential amenity, heritage, environmental and landscape impacts</p> <p>WEO 1 To prepare a Wind Energy Development Strategy and to publish it as a proposed variation of this plan following the completion of the review of the DECLG's Wind Energy Development Guidelines.</p>				
<p>Commentary:</p> <p><i>These provisions cumulatively contribute towards the effects referred to under 'Aim' above; see commentary under 'Aim' above.</i></p> <p><i>Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets</i></p> <p><i>Potential Negative Effects, if unmitigated:</i></p> <ul style="list-style-type: none"> <i>Potential impacts include those associated with construction and operation of the turbines and ancillary facilities and infrastructure (including roads and electrical infrastructure)</i> <i>Potential human health impact: shadow flicker, noise, and impacts arising from bog bursts and landslides</i> <i>Potential impact upon designated and non-designated biodiversity and flora and fauna including birdlife</i> <i>Potential interactions leading to change in structure of soil and geology and changes to drainage</i> <i>Potential impacts on water status during construction - this could interact with drinking water sources and biodiversity</i> <i>Potential impacts upon the context of protected archaeological and architectural heritage - including the context of this heritage - as well as unknown archaeological heritage</i> <i>Potential impacts upon traffic during construction due to transportation of turbine components</i> <i>Changes to the character of areas would be likely to occur however visual impacts would depend on various factors including the size, number and spacing of the turbines, perception of the relevant areas and any cumulative effect arising from multiple wind farms</i> 				
<p>Hydro-Energy Policies</p>				
<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 the 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 support the role out of small scale hydroelectric projects on rivers, water courses, dams and weirs across the County, where projects do not impact negatively on freshwater species, biodiversity and natural or built heritage features</p> <p>HD 3 To seek to ensure that, in sensitive landscapes, powerlines connecting the hydro unit to the national grid will be laid underground.</p> <p>HD 4 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>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

Commentary:

These provisions cumulatively contribute towards the effects referred to under 'Aim' above; see commentary under 'Aim' above.
Hydroelectric Projects on rivers and geothermal energy developments

Hydro-Energy Policies

Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets

Potential negative Effects, if unmitigated:

- Depending on the scale and location of the development there is potential for impacts to occur on biodiversity, in particular aquatic biodiversity

Lower tier project consideration is likely to find that the highest concentrations of ecological constraints to both the construction and operation of development are located within water bodies or close to the edge water bodies and that more ecologically appropriate locations for new development are located away from the water's edge. Providing for hydro-energy developments presents a particular challenge in this context. The mitigation measures that have been integrated into the Plan support the location of new development away from the water's edge (including for example GI 18: "To maintain a biodiversity zone of not less than 10 metres from the top of the bank of all watercourses in the county...") and necessitate the undertaking of lower tier studies. Lower tier studies would be required to undertake new ecological survey work (where necessary, to be determined on a project by project basis) as well as consider information on the various designations to which the baseline data provided in this SEA Environmental Report relates.

- Potential to impact upon the morphological, biological and chemical status of waters - this could interact with drinking water sources (in freshwater) and biodiversity
- Potential interactions leading to change in structure of soil and geology
- Operation could impact upon flood risk elsewhere
- Potential impacts upon archaeological heritage or nearby architectural heritage, including context
- Changes to the character of locations may occur however visual impacts would depend upon, inter alia, the size of the installation, ancillary facilities and the perception and visibility of the relevant area

Solar Energy Policies

SE 1 To promote the development of solar energy infrastructure in the County, in particular for on-site energy use, including solar PV, solar thermal and seasonal storage technologies. Such projects will be considered subject to environmental safeguards and the protection of natural or built heritage feature, biodiversity views and prospects.

SE 2 To ensure that the assessment of solar energy development proposals will have regard to:

- site selection by focussing in the first instance on developing solar farms on previously developed and non-agricultural land, provided that it is not of high environmental value;
- where a proposal involves greenfield land, whether (i) the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and (ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays.
- the nature of solar farms as normally temporary structures and as result decommissioning and site rehabilitation plans will be required and that the land be restored to its previous use;
- the proposal's impact through glint and glare on neighbouring uses and on transportation and aviation safety;
- the proposal's visual and landscape impact and the potential to mitigate these impacts through, for example, screening with native hedges;
- the guidance provided in relation to compatibility with landscape designations of tables 14.3 and 14.4 of chapter 14 of this plan.
- the need for, and impact of, security measures such as lights and fencing;
- the need to ensure that heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on protected views and scenic routes etc. As the significance of a heritage asset derives not only from its physical presence, but also from its setting, careful consideration should be given to the impact of large scale solar farms on such assets, e.g. historic demesnes. Depending on their scale, design and prominence, a large scale solar farm within the setting of a heritage asset may cause substantial harm to the significance of the asset.
- the need to consider ecology so as to avoid or minimise damage on important species or protected habitats.

B1 B2 B3 PHH1 S1
W1 W2 W3 M1 M2
M3 C1 CH1 CH2
L1

B1 B2 B3 PHH1 S1
W1 W2 W3 M1 M2
M3 C1 CH1 CH2 L1

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<ul style="list-style-type: none"> the energy generating potential, which can vary for a number of reasons including, latitude and aspect. the design of the scheme needs to be carefully considered including layout, scale, land cover panel, height, landscaping, access roads, noise, cumulative impacts and the design of ancillary elements. <p>SE 3 To encourage use of passive solar design principles for residential building(s).</p> <p>SE 4 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>Commentary: <i>These provisions cumulatively contribute towards the effects referred to under 'Aim' above; see commentary under 'Aim' above.</i></p> <p><i>Positive Effects: Contribution towards renewable energy targets</i></p> <p><i>Potential Negative Effects, if unmitigated:</i></p> <ul style="list-style-type: none"> Potential impacts on architectural heritage - including the context of this heritage - at micro scale Potential impacts on habitats and species and micro scale Large scale installations may have visual impacts - these would depend on perception of the relevant area - 				
<p>Bio Energy Policies</p>				
<p>BE 1 To facilitate the development of projects that convert biomass to energy subject to proper planning considerations.</p> <p>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.</p> <p>BE 3 To promote domestic biological treatment including composting of kitchen and garden waste.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary: <i>These provisions cumulatively contribute towards the effects referred to under 'Aim' above; see commentary under 'Aim' above.</i></p> <p><i>Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets. Can provide for the use of agricultural and other wastes</i></p> <p><i>Potential Negative Effects, if unmitigated:</i></p> <ul style="list-style-type: none"> Potential impact upon designated and non-designated biodiversity and flora and fauna arising from changes in vegetation. Soil structure may also be impacted upon. Changes in farming practices may lead to changes in drainage and runoff which could impact upon biological and chemical status of waters - - this could interact with drinking water sources and biodiversity Potential human health impact: odour and noise from operation of plants Potential impacts upon traffic during operation due to transportation of fuel to plants Fuels derived from bio-mass still produce emissions however these are less than those derived from fossil fuels Changes to the land cover of areas could occur however visual impacts would depend on perception of the relevant area; Biomass plants may have visual impacts - these would depend on perception of the relevant area 				
<p>Energy from Waste Policies:</p>				
<p>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.</p> <p>EW 2 To promote the development of waste heat technologies and the utilisation and sharing of waste heat in new or extended industrial and commercial developments, where the processes associated with the primary operation onsite generates waste heat.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary: <i>These provisions cumulatively contribute towards the effects referred to under 'Aim' above; see commentary under 'Aim' above.</i></p> <p><i>Positive Effects: Contribution towards renewable energy and minimisation of greenhouse gases targets. Meets waste management objectives</i></p> <p><i>Potential Negative Effects, if unmitigated:</i></p> <ul style="list-style-type: none"> Potential odour issues Construction of facilities can result in impacts similar to other built development – potential visual impact, impact on ecology, waters Design needs to ensure that emissions comply with relevant standards 				
<p>Energy Efficiency in Buildings Policy:</p>				
<p>EB 1 To ensure that new development is designed to take account of the impacts of climate change, and that</p>	<p>B1 B2 B3 PHH1 S1</p>		<p>B1 B2 B3 PHH1 S1</p>	

<p>energy efficiency and renewable energy measures are incorporated in accordance with national building regulations, policy and guidance.</p> <p>EB 2 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>EB 3 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> <p>EBO 1: 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>W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>Actions in relation to energy efficiency cumulatively contributes towards the effects referred to under 'Aim' above; see commentary under 'Aim' above. This includes a contribution towards renewable energy and minimisation of greenhouse gases targets.</i></p>				
<p>Geo Thermal Energy Policies</p>				
<p>GT 1 To facilitate large and smaller scale geothermal energy generating developments subject to the proper planning and sustainable development of the area and consideration of environmental and ecological sensitivities.</p> <p>GT 2 To promote the use of geothermal heat pumps for space heating and cooling as well as water heating in domestic, commercial and recreational buildings subject to the protection of water quality and any other relevant considerations.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>These provisions cumulatively contribute towards the effects referred to under 'Aim' above; see commentary under 'Aim' above.</i></p> <p><i>Positive Effects: Contribution towards renewable energy targets</i></p> <p><i>Potential Negative Effects, if unmitigated:</i></p> <ul style="list-style-type: none"> • <i>Potential impacts upon the status of waters and ecology contained within, especially arising from changes in the temperature of groundwater which can impact upon the structure and ecology of the aquifer and any dependent surface waters - this could interact with drinking water sources</i> • <i>Warm Springs that occur along the Meath to Kildare border, which are of geological and ecological interest and are subject to designations in places would present constraints to geo thermal projects in these locations</i> • <i>The mitigation measures that have been integrated into the Plan contribute towards the protection of the environment (including Geo Thermal Energy Project GT 1: "To facilitate large and smaller scale geothermal energy generating developments subject to the proper planning and sustainable development of the area and consideration of environmental and ecological sensitivities") and necessitate the undertaking of lower tier studies. Lower tier studies would be required to undertake new ecological survey work (where necessary, to be determined on a project by project basis) as well as consider information on the various designations to which the baseline data provided in this SEA Environmental Report relates.</i> • <i>Potential interactions leading to change in structure of soil and geology</i> • <i>Potential impacts upon archaeology, including unknown underground archaeology</i> • <i>Potential impacts upon on site water services</i> • <i>Potential impacts upon context of archaeological and architectural heritage arising from surface installation</i> 				
<p>Gas Policies:</p>				
<p>GS1 to support the infrastructural renewal and development of the gas networks in the county, subject to proper planning heritage and amenity requirements.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>The gas network related development has the potential to impact upon various environmental components. This provision cumulatively contributes towards the effects referred to under 'Aim' above; see commentary under 'Aim' above. Mitigation integrated into this Policy "subject to proper heritage and amenity requirements" will contribute towards the protection of the environment.</i></p>				
<p>Energy Supply and Infrastructure Policies</p>				
<p>TN 1 To ensure that planning applications involving the siting of electricity power lines and other overhead cables and their support structures, consider in full, the impacts of such development on the landscape, nature conservation, archaeology, residential and visual amenity.</p> <p>TN 2 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</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>stations, pumping stations and other necessary service buildings. Pole mounted equipment (such as transformers) will not be permitted.</p> <p>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.</p> <p>TN 4 To support the sustainable improvement and expansion of the high voltage electricity transmission power lines and distribution network, subject to human health, landscape, residential amenity, tourism, equine industry and environmental considerations.</p> <p>TN 5 To require developers to outline in any proposed planning application for high voltage transmission lines:</p> <ul style="list-style-type: none"> (a) the key drivers for the project (b) the manner in which the preferred technological solution has been arrived at, including considerations of alternatives, and (c) How environmental assessments have informed options relating to undergrounding / partial undergrounding / over grounding of transmission infrastructure, and (d) how the preferred route and substation requirements within the county were selected and justification for same, having regard to paragraph (c) above (e) the cumulative impact of the proposal with other planned projects. Where impacts are inevitable mitigation measures shall be clearly outlined. <p>TN 6 To have regard to the requirements of the service providers in the provision of strategic infrastructure while also seeking to ensure that development, including the location of high voltage transmission power lines, is controlled particularly adjoining existing dwellings, except where no other alternative can be shown to exist.</p> <p>TN 7 To ensure that the ability of the area to absorb overhead transmission lines is considered with reference to landscape character designations of the county as outlined in Chapter 14 of this plan C or following any forthcoming National Landscape Guidelines issued pursuant to Section 28 of the Planning Acts 2000-2015.</p> <p>TN 8 To ensure that the landscape and visual assessment of any proposal focus on the potential of the development to impact upon county landscape designations and important designated sites. Proposed overhead lines shall as far as possible seek to avoid areas of sensitivity (e.g. areas of high amenity, high sensitive landscape designations, scenic views, protected structures etc.). Where avoidance is not possible full consideration shall be given to undergrounding the lines.</p> <p>TN 9 To have regard to the potential impact of proposed overhead high voltage transmission power lines on the established equine industry in the County, such as the sport horse and the thoroughbred bloodstock sectors, and to ensure that appropriate mitigation measures are provided to mitigate any adverse impact on this important industry.</p> <p>TN 10 To ensure that the developers of high voltage transmission overhead lines seek to minimise the visual impact of the lines. In this regard, detailed consideration shall be given to appropriate support structure designs and the reason for the selection of particular support structure design over other designs. Where appropriate alternative solutions including monopole designs or such other designs or mitigation measures shall be given due consideration.</p> <p>TN 11 To ensure that additional infrastructure and / or substation sites required to accommodate high voltage transmission power lines shall be detailed including consideration of alternatives. Mitigation measures shall be outlined to minimise the visual impact of the multiplicity /convergence of overhead lines including any associated tie-ins at substations. Where there is a multiplicity and or convergence of overhead lines that the undergrounding of existing and / or proposed lines shall be investigated by applicants.</p> <p>TN 12 To have regard to the potential impact of proposed overhead high voltage transmission power lines on the established equine industry in the County, such as the sport horse and the thoroughbred bloodstock sectors, and to ensure that appropriate mitigation measures are provided to mitigate any adverse impact on this important industry.</p> <p>TN 13 To ensure that proposals for development which would be likely to have a significant effect on nature conservation sites and /or habitats or species of high conservation value will only be approved if it can be ascertained, by means of an Appropriate Assessment or other ecological assessment, that the integrity of these sites will not be adversely affected except where there are imperative reasons of overriding public interest (IROPI).</p> <p>TN 14 To seek compliance with any statutory government guidelines issued by the DECLG pursuant to Section 28 of the Planning and Development Acts 2000-2014. This includes the review by the expert group on "Health Effects of Electromagnetic Fields", published in 2007 by the Department of Communications, Energy and Natural Resources", and</p>				
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<p>any further reviews.</p> <p>TN 15 To seek to ensure that there is adequate electrical infrastructure and network capacity to provide a reliable supply to all those working and living in the county, and thereby support national economic growth and social development.</p> <p>TNO 1 To support the statutory providers of national grid infrastructure by safeguarding strategic corridors (where strategic route corridors have been identified) from encroachment by other development, that might compromise the provision of energy networks.</p>				
<p>Commentary:</p> <p><i>These provisions cumulatively contribute towards the effects referred to under 'Aim' above; see commentary under 'Aim' above.</i></p> <p><i>Many of these provisions contribute towards both sustainable development and the protection and management of the environment, for example:</i></p> <ul style="list-style-type: none"> • TN 1 "landscape, nature conservation, archaeology, residential and visual amenity" • TN 4 "subject to human health, landscape, residential amenity, tourism, equine industry and environmental considerations" • TN 5 "the cumulative impact of the proposal with other planned projects" • TN 7 "with reference to landscape character designations of the county" • TN 8 "landscape and visual assessment" • TN 9 "equine industry" • TN 10 "minimise the visual impact" • TN 11 "minimise the visual impact" • TN 13 "Appropriate Assessment or other ecological assessment" 				
<p>Telecommunications Policies</p>				
<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 and social development.</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 and where practicable encourage the efficient and shared use of said infrastructural services.</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 <i>Telecommunications Antennae and Support Structures Guidelines for Planning Authorities (1996)</i> and circular letter PL07/12 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 over ground masts and antennae within the following areas:</p> <ul style="list-style-type: none"> ◦ Areas of high amenity / sensitive landscape areas (refer to Chapter 14) ◦ Areas within or adjoining the curtilage of protected structures ◦ On or within the setting of archaeological sites. <p>TL 10 To discourage the development of individual telecommunications support structures and antennae for private use.</p> <p>TL 11 To require all telecommunications services to be placed underground and that any works carried out on</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

footpaths make provision for future services.				
Commentary:				
<p>These provisions cumulatively contribute towards the effects referred to under 'Aim' above; see commentary under 'Aim' above.</p> <p>The development of telecommunications has the potential to impact upon various environmental components. Some of these provisions contribute towards both sustainable development and the protection and management of the environment, for example:</p> <ul style="list-style-type: none"> • TL 7 "minimise and / or mitigate any adverse impacts on communities, public rights of way and the built or natural environment" • TL 8 "minimise the number of masts and their visual impact on the environment" • TL 9 "To minimise the provision of over ground masts and antennae within the following areas: Areas of high amenity / sensitive landscape areas (refer to Chapter 14); Areas within or adjoining the curtilage of protected structures; on or within the setting of archaeological sites." 				
Broadband Policies				
BR 1	To assist in the provision of information and communication technologies throughout the county.	B1 B2 B3 PHH1 S1		B1 B2 B3 PHH1 S1
BR 2	To co-operate with the Department of Communications, Energy and Natural Resources and public and private agencies where appropriate, in improving high quality broadband infrastructure throughout the county.	W1 W2 W3 M1 M2		W1 W2 W3 M1 M2
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.	M3 C1 CH1 CH2		M3 C1 CH1 CH2 L1
BR 5	To support the provision of the National Broadband Plan in so far as it relates to the County.	L1		
BR 6	To cooperate with service providers in securing a greater range and coverage of telecommunications services in order to ensure that people and business have equitable access to a wide range of services and the latest technologies as they become available.			
BRO 1	To seek to provide public wifi zones in and around all public buildings			
Commentary:				
<p>These provisions cumulatively contribute towards the effects referred to under 'Aim' above; see commentary under 'Aim' above.</p> <p>The development of telecommunications has the potential to impact upon various environmental components. Some of these provisions contribute towards both sustainable development and the protection and management of the environment, for example:</p> <ul style="list-style-type: none"> • TL 7 "minimise and / or mitigate any adverse impacts on communities, public rights of way and the built or natural environment" • TL 8 "minimise the number of masts and their visual impact on the environment" • TL 9 "To minimise the provision of over ground masts and antennae within the following areas: Areas of high amenity / sensitive landscape areas (refer to Chapter 14); Areas within or adjoining the curtilage of protected structures; on or within the setting of archaeological sites." 				

8.6.8 Chapter 9: Retail

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
Aim: 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.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

Commentary:

The retail development provisions from the Plan set out the overall strategy for the future development of retailing in the County and will, in combination with the implementation of other provisions from the Plan, towards the overall development of the County. By providing for the development of retail (which would encompass new built development and the construction and operation of infrastructure to service this development), these provisions would potentially conflict with the full range of environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). Potential adverse effects would be mitigated by measures which have been integrated into the Plan (see Section 9). The evaluation against Strategic Environmental Objectives (SEOs) that is provided above is consistent with the evaluation of the preferred scenario which is provided in Section 7. This scenario would contribute towards the protection of many environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 CH1 CH2 L1).

Retail provisions place an emphasis on the provision within County Kildare's settlements of a range of retail goods and services that are accessible to residents, visitors and workers within the County – this will have various benefits on the protection and management of the environment and will contribute towards maximising sustainable mobility and associated interactions with emissions to air, energy usage and human health (SEO C1 PHH1).

Policies and Objectives

R1: To guide major retail development in accordance with the framework provided by the County Retail Hierarchy (Table 9.2) to enable an efficient, equitable and sustainable distribution of retail floor space throughout the County.

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 and village centres to be sustained and strengthened.

R 3: To define the Core Retail Area within the Development Plan/Local Area Plans (LAP) of the County's main centres to provide guidance on the application of the Sequential Approach.

R 4: To confirm the Town Centre zoning in adopted LAPs and, where appropriate, designate further Town Centre Expansion Areas subject to the tests of the Sequential Approach to enable the vision for these centres to be achieved and provide the appropriate guidance to applicants.

R 5: To have due regard to the broad assessment for additional retail floor space in the Plan period and beyond in the determination of retail planning applications, in parallel to a more detailed appraisal under the Plan's Retail Development Management Criteria.

R 6: To promote and encourage major enhancement and expansion of mainstream comparison floor space 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.

R 7: To restrict the granting of permissions for both convenience and mainstream comparison floor space in the town and its environs outside of the designated Core Retail Area until proposals for the redevelopment/regeneration of some of the following key sites have been achieved:

- Naas Shopping Centre – Corbans Lane
- The former Superquinn site
- The Naas Shopping Mall
- The former Penneys outlet on Blessington Road.

R 8: To support and implement appropriate development of lands for the future expansion of Newbridge Town Centre, and specifically the Whitewater Shopping Centre, facilitated by the expansion of the Core Retail Area.

R 9: To provide the framework for a more integrated approach to the planning of the town centre through the Newbridge LAP 2013 – 2019, and in particular Edward Street/Main Street North/Charlotte Street/Eyre Street area being a focus for achieving greater linkage and commercial synergy.

R 10: 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.

R 11: To support the further development of the tourism asset and attraction of the Newbridge Silverware Visitor Centre given its benefits to both the retail and tourism economies of the town and County.

R 12: To seek the redesignation of Leixlip as a Metropolitan Area Level 3 Town Centre in the new GDA Retail Hierarchy.

R 13: To work with development interests/landowners and other key stakeholders in the development of a revised plan for the lands at Collinstown.

R 14: To encourage and facilitate sustaining and enhancing the retail, commercial leisure and services offer of

B1 B2 B3 PHH1 S1
W1 W2 W3 M1 M2
M3 C1 CH1 CH2
L1

B1 B2 B3 PHH1 S1
W1 W2 W3 M1 M2
M3 C1 CH1 CH2
L1

<p>Leixlip as a Level 3 Town Centre and harnessing the potential of its heritage and tourism assets.</p> <p>R 15: To encourage the development of the retail, commercial leisure and service role of Celbridge as a self-sustaining main centre 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 seek the redesignation of Maynooth as the Metropolitan Area Level 2 Major Town Centre to serve North East Kildare in the new GDA Retail Hierarchy.</p> <p>R 18: To secure the achievement of Maynooth becoming a Metropolitan Area Level 2 Major Town Centre through encouraging the redevelopment of the Town Centre Expansion Area and the regeneration of backland areas of 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 LAPs during the period of this Plan.</p> <p>R 20: To encourage and facilitate the regeneration of land and buildings in the Kilcock Core Retail Area and other Town Centre zoned lands.</p> <p>R 21: To work with all stakeholders in further promoting the asset of Kilcock's heritage townscape and location on the Royal Canal.</p> <p>R 22: To promote and encourage major enhancement and expansion of the retail offer and town centre functions of Athy and Kildare Town to sustain and enhance their importance as Sub County Town Centres within the South Sub Area of the County.</p> <p>R 23: To support and implement appropriate development of lands for the future expansion of Athy Town Centre and specifically those facilitated by the expansion of the Core Retail Area and the designation of those lands as the Town Centre Retail Expansion Area in the forthcoming Athy LAP.</p> <p>R 24: To work with all stakeholders in Athy to redress the high retail expenditure leakage from the town, its catchment area and the south of the County as a whole and deliver the vision and potential of the town, as set out in the Athy Town Development Plan 2012 – 2018.</p> <p>R 25: To encourage and facilitate the further expansion of the KTOV in accordance with the guidance in the GRPs 2012 and achieve greater linkage and synergy with Kildare Town Centre and the offers and attractions of Naas and Newbridge. In any future expansion of KTOV it should be demonstrated that there will be no capacity impacts on the national motorway and regional and local road networks.</p> <p>R 26: To investigate the need for any additional retail provision as appropriate within existing and expanding residential areas in future LAPs during the period of this Plan.</p> <p>R 27: To identify and zone suitable locations for retail warehouse development in Kildare Town in the review and update of the Kildare Town LAP 2012 – 2018.</p> <p>R 28: To encourage the growth and development of retail and other town centre services/functions in Clane, Kilcullen and Monasterevin to enable them to grow into more self-sustaining towns in the County's Settlement and Retail Hierarchies, with Clane growing into its potential as a Hinterland Area Tier 1 Level 3 Sub County Town Centre to redress the strategic spatial deficiency in main centres in the north of the Central Sub Area of the County.</p> <p>R 29: To progress the redevelopment/regeneration of town centre sites, with any expansion of Clane, Kilcullen and Monasterevin main food and comparison offers being in the town centres or appropriate edge of centre locations. The emphasis is on consolidation of these 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 as part of an integrated strategy for raising their profiles and identities.</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>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 encourage and respond positively to applications for retail and other town centre developments in Castledermot, Prosperous, Rathangan and Sallins where they serve to consolidate the town centres and respect and enhance the existing built fabric.</p>				
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<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 encourage and facilitate preservation of retail, other services and tourism potential within established rural centres.</p> <p>R 36: To request that the nature of the comparison component of proposed large convenience stores is provided in detail and a transparent and evidence based Retail Impact Assessment (RIA)/Retail Impact Statement (RIS) provided in support of the application.</p> <p>R 37: To refuse permission for edge of and out of centre large convenience stores which include a large component of High Street fashion brands in the comparison mix proposed in the interests of sustaining and further enhancing the vitality, viability and attraction of the Core Retail Areas of the main town centres in the County.</p> <p>R 38: To retain, encourage and facilitate the retail role of Corner Shops and Smaller Villages around the County.</p> <p>R 39: To encourage and facilitate preservation of retail and other services within established rural centres.</p> <p>R 40: To encourage and facilitate the enhancement and environmental improvement of the County's towns and villages and review the approaches of the exemplars in Ireland and overseas to inform how this can be achieved.</p> <p>R 41: To pursue all avenues of funding, including State funding, to secure resources for the enhancement, renewal and regeneration of the public realm of the County's towns and villages.</p> <p>R 42: To ensure that the best quality of design is achieved for all new retail development and that 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 43: 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 its town and village centres perform while ensuring the protection of the important heritage and architectural quality of their streetscapes. This will apply to the skyline, shop fronts and advertising structures.</p> <p>R 44: To work with other statutory and non-statutory stakeholders in the preparation of environmental improvement/design strategies that harness the heritage and potential of the main towns in the first instance, founded on models successfully being implemented in such centres as Clonakilty in Cork and Westport in Mayo.</p> <p>R 45: To investigate the need for any additional retail provision as appropriate within existing and expanding residential areas in future LAPs during the period of this Plan and having regard to the possible impact on town centres, with the key emphasis being securing and sustaining the vitality and viability of the Core Retail Areas of the County's centres across all levels of the County Retail Hierarchy.</p> <p>R 46: To prohibit mainstream and discount convenience retail developments in retail parks.</p> <p>R 47: To prohibit mainstream comparison floorspace or retailers in retail parks.</p> <p>R 48: 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.</p> <p>R 49: 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.</p> <p>R 50: To limit the level of shopping and local services provision in existing industrial estates or business parks. Standalone mainstream and discount convenience or comparison floorspace will not be permitted in existing or emerging employment areas unless it is proven to be part of the wholesale retail market sector.</p> <p>R 51: 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, villages and smaller centres. 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.</p> <p>R 52: 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 across all centres in the County Retail Hierarchy.</p> <p>R 53: 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.</p> <p>R 54: To encourage and facilitate the delivery of tourism related retail developments and initiatives, subject to</p>				
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<p>compliance with this Plan's objectives and its Development Management assessment criteria.</p> <p>R 55: To seek comprehensive details, such as RIA/RIS and other appropriate studies, for all proposals which seek inclusion of either or both substantial enhancement of the centre/business' retail and restaurant/café's floorspace and offer to enable assessment of their potential impact on nearby small towns and villages. In addition, such proposals may also require the submission of Traffic and Transport Assessment, where required, under the NRA Traffic and Transport Assessment Guidelines (2014) or any update to same.</p> <p>R 56: To prosecute in situations where the Casual Trading Act 1995 is being contravened.</p> <p>R 57: 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>R 58: To encourage and support the development and attraction of quality town markets selling artisan food and craft produce in centres at all levels of the County Retail Hierarchy in recognition of their potential to sustain and increase the attractiveness of these centres</p> <p>R59: 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 centres in the County.</p> <p>R 60: To discourage where possible within its statutory powers the introduction of non-retail and lower grade retail uses in Core Retail Areas and other streets in the interests of maintaining and sustaining the retail attraction of the County's centres.</p> <p>R 61: To encourage and facilitate innovation in the County's retail offer and attraction.</p> <p>R 62: 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.</p> <p>R 63: 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 prescribed in LAPs.</p> <p>R 64: To assess all applications for large retail development in accordance with the criteria set out above and in Section 19.10 of Chapter 17, Development Management Standards of this Plan.</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 and County Retail Hierarchies, 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.</p> <p>RTO 2: To reinforce the County Retail Hierarchy which assists in defining the County's settlement structure and provides clear guidance on where major new retail floorspace would be acceptable.</p> <p>RTO 3: 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.</p> <p>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.</p> <p>RTO 5: To sustain and enhance the increase in comparison expenditure inflows to the County and its attraction as a retail destination in the GDA, nationally and internationally through delivering a quality and quantum of retail offer in the main centres in the County Retail Hierarchy.</p> <p>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>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>RTO 10: To promote retail-led tourism in Kildare and to facilitate the provision of tourism infrastructure.</p>				
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<p>RTO 11: To encourage and facilitate innovation and diversification in the County's retail profile and offer. RTO 12: To support existing retail facilities and to facilitate the provision of new facilities as appropriate where such proposals are in accordance with the GRPs, the Regional Retail Strategy, this Plan's Core and Settlement Strategies and the proper planning and sustainable development of the area. RTO 13: To support a diversity of the retail offer in the County and including the sustainability of independent retail sector in the County.</p>				
<p>Commentary:</p> <p><i>These provisions cumulatively contribute towards the effects referred to under 'Aim' above; see commentary under 'Aim' above.</i></p> <p><i>Consistent with the Aim, these Policies and Objectives make further contributions towards maximising sustainable mobility in the County and associated interactions with emissions to air, energy usage and human health (SEO C1 PHH1).</i></p> <p><i>The sequential approach provided for by these provisions (e.g. Policy R 2) would avoid the need for unnecessary greenfield development in certain locations thereby contributing towards: sustainable mobility and associated interactions with emissions to air, energy usage and human health (SEO C1 PHH1); avoidance of unnecessary adverse environmental effects (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 CH1 CH2 L1); and the serving of development by existing water services and drainage infrastructure (SEOs M1 M2 W1 W2 W3 B1 B2 B3 S1 PHH1).</i></p> <p><i>By promoting development within existing centres and encouraging redevelopment and regeneration (e.g. R 50 and R51), these provisions facilitate the avoidance of greenfield development and associated adverse effects. Brownfield and town centre development has the potential, if unmitigated, to impact upon environmental sensitivities including cultural heritage (SEOs CH1 CH2) – including context – and flood risk (SEOs W3 PHH1).</i></p> <p><i>Other examples of contributions towards both sustainable development and the protection and management of the environment, include:</i></p> <ul style="list-style-type: none"> • R 10 "strategic environmental enhancement" • R 14 "heritage and tourism assets" • R 16 "re-use and regeneration" • R 21 "Kilcock's heritage townscape" • R 39 "environmental improvement" • R 43 "environmental improvement/design strategies" • R 56 "sustainable development"; "preservation and improvement of amenities" • RTO 9 "re-use and regeneration of derelict land and buildings" • RTO 12 "proper planning and sustainable development" 				

8.6.9 Chapter 10: Rural Development

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
<p>Aim: 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>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

Rural Economy Policies	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
<p>RE 1: To support the implementation of the National Rural Development Programme 2014-2020.</p> <p>RE 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>RE 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>RE 4: 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> <p>RE 5: To support and facilitate sustainable agriculture, horticulture, forestry, renewable energy and other rural enterprises at suitable locations in the County.</p> <p>RE 6: To support the restoration, preservation and enhancement of ecosystems dependent on agriculture and forestry.</p> <p>RE 7: To promote social inclusion, poverty reduction and economic development in rural areas.</p> <p>RE 8: To support farm diversification, where a proposed business initiative is subordinate to the primary agricultural use of the site, subject to traffic and environmental safeguards.</p> <p>RE 9: To protect agriculture and traditional rural enterprises from unplanned and/or incompatible urban development.</p> <p>RE 10: To promote resource efficiency and supporting the shift toward a low-carbon and climate-resilient economy in the agriculture, food and forestry sectors.</p>				
Commentary:				
<p><i>The rural development provisions in this chapter support and are consistent with the preferred alternative scenario for the Plan and provide a planning framework for economic development in County Kildare that is line with the provisions of the Core Strategy. The evaluation against Strategic Environmental Objectives (SEOs) that is provided above is consistent with the evaluation of the preferred scenario which is provided in Section 7.</i></p>				
<p><i>The preferred alternative scenario, the above aim ("high quality rural environment" and "sustainable management of land and resources") and many of the policies and objectives listed in this Chapter contribute towards sustainable development and the protection and management of the environment (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 C1 M1 M2 M3 CH1 CH2 L1).</i></p>				
<p><i>The construction and operation of rural development has the potential to result in adverse effects upon all environmental components however these effects have been mitigated by provisions which have been integrated into the Plan, including those which are identified in Section 9 of this report. The potential adverse effects (if unmitigated) include the following:</i></p>				
<ul style="list-style-type: none"> • <i>Loss of biodiversity with regard to Natura 2000 Sites and Annexed habitats and species (SEO B1)</i> • <i>Loss of biodiversity with regard to ecological connectivity and stepping stones (SEO B2)</i> • <i>Loss of biodiversity with regard to designated sites including Wildlife Sites and listed species (SEO B3)</i> • <i>Spatially concentrated deterioration in human health (SEO PHH1)</i> • <i>Damage to the hydrogeological and ecological function of the soil resource (SEO S1)</i> • <i>Adverse impacts upon the status and quality of water bodies (SEOs W1 W2)</i> • <i>Increase in the risk of flooding (SEO W3)</i> • <i>Failure to provide adequate and appropriate waste water treatment (SEO M1; water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)</i> • <i>Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (SEO M2; water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts)</i> • <i>Increases in waste levels (SEO M3)</i> • <i>Failure to contribute towards sustainable transport and associated impacts (SEO C1; transport infrastructure investment is needed to ensure the mitigation of potential conflicts)</i> • <i>Effects on entries to the Record of Monuments and Places and other archaeological heritage (SEO CH1)</i> • <i>Effects on entries to the Records of Protected Structures and other architectural heritage (SEO CH2)</i> • <i>Occurrence of adverse visual impacts (SEO L1)</i> 				

Agriculture Policies				
<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 <i>County Biodiversity Plan</i> (adopted November 2008) and the <i>National Biodiversity Plan</i> (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>AG 6: 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 such as:</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; <p>Conversion of redundant farm buildings of vernacular importance for appropriate owner-run enterprises, such as agri-tourism.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>Agriculture cumulatively contributes towards the effects referred to under the Aim above; see commentary under 'Aim' above.</i></p> <p><i>Agriculture is essential to the sustenance of rural populations and associated existing sustainable rural management practices which can often sustain biodiversity (SEOs B1 B2 B3). The development of agriculture has the potential to adversely affect various environmental components including biodiversity and flora and fauna (SEOs B1 B2 B3), water and human health (SEOs W1 W2 PHH1), the provision of appropriate water and waste services (SEOs M1 M2 M3), cultural heritage (SEOs CH1 CH2), the landscape (SEO L1) and sustainable mobility patterns (SEO C1).</i></p> <p><i>Many of these agricultural policies contribute towards sustainable development and the protection and management of the environment, for example:</i></p> <ul style="list-style-type: none"> AG 2 "environmentally sustainable agricultural practices"; "visual amenity of the countryside"; "wildlife habitats and areas of ecological importance are protected" AG 3 "all agricultural activities comply with legislation on water quality" AG 4 "encourage bio-diversity" 				
Horticulture Policies				
<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 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>Horticulture cumulatively contributes towards the effects referred to under the Aim above; see commentary under 'Aim' above. Policy HT1 would contribute towards sustainable development and the protection and management of the environment: "environmentally sustainable horticultural practices", "visual amenity of the countryside"; "wildlife habitats and areas of ecological importance are protected from the threat of pollution".</i></p>				

Equine Industry Policies			
<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 position of the equine industry in the 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>EQ 8: To ensure that the Curragh remains the centre of excellence in Ireland for horse training 9: To promote and encourage the development of activities that relate to the equine industry in the county such as riding schools, pony trekking and the development of bridle paths.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>
<p>Commentary:</p> <p><i>The equine industry cumulatively contributes towards the effects referred to under the Aim above; see commentary under 'Aim' above. Policy EQ1 would contribute towards sustainable development and the protection and management of the environment: "protecting the environment and amenity value of rural areas, from encroachment by urban sprawl and incompatible development".</i></p>			
Forestry Policies			
<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 wellbeing and which is compatible with the protection of the environment.</p> <p>FT 2: To support the Forest Service of the Department of Agriculture, Fisheries and Food by providing planning and other inputs into EIA process for afforestation proposals</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 <i>National Indicative Forestry Statement (2008)</i>. • 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>FT 5: 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, traditional walking routes and recreational facilities) or cause pollution or degradation of wildlife habitats, natural waters or areas of ecological importance.</p> <p>FT 6: To encourage the improved management of woodlands and to promote the Native Woodland Conservation Scheme 2015 and the Native Woodland Establishment GPC9 & GPC10 Sylvicultural Standards 2015 which aim 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 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</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>

<p>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>				
<p>Commentary:</p> <p><i>Forestry cumulatively contributes towards the effects referred to under the Aim above; see commentary under 'Aim' above.</i></p> <p><i>Forestry is essential to the sustenance of rural populations and can improve the biodiversity value of the countryside (SEO B2). Depending on how it is developed, forestry has the potential to adversely affect various environmental components including biodiversity and flora and fauna, water and human health, the landscape (SEOs B1 B2 B3 W1 W2 M2 PHH1 L1).</i></p> <p><i>Many of these forestry policies contribute towards sustainable development and the protection and management of the environment, for example:</i></p> <ul style="list-style-type: none"> • FT 1 "sustainable forestry sector"; "protection of the environment" • FT 2 "EIA process for afforestation proposals" • FT 3 "planting of diverse species" • FT 5 "wildlife habitats, natural waters or areas of ecological importance" • FT 6 "protect and enhance existing native woodlands"; "enhance local character and local biodiversity" • FT 7 "buffer zones or exclusion zones are applied to aquatic zones and sites of archaeological importance" 				
<p>Boglands Policies</p>				
<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 the peat extraction potential of the county, whilst ensuring the 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 recognising their significant landscape, environmental and heritage value. Future development seek to conserve cutaway bogs and maximise their potential for wildlife, biodiversity, conservation and amenity in the first instance, whilst the potential for economic uses such as grassland, forestry and renewable energy in some circumstances is acknowledged, subject to the protection of the environment and landscape character.</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, Community 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 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 ground or 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> <p>BL 7: To recognise the potential and support the appropriate development of eco tourism developments based on the unique characteristics and biodiversity of bogland in Kildare.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>These provisions for the County's boglands cumulatively contribute towards environmental protection and management and the effects referred to under the Aim above; see commentary under 'Aim' above.</i></p> <p><i>Any activities or developments in relation to bogland would need to be considered carefully in recognition of the level of ecological protection afforded to peatland habitats and species.</i></p> <p><i>Many of these boglands policies contribute towards sustainable development and the protection and management of the environment, for example:</i></p> <ul style="list-style-type: none"> • BL 1 "minimise the negative impact on biodiversity and the archaeological and cultural heritage of the county" • BL 2 "protection and conservation of bogland habitats"; "protect the bog landscape character areas within the county" • BL 3 "areas for wildlife, biodiversity, conservation" • BL 4 "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 				

<p><i>the sustainable use of cutaway bogland, with due consideration given to their ecological and amenity value"</i></p> <ul style="list-style-type: none"> • <i>BL 5 "Flood Risk Assessment" "should address the issue of ground and slope stability"</i> • <i>BL 6 "subject to environmental considerations and nature designations"</i> 				
<p>Rural Enterprise Policies</p>				
<p>RLE 1: To encourage expansion and employment in local enterprises and industries such as agriculture, horticulture, forestry, peatlands, food, crafts, tourism and energy.</p> <p>RLE 2: 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 <i>Re-using Farm Buildings – A Kildare Perspective</i> produced by Kildare County Council in 2006.</p> <p>RLE 3: 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>RLE 4: 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>RLE 5: To encourage the conservation and promotion of bio-diversity in all rural development activities.</p> <p>RLE 6: To support the development of renewable energy production including energy crops in rural areas where it is considered appropriate.</p> <p>RLE 7: To promote the provision of broadband and other communications infrastructure in rural areas of the county.</p> <p>RLE 8: To consider other appropriate landuses in the rural countryside apart from rural housing as provided for in Chapter 4. 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>RLE 9: 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>RLE 10: 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 <i>"The Planning System and Flood Risk Management Guidelines for Planning Authorities"</i> published by the Minister for the Environment, Heritage and Local Government in November 2009. <p>REO 1: To continue to support rural development within the county as a contributory means of sustaining the rural economy.</p> <p>REO 2: To ensure that all planning applications for one off enterprises in rural areas have regard to the criteria listed at Table 10.2 of the Plan.</p> <p>REO 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>REO 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 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
<p>Commentary:</p> <p><i>These provisions cumulatively contribute towards environmental protection and management and the effects referred to under the Aim above; see commentary under 'Aim' above.</i></p> <p><i>Many of these provisions contribute towards sustainable development and the protection and management of the environment, for example:</i></p>				

- RLE 3 "utilise native species"
- RLE 5 "conservation and promotion of bio-diversity"
- RLE 9 "compliance with the relevant environmental and planning criteria"
- RLE 10 "County Kildare Groundwater Protection Scheme"; "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)"; "comply with the requirements of "The Planning System and Flood Risk Management Guidelines for Planning Authorities"
- REO 3 "supported by the necessary physical and communications infrastructure"
- REO 4 "do not undermine rural ecosystems, landscapes and conservation areas"

More detailed provisions on agriculture, horticulture, forestry, peatlands, tourism and energy are evaluated elsewhere in this report.

Sand and Gravel/Extractive Industry

<p>Sand and Gravel Extraction Aim: 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>EI 1: To have regard to the <i>Section 261A of the Planning and Development Act, 2000 and related provisions Guidelines for Planning Authorities (2012) DoECLG and Quarries and Ancillary Activities Guidelines for Planning Authorities (2004)</i> published by the DoEHLG or as may be amended from time to time.</p> <p>EI 2: To recognise the role and facilitate the exploitation of County Kildare's natural aggregate resources in a manner which does not unduly impinge on the environmental quality, and the visual and residential amenity of an area while continuing to regulate the extraction of aggregates and to seek the delivery of environmental benefits in the form of sustainable habitat creation in conjunction with the restoration phases of development.</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>EI 5: To ensure that development for aggregate extraction, processing and associated concrete production does not significantly impact the following:</p> <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. • Zones of archaeological potential. • 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. <p>EI 6: To consult with the Geological Survey of Ireland (GSI), with regard to any developments likely to have an impact on Sites of Geological Heritage listed in the Development Plan (Chapter 13).</p> <p>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).</p> <p>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.</p> <p>EI 9: To require 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.</p> <p>EI 10 To require detailed landscaping and quarry restoration plans to be submitted with each application. Habitats</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	
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<p>and species surveying shall be carried out and shall influence the restoration plan for the site.</p> <p>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.</p> <p>EI 12: To ensure that all existing workings are rehabilitated to suitable land uses and that extraction activities allow for future rehabilitation and proper land use management.</p> <p>EI 13: To require, where permission is granted for quarrying / extraction of aggregates the submission by the developers, of a bond (cash deposit, bond from an insurance company or other security acceptable to the planning authority) for the satisfactory completion and restoration of the site.</p> <p>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.</p> <p>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>EI 16: To have regard to the following guidance documents (as may be amended, replaced or supplemented) in the assessment of planning applications for quarries and ancillary facilities:</p> <ul style="list-style-type: none"> • Quarries and Ancillary Activities: Guidelines for Planning Authorities' (2004, DEHLG); • Environmental Management Guidelines – Environmental Management in the Extractive Industry (Non Scheduled Minerals)', EPA 2006 • Archaeological Code of Practice between the DEHLG and the ICF 2009; • Geological Heritage Guidelines for the Extractive Industry', 2008; and • Wildlife, Habitats and the Extractive Industry – Guidelines for the protection of biodiversity within the extractive industry', NPWS 2009. <p>EO 1: To continue to implement the provisions of S261A of the Planning and Development Act 2000, as amended, including taking enforcement action against quarry owners/operators who do not comply with the requirements of the Act.</p> <p>EO 2: To support regional policy for the adequate supply of aggregate resources to ensure continued growth of the county and region.</p> <p>EO 3: To ensure that the extractive industry minimises and / or mitigates 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>				
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Commentary:

These provisions cumulatively contribute towards the effects referred to under the Aim above; see commentary under 'Aim' above.

Extractive industries have the potential to impact upon various environmental components including biodiversity (SEOs B1 B2 B3), human health (SEO PHH1), water resources (SEOs W1 W2), soil functions (SEO S1), the landscape (SEO L1) and cultural heritage (SEOs CH1 CH2).

Many of these provisions contribute towards sustainable development and the protection and management of the environment, for example:

- EI 3 "subject to the protection of landscape, environment, road network, heritage, visual quality and amenity"
- EI 4 "address key environmental, amenity, traffic and social impacts and details of rehabilitation"
- EI 5 "ensure that development for aggregate extraction, processing and associated concrete production does not significantly impact the following: Special Areas of Conservation (SACs). Special Protection Areas (SPAs). Natural Heritage Areas (NHAs). Other areas of importance for the conservation of flora and fauna. Zones of archaeological potential. 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 "consult with the Geological Survey of Ireland"
- EI 7 "submission of an Appropriate Assessment"
- EI 8 "require relevant planning applications to be accompanied by an Environmental Impact Statement"
- EI 9 "require a detailed landscaping plan"
- EI 12 "ensure that all existing workings are rehabilitated to suitable land uses"
- EO 3: "ensure that the extractive industry minimises and / or mitigates any adverse visual and / or environmental impacts on the built or natural environment"

8.6.10 Chapter 11: Social, Community and Cultural Development

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
Aim: To ensure that County Kildare is an attractive place to live and work by building strong inclusive communities that have a sense of place and belonging. This will be supported by, the provision of accessible community based facilities from which services and supports can be provided	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Policies and Objectives				
LCDC and LECP 2016-2021 Policies and Objectives LE 1: To deliver on the objectives and actions set out in the Kildare LECP 2016-2021 to strengthen economic and community development in the county. LEO 1: To liaise with community and economic stakeholders to promote the sustainable development of economic and community services and infrastructure in the county, in accordance with the objectives and actions set out in the Kildare LECP 2016-2021. LEO 2: To develop and expand the Integrated Services Programme (ISP) to help deliver the community infrastructure, supports and services in a planned and coordinated manner within the county. LEO 3: To utilise the Kildare LECP Baseline Report (2015), and any subsequent update of this evidence base, to inform the development of policies, objectives and actions for the delivery of community facilities and services within LAPs and planning schemes. LEO 4: To support and promote volunteerism through participation in the PPN structure and by supporting the work of Kildare Volunteer Centre. Community Service and Facilities Policies and Objectives C 1: To ensure that sufficient lands in appropriate locations are zoned to cater for social and community needs. C 2: To promote the shared use of educational and community facilities for community and non-school purposes	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	

<p>where possible so as to maximise the sustainable use of such infrastructure and promote community cohesion.</p> <p>C 3: To assess the suitable provision of nursing homes, crèches and other commercially run community facilities and amenities at appropriate locations, during the preparation of Local Area Plans and Village Plans.</p> <p>C 4: To promote the highest levels of universal accessibility in all community facilities.</p> <p>CO 1: To map current and future anticipated community facilities across the county to respond to population growth and increased service need.</p> <p>CO 2: To ensure that community facilities are provided in new communities on a phased basis in tandem with the provision of housing in accordance with approved Local Area Plans or other Planning Schemes. 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 Town and Village Plans which are greater than 10 units, for residential schemes on unzoned lands which are greater than 10 units or where deemed necessary by the planning authority. In certain large mixed use schemes the frontloading of such infrastructure may be required prior to the commencement of development.</p> <p>CO 3: To carry out a review of the SIA process to assist in the implementation of objective CO 1 above.</p> <p>CO 4: To ensure that community buildings are flexible and adaptable and can be used by all age cohorts, including young people (youth programmes, youth cafes, etc.).</p> <p>CO 5: Progress priority community facilities in Kilcock (Bawnogues), Athy (Former Dominican Church) and Kildare Town (Cherry Avenue).</p> <p>CO 6: Support the work of Kildare Sports Partnership in promoting participation in sports and physical activity across the county through the provision of recreational and sports amenity space</p> <p>CO 7: Progress plans to develop a swimming pool in North Kildare in conjunction with other relevant bodies.</p> <p>CO 8: To capitalise on Kildare’s strength as a home to regional scale recreational facilities, national and international festivals and sporting events by promoting, encouraging and facilitating further development of the social economy and associated spin offs in a sustainable manner.</p> <p>CO 9: To support the development of improved universally accessible facilities and services at Barretstown.</p> <p>Social Inclusion and Community Development Policies</p> <p>SC 1 To promote social inclusion through equality of access to services and facilities and to assist in the removal of barriers to full participation in society.</p> <p>SC 2: 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 3: 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>Children and Young People Policies and Objectives</p> <p>SN 1: 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>SNO 1: 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.</p> <p>SNO 2: 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>SNO 3: To increase and improve the provision for children’s play across the county. The provision of facilities such as play areas 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. The provision of facilities such as play areas should have regard for children with special needs.</p> <p>SNO 4: 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>SNO 5: To seek to integrate the design of youth space facilities as part of all newly planned community facilities in the county</p>				
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<p>People with Disabilities Policies and Objectives</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 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>PDO 1: 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, etc.</p> <p>PDO 2: To ensure that all footpaths and public areas are accessible and safe for people with disabilities and/or reduced mobility etc. by continuing a programme of footpath development and improvements.</p> <p>Older People Policies and Objectives</p> <p>OP 1: 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>OP 2: 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> <ul style="list-style-type: none"> (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. (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, 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. <p>OP 4: To require the design and layout of residential care facilities for the elderly to comply with all relevant standards set out in the '<i>National Quality Standards for Residential Care Settings for Older People in Ireland</i>' 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 17 Development Management Standards.</p> <p>OP 5: To continue to develop and implement the Age Friendly Programme and Actions in Naas and to investigate the possibility of expanding the programme into other towns and villages throughout the county.</p> <p>OP 6: To adopt the ethos of McAuley Place, Naas as a recognised model of Positive Ageing and best practice in Ireland in planning and delivering services to older people.</p> <p>OPO 1: 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.</p> <p>Local Development/Community Groups Policies</p> <p>LDG 1: To continue to co-operate with statutory bodies, in particular the Local Community Development Committee (LCDC) 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> <p>LDG 2: To support the Kildare Integrated Services Programme in the delivery of its objectives in County Kildare.</p> <p>Arts and Culture in the Community Policies and Objectives</p> <p>AC 1: To develop and improve the physical infrastructure of cultural facilities countywide.</p> <p>AC 2: 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>ACO 1: To continue the physical enhancement programme of arts spaces in libraries, including visual arts and a gallery performance and workshop facilities.</p>				
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<p>ACO 2: To support the existing Heritage Centres by the promotion of further heritage services within the county.</p> <p>ACO 3: To develop Kildare town as a tourism centre within the county and seek the development of a museum or a cluster of museums featuring the heritage and attractions of the town including natural heritage, history, the equine industry and the Defence Forces.</p> <p>ACO 4: To support the provision of a performing arts space in North Kildare.</p> <p>ACO 5: To support the delivery of the strategic objectives set out in "(Continue to) Make Inroads: An Arts Development Plan for Kildare Local Authorities 2012 – 2016" (and any future Plan) in delivering sustainable arts development in the county.</p> <p>ACO 6: To promote and support Kildare as a film destination and to support the emerging film industry within Kildare by building on the progress to date to attract and develop film across Kildare and identifying potential suitable sites for Film studios in Kildare.</p> <p>ACO 7: To support the development of Athy Heritage and Museum including the Shackleton exhibition incorporating the potential of the Dominican site and Library and Community Arts centre as a unique cluster of Arts, Culture and Heritage in the South of the County.</p> <p>ACO 8: To support and promote additional cultural and arts spaces throughout Kildare</p> <p>Library Services Policies and Objectives</p> <p>LS 1: To support the delivery of libraries, arts and cultural facilities and services across communities in Kildare, particularly those that have grown rapidly.</p> <p>LS 2: To provide and improve access to library services and provide an integrated approach to the delivery of library, arts, genealogy archives and local studies services.</p> <p>LBO 1: 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>LBO 2: To support the development of the County's library services and the implementation of the objectives and actions set out in the Kildare Library Service Plan 2015-2019 (and any future Plan) in delivering educational, cultural, training and learning centres across the county.</p> <p>LBO 3: To provide and improve access for the disabled in both proposed and existing library accommodation.</p> <p>Educational Facilities Policies</p> <p>EF 1: To work in conjunction with the relevant education authorities to promote and support the provision of primary and post-primary schools in the County and to support the Department of Education and Skills School Building Programme by planning for future schools based on forecast need.</p> <p>EF 2: To promote, in conjunction with the relevant authorities, the provision of improved third level facilities within the county.</p> <p>EF 3: Establish local centres of education and training excellence across Kildare to engage people to up-skill, train and re-train to fit employer needs and employment growth areas (LECP Action 6.2.1)</p> <p>EF 4: To work in conjunction with the relevant education authorities to promote the provision for after-school care and community use of school buildings / facilities, by the incorporation of design specifications appropriate to such use in any new schools programme and in existing school expansions or upgrades.</p> <p>EF 5: To facilitate the further development of the primary school and its facilities at Ballyshannon.</p> <p>EFO 1: To co-operate with the Department of Education and Skills, the Kildare Wicklow Education and Training Board (KWETB) and School Management Boards in the identification of appropriate sites for school facilities and in accordance with the proper planning and sustainable development.</p> <p>EFO 2: To engage with the Department of Education and Skills to develop a clear analysis of projected school demand across all age cohorts in order to plan appropriately for the expansion and development of new schools within the county</p> <p>EFO 3: To support the development of Maynooth University as a leading centre for international, national and local "lifelong learning and development".</p> <p>EFO 4: To promote the clustering of education-related services and facilities proximate to existing third-level facilities.</p> <p>EFO 5: To explore the potential for a dedicated technical college within the county</p> <p>EFO 6: To promote links between Maynooth University and other education and training facilities in the county.</p> <p>EFO 7: To promote the clustering of educational facilities and ensure that new schools are located and designed so as to facilitate walking and cycling. The transport network in the vicinity of schools should also seek to facilitate the safe</p>				
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<p>movement of pedestrians and cyclists.</p> <p>Childcare and pre-school facilities Policies</p> <p>CPF 1: To work with national (e.g. TUSLA) and local agencies (e.g. Kildare Childcare Committee) to improve the quality, provision and affordability of childcare in the county.</p> <p>CPF 2: 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 and to identify suitable locations through the Local Area Plan process, where appropriate.</p> <p>CPFO 1: 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 period of this Plan.</p> <p>CPFO2: 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.</p> <p>CPFO 3: To work with national and local agencies to develop childcare policy and initiatives which achieve a range of viable childcare options and to work towards a standard of excellence for the county. The Council (through the Economic Development, Enterprise and Planning SPC), in consultation with national and local agencies, will undertake a study of early years childcare and education needs in County Kildare (inc. school age provision) and develop a series of multi-agency actions and targets to support the provision of good quality infrastructure and services at optimal locations throughout Kildare.</p> <p>CPFO 4: Ensure that there is a planned approach to economic and community development that takes account of the need for high quality accessible childcare.</p> <p>CPFO 5: 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>Health Services Policies</p> <p>HS 1: To respond to current and future health needs to support healthy communities across the county and to facilitate and enable a multi-agency approach to service delivery in community settings.</p> <p>HS 2: 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 locations.</p> <p>HS 3: To facilitate the integration of appropriate healthcare facilities within new and existing communities.</p> <p>HS 4: To support the provision of 'one stop' primary care medical centers and GP practices particularly along public transport routes and at locations easily accessible to members of the wider community.</p> <p>HS 5: To facilitate the further development of Naas General Hospital as an important and major center for healthcare in the county.</p> <p>HCO 1: To support the provision of after-care facilities for vulnerable groups (such as older people, people undergoing addiction treatment, people with disabilities, etc.) within appropriately located and designed Primary Health Centres in order to improve social inclusion across the county.</p> <p>HCO 2: To support the increased provision of accessible and equitable primary care and mental health services at appropriate locations across the county.</p> <p>HCO 3: To support the delivery of infrastructure, facilities and services that promotes and support healthy communities across Kildare. This includes progress to establish primary care centres in Kilcock, Celbridge and Kildare Town and the provision of high quality amenity space that promotes healthy lifestyles.</p> <p>HCO 4: To support the work of Kildare Sports Partnership and the Sport's National Governing Bodies to increase participation in sports and physical activity.</p> <p>HCO 5: To support the implementation of Healthy Ireland Strategy and the Healthy Schools programme across Kildare.</p> <p>Fire Services Objectives</p> <p>FS 1: 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>Places of Worship and Burial Grounds Policies and Objectives</p> <p>BG 1: To protect the cultural heritage of historical burial grounds within the county and to encourage their management and maintenance in accordance with conservation principles.</p> <p>BG 2: To provide or assist in the provision of burial grounds and extensions to existing burial grounds at</p>				
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<p>appropriate locations throughout the county.</p> <p>BG 3: To support and facilitate the development of places of worship and multi-faith facilities at appropriate locations, such as town and village centres</p> <p>BGO 1: To facilitate the development of new or extended burial grounds and crematoria by reservation of land at suitable locations and provision of local authority burial grounds subject to appropriate safeguards with regard to environmental, noise and traffic impacts.</p> <p>BGO 2: To explore the feasibility of the provision of a district-type burial ground, including crematoria and a natural wood cemetery (subject to a site-specific feasibility study), at two locations as follows;</p> <p>(i) North-east of the county</p> <p>(ii) Centre of the county</p> <p>BGO 3: To investigate the feasibility of developing lands adjacent to Bodenstown cemetery to facilitate an extension to the existing graveyard and to facilitate development of suitable facilities for visitors to Wolf Tone's grave.</p> <p>Social, Community and Cultural Events Policies</p> <p>SCC 1: To plan sustainable social, cultural and community facilities events across the county as a mechanism to promote and support community development, healthy lifestyles, training, education and recreational opportunities.</p> <p>SCCO 1: To support social, community and cultural events in the county, such as outdoor concerts and annual festivals, at appropriate locations and at an appropriate type and scale, in accordance with planning regulations and health and safety requirements.</p>				
<p>Commentary:</p> <p><i>The social, community and cultural development provisions will, in-combination with the implementation of other provisions in the Development Plan, contribute towards the overall development of the County.</i></p> <p><i>By facilitating community development (which would encompass new built development and the construction and operation of infrastructure to service this development), these provisions would potentially conflict with the full range of environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1). Potential adverse effects would be mitigated by measures which have been integrated into the Plan (see Section 9) – this includes those potential impacts that may arise on open space as a result of leisure and recreation development. The evaluation against Strategic Environmental Objectives (SEOs) that is provided above is consistent with the evaluation of the preferred scenario which is provided in Section 7.</i></p> <p><i>The social, community and cultural development provisions place an emphasis on integrating the delivery of community development alongside other types of development as well as improved physical access to this infrastructure and associated services. This will have various benefits on the protection and management of the environment and will contribute towards maximising sustainable mobility and associated interactions with emissions to air, energy usage and human health (SEO C1 PHH1).</i></p>				

8.6.11 Chapter 12: Architectural & Archaeological Heritage

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
<p>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</p>	CH1 CH2			B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 L1
<p>Commentary:</p> <p><i>This Aim primarily contributes towards the protection of architectural and archaeological heritage (SEOs CH1 CH2).</i></p>				

Protected Structures Policies and Objectives			
<p>PS 1: To conserve and protect buildings, structures and sites contained on the Record of Protected Structures of special architectural, historical, 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 DAHG <i>Advice Series</i> on how best to repair and maintain historic buildings. As outlined in the DAHG'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 minimize 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> <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 favorably 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 DAHG <i>Architectural Heritage Protection, Guidelines for Planning Authorities, 2011</i>, 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</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 CH1 CH2 L1 C1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>

<p>conservation practice.</p> <p>PS 18: To require where appropriate that a Conservation Plan is prepared in accordance with DAHG Guidelines and conservation best practice to inform proposed visual or physical impacts on a Protected Structure its curtilage, demesne and setting</p> <p>PS 19: To have regard where appropriate to DAHG Guidelines and conservation best practice in assessing the significance and conservation of a Protected Structure its curtilage, demesne and setting</p> <p>PS 20: To have regard where appropriate to DAHG Guidelines and conservation best practice in assessing the impact of development on a Protected Structure its curtilage, demesne and setting.</p> <p>PS 21: To preserve and protect the historic architectural and military heritage of The Curragh Camp.</p> <p>PSO 1: To review and amend on an ongoing basis the County Record of Protected Structures and make additions, deletions and corrections as appropriate over the period of this Plan. See Appendix 3 for County RPS Table (including List of Naas and Athy list of Protected Structures) and Proposed Additions and Deletions Table</p> <p>PSO 2: To prepare a Buildings at Risk Register and to prevent the endangerment of protected structures, historic or vernacular buildings.</p> <p>PSO 3: To prepare a Local Area Plan for Celbridge and Castletown Demesne in conjunction with relevant bodies to protect the views as outlined in objective PSO4 and Map 12.10.</p> <p>PSO 4: To protect the views at Castletown House</p> <ul style="list-style-type: none"> -axial views between the Castletown House and Connolly'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>PSO 5: To preserve the views to and from Carton House within the Demesne walls, as outlined in Map 12.9.</p> <p>PSO 6: 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>PSO 7: 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>PSO 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>Architecture Conservation Objectives</p> <p>ACO 1: To carry out field surveys of Industrial Architectural and Archaeological types in the County and make recommendations for their protection.</p> <p>ACO 2: 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>ACO 3: To carry out an audit of all historic rail and road bridges and disused railway lines in Kildare and liaise with Iarnród Éireann and the TII regarding same.</p> <p>ACO 4: To carry out a pilot study on the sympathetic reuse of a Protected Structures/ or groups of buildings in an ACA to address high quality residential reuse in historic urban cores of towns and villages.</p> <p>Country House and Demesne Policies</p> <p>CH1: 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.</p> <p>CH 2: To preserve and protect the historic gardens and designed landscapes identified in the National Inventory of Architectural Heritage.</p> <p>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>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 have regard to "Guidance Notes for the Appraisal of Historic Gardens, Demesnes, Estates and their Settings"</p>				
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<p>published by Cork County Council 2006, in the appraisal and description of historic designed landscapes, demesnes and gardens.</p> <p>CH 6: To designate Architectural Conservation Areas where considered appropriate, to preserve the character of a designed landscape.</p> <p>CH 7: 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> <p>CH 8: To require where appropriate that a Conservation Plan is, prepared in accordance with DAHG Guidelines and Conservation best practice to inform proposed visual or physical impacts on a demesne, designed landscape or a park.</p> <p>CH 9: 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>CHO 1: To assess the demesnes and historic designed landscapes within Kildare and promote the conservation of their essential character, both built and natural, while allowing for appropriate re-use.</p> <p>CHO 2: To carry out a pilot study to protect and enhance the amenity value of significant demesnes in the County. (OPW/Castletown, Donaghcumper, St Wolstans).</p> <p>Vernacular Architecture Policies</p> <p>VA 1: To encourage the protection, retention, appreciation and appropriate revitalization 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 "<i>The Thatched Houses of Kildare</i>" and "<i>Reusing Farm Buildings, A Kildare Perspective</i>" 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>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>VA8 To have regard, where appropriate, to guidance in the DAHG Guidelines and conservation best practice in assessing proposed interventions and planning applications relating to vernacular structures, traditional farmhouses, their curtilage, out buildings, and settings.</p> <p>VAO 1: 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>VAO 2: To develop and publish guidelines on the conservation and appropriate reuse of Local Authority Cottages and similar vernacular structures.</p> <p>Architectural Conservation Areas Policies and Objectives</p> <p>ACA 1: To investigate the designation of further ACAs at appropriate locations throughout the county to include Celbridge, Johnstown, Ballymore Eustace, Kilcullen, Brannockstown, Rathmore, Clane and Newbridge.</p> <p>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 and are in keeping with any Architectural Conservation Area Statement of Character Guidance Documents prepared for the relevant ACA.</p> <p>ACA 3: To have regard to DAHG Guidelines and conservation best practice in assessing the significance of an historic town or urban area and the formulation of an ACA or in the assessing development proposals relating to an ACA.</p> <p>ACA 4: To require where appropriate that a Conservation Plan is, prepared in accordance with DAHG Guidelines and conservation best practice to inform proposed visual or physical impacts on an ACA.</p> <p>ACA 5: To have regard to "Guidelines for the management and development of Architectural Conservation Areas"</p>				
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<p>published by Cork County Council (2006) for development with ACA's.</p> <p>ACAO 1: To prepare 'Guidelines for the Management and Development of ACAs identified in this plan.</p> <p>ACAO 2: To prepare a character statement appraisal and area specific policy for each ACA to include Athy, Ballitore, Kilcock, Leixlip, Maynooth, Monasterevin, Moone, Naas, Prosperous, Rathangan, Celbridge, Johnstown, Ballymore Eustace, Kilcullen, Brannockstown, Rathmore, Clane and Newbridge and to preserve, protect and enhance the character of these areas.</p> <p>ACAO 3: To carry out a pilot study on how to set up a proactive and dynamic framework for the use of ACA Pol/ObJs so as to economically enhance its built heritage character.</p> <p>Archaeological Heritage Policies</p> <p>AH 1: To manage development in a manner that protects and conserves the archaeological heritage of the county, avoids adverse impacts on sites, monuments, features or objects of significant historical or archaeological interest and secures the preservation in-situ or by record of all sites and features of historical and archaeological interest.</p> <p>AH 2: To have regard to the Record of Monuments and Places (RMP), the Urban Archaeological Survey and archaeological sites identified subsequent to the publication of the RMP 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.</p> <p>AH 3 To favour the preservation in-situ of all sites, monuments and features of significant historical or archaeological interest, included in the Record of Monuments and Places and their settings, in accordance with the recommendations of the Framework and Principles for the Protection of Archaeological Heritage, DAHGI (1999), or any superseding national policy document</p> <p>AH 4: 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 sited and designed in such a way as to avoid impacting on archaeological heritage that is of significant interest including previously unknown sites, features and objects.</p> <p>AH 5: To protect and preserve the archaeological value of underwater or archaeological sites associated with rivers and associated features.</p> <p>AH 6: 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 Department of Arts, Heritage and the Gaeltacht (DAHG).</p> <p>AH 7: To promote and support in partnership with National Monuments Section of the Department of Arts, Heritage and the Gaeltacht (DAHG), the concept of Archaeological Landscapes where areas contain several Recorded Monuments.</p> <p>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.</p> <p>AH 9: To encourage the provision of signage to publicly accessible recorded monuments.</p> <p>Walled Town Policies and Objectives</p> <p>AH 10: To avoid disturbance, removal and alteration of the line of town walls as detailed in Conservation and Management Plans or the potential line of the town walls as identified in the Urban Archaeological Survey.</p> <p>AH 11: To retain where possible the existing street layout, historic building lines and traditional plot widths where these derive from medieval or earlier origins</p> <p>AO 1: To support the membership of Kildare, Naas, Athy and Castledermot in the Walled Towns Network.</p> <p>AO 2: To prepare a Conservation and Management Plan for Athy and Naas Walled Towns.</p> <p>AO 3: To support the inclusion of Kildare Towns in the Historic Towns Initiative piloted by the DAHG. Seek the preparation and implementation of heritage led regeneration plans (including the public realm) for the historic core of relevant towns in Kildare.</p> <p>AO 4: To continue to develop its programme of survey and maintenance of Council-owned monuments and structures of historic interest through the Historic Monuments Advisory Committee and with the support of the National Monuments Section of the Department of the Arts, Heritage and the Gaeltacht (DAHG).</p> <p>World Heritage Policies</p> <p>AH 12: To protect any site designated as World Heritage Site in Kildare</p>				
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<p>AO 5: To recognise the potential World Heritage Site in Kildare on the UNESCO Tentative List – Ireland-2010 and support the nomination of Dún Ailinne to World Heritage status</p> <p>Features of Historical Interest Policies</p> <p>HF 1: To secure the identification, protection and conservation of historic items and features of interest throughout the County including street furniture, surface finishes, roadside installations, items of industrial heritage and other stand-alone features of interest (items not listed on the RMP or RPS).</p> <p>Features of Historical Interest Objectives</p> <p>HFO 1: To ensure that development within the County including Council development seeks to retain, refurbish and incorporate features of historical interest.</p> <p>HFO 2: To develop a database of features of historical interest within village and towns in County Kildare and ensure they are included in relevant Local Area Plans.</p>				
<p>Commentary:</p> <p><i>These provisions primarily contribute towards the protection of architectural and archaeological heritage (SEOs CH1 CH2) and landscape sensitivities including protected views (SEO L1).</i></p> <p><i>By limiting the development of the settings of architectural heritage, these provisions also have the potential to improve other environmental components including biodiversity, flora and fauna, soil, water, human health and flood risk management (SEOs B1 B2 B3 S1 PHH1 W1 W2 W3).</i></p> <p><i>Certain provisions that provide for development - e.g. PS 4 (development at Clongowes Wood College) and PS 17 (change of use and reuse of industrial buildings) – could potentially conflict with environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 M1 M2 M3 CH1 CH2 L1).</i></p> <p><i>By allowing for sympathetic re-development of urban sites, these provisions would contribute towards sustainable mobility and associated interactions with emissions to air, energy usage and human health (SEO C1 PHH1).</i></p>				

8.6.12 Chapter 13: Natural Heritage and Green Infrastructure

For an explanation of SEO codes e.g. B1, B2, B3, PHH1, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
<p>Aim: To contribute towards the protection of, conserve and manage natural heritage including sites designated at national and EU level and protected species and habitats outside of designated sites and to develop a Green Infrastructure network in the interests of the proper planning and sustainable development of the county.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 CH1 CH2 L1 C1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 M2 M3 CH1 CH2 L1</p>	<p>M1</p>
<p>Commentary:</p> <p><i>The provisions in this Chapter are primarily concerned with the protection and management of the environment, benefitting environmental components including:</i></p> <ul style="list-style-type: none"> • <i>Biodiversity, flora and fauna (SEOs B1 B2 B3);</i> • <i>Landscape (SEO L1);</i> • <i>Cultural heritage (SEO CH1 CH2);</i> • <i>Waters (SEOs W1 W2);</i> • <i>Soil (SEO S1);</i> • <i>Flood risk management (SEOs W3 PHH1);</i> • <i>Human health (SEO PHH1); and</i> • <i>Sustainable mobility and associated reductions in travel related emissions (SEO C1).</i> <p><i>Certain types of development which are supported by some of the provisions – i.e. those related to the development of Green Infrastructure - could potentially conflict with environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 M2 M3 CH1 CH2 L1). Adverse effects would be mitigated by both measures which have been integrated into the Plan (see Section 9) and any additional requirements arising</i></p>				

through lower tier assessments or granting of permission.

Natural Heritage Policies and Objectives

<p>General</p> <p>NH 1: To facilitate, maintain and enhance as far as is practicable 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>NH 2: 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>NH 3: 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</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 implement the actions contained in the County Biodiversity Plan through the identification of priority actions subject to the availability of funding.</p> <p>NHO 3: To integrate biodiversity considerations into Local Area Plans, programmes and activities.</p> <p>NHO 4: To identify, conserve and provide guidance on development in important local biodiversity sites.</p> <p>NHO 5: 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, DAHG and Inland Fisheries Ireland.</p> <p>Natura 2000</p> <p>NH 4: To support the conservation and enhancement of Natura 2000 Sites including any additional sites that may be proposed for designation during the period of this Plan and to protect the Natura 2000 network from any plans and projects that are likely to have a significant effect on the coherence or integrity of a Natura 2000 Site.</p> <p>NH 5: To prevent development that would adversely affect the integrity of any Natura 2000 site located within and immediately adjacent to the County and promote favourable conservation status of habitats and protected species including those listed under the Birds Directive, the Wildlife Acts and the Habitats Directive.</p> <p>NH 6: To ensure an Appropriate Assessment, in accordance with Article 6(3) and Article 6(4) of the Habitats Directive and with DoEHLG guidance (2009), is carried out in respect of any plan or project not directly connected with or necessary to the management of a Natura 2000 site to determine the likelihood of the plan or project having a significant effect on a Natura 2000 site, either individually or in combination with other plans or projects and 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>NHO 6: 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>Natural Heritage Area</p> <p>NH 7: To contribute towards the protection of the ecological, visual, recreational, environmental and amenity value of the County's proposed Natural Heritage Areas and associated habitats.</p> <p>NH 8: To ensure that any proposal for development within or adjacent to a Natural Heritage Area (NHA), Ramsar Sites and Nature Reserves is designed and sited to minimise its impact on the biodiversity, ecological, geological and landscape value of the site particularly plant and animal species listed under the Wildlife Acts and the Habitats and Birds Directive including their habitats.</p> <p>NH 9: To ensure the impact of development within or adjacent to national designated sites Natural Heritage Areas (pNHA and NHA), Ramsar Sites and Nature Reserves that is likely to result in significant adverse effects on the designated site 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>NH 10: To restrict development within a proposed Natural Heritage Area to development that is directly related to</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 CH1 CH2 L1 C1</p>			<p>M1 M2 M3</p>
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<p>the area's amenity potential subject to the protection and enhancement of natural heritage and visual amenities including biodiversity and landscapes.</p> <p><i>Protected Habitats and Species</i></p> <p>NH 11: To ensure that development does not have a significant adverse impact on rare and threatened species, including those protected under the Wildlife Acts 1976-2012, the Birds Directive 1979, the Habitats Directive 1992 and the Flora Protection Order species.</p> <p>NH 12: To ensure that, where evidence of species that are protected under the Wildlife Acts 1976-2012, the Birds Directive 1979 and the Habitats Directive 1992 exist, appropriate avoidance and mitigation measures are incorporated into development proposals as part of any ecological impact assessment. In the event of a proposed development impacting on a site known to be a breeding or resting site of species listed in the Habitats Regulations or the Wildlife Acts a derogation licence, issued by DAHG may be required.</p> <p><i>Invasive Non-Native Species</i></p> <p>NH 13: To support measures for the prevention and / or eradication of invasive species within the county</p> <p>NH 14: To promote best practice with respect to minimising the spread of invasive species in the carrying out of development and to support measures for the prevention and / or eradication of invasive species within the county.</p> <p>NH 15: To require, as part of the planning application process, the eradication/control of invasive introduced species including Japanese Knotweed, when identified on a site or in the vicinity of a site in accordance with Regulation 49 of the European Communities (Birds and Natural Habitats) Regulations 2011 to 2015</p> <p>NHO 7: To complete a programme of mapping of invasive species in the County</p> <p>NHO 8: To raise awareness of potential threats caused by invasive species, their methods of dispersal and appropriate control measures in association with relevant authorities.</p> <p><i>Geology</i></p> <p>NH 16: To maintain the conservation value and seek the sustainable management of the County's geological heritage resource.</p> <p>NHO 9: To contribute towards the protection of Geological Natural Heritage Areas that become designated during the life time of the plan from inappropriate development.</p> <p>NHO 10: The Council will publish the findings of the audit of Geological Heritage of County Kildare</p>				
<p>Commentary:</p> <p><i>These Policies and Objectives are primarily concerned with the protection and management of the environment, benefitting environmental components including:</i></p> <ul style="list-style-type: none"> • <i>Biodiversity, flora and fauna (SEOs B1 B2 B3);</i> • <i>Landscape (SEO L1);</i> • <i>Cultural heritage (SEO CH1 CH2);</i> • <i>Waters (SEOs W1 W2);</i> • <i>Soil (SEO S1);</i> • <i>Flood risk management (SEOs W3 PHH1);</i> • <i>Human health (SEO PHH1); and</i> • <i>Sustainable mobility and associated reductions in travel related emissions (SEO C1).</i> 				
<p>Green Infrastructure Policies and Objectives</p>				
<p>GI 1: To ensure the protection, enhancement and maintenance of Green Infrastructure and recognise the health benefits as well as the economic, social, environmental and physical value of green spaces through the development of and integration of Green Infrastructure (GI) planning and development in the planning process.</p> <p>GI 2: To develop and support the implementation of a Green Infrastructure Strategy for County Kildare taking full account of the Actions for Green Infrastructure in the GDA identified in the Regional Planning Guidelines 2010-2022.</p> <p>GI 3: To identify Green Infrastructure resources within and on the edge of the settlement boundaries by expanding the existing programme of Green Infrastructure mapping and to include, during the review process of Local Area Plans, Green Infrastructure policies and objectives.</p> <p>GI 4: To require that all Local Area Plans protect and manage the Green Infrastructure network in an integrated and coherent manner and add additional Green Infrastructure where possible.</p> <p>GI 5: To encourage, pursuant to Article 10 of the Habitats Directive, the management of features of the</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 CH1 CH2 L1 C1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 M3 CH1 CH2 M2 L1</p>	<p>M1</p>

<p>landscape, such as traditional field boundaries and laneways, important for the ecological coherence of the Natura 2000 network and essential for the migration, dispersal and genetic exchange of wild species.</p> <p>GI 6: To provide for the incorporation of underpasses and/or Green Bridges at ecologically sensitive locations on the county's road and rail corridors that will facilitate the free movement of people and species through the urban and rural environment.</p> <p>GI 7: To promote a network of paths and cycle tracks to enhance accessibility to the Green Infrastructure network, while ensuring that the design and operation of the routes respects and where possible enhances the ecological needs of each site.</p> <p>GIO 1: To prepare a Green Infrastructure Strategy for County Kildare in accordance with international best practice.</p> <p>GIO 2: To complete the mapping of Green Infrastructure for each town, village and settlement in County Kildare and to develop specific policies and objectives for each area.</p> <p>GIO 3: To prepare an inventory of locally important Biodiversity sites in the County to support the nationally designated sites and seek to ensure that they are protected through local authority planning processes.</p> <p>GI 8: To contribute towards the protection of and manage existing networks of woodlands, trees and hedgerows which are of amenity or biodiversity value and/or contribute to landscape character and to strengthen local networks.</p> <p>GI 9: To ensure proper provision is made for the consideration, protection and management of existing networks of woodlands, trees and hedgerows when undertaking, approving or authorising development.</p> <p>GI 10: To ensure a Tree Management Plan is provided to ensure that trees are adequately protected during development and incorporated into the design of new developments</p> <p>GI 11: 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>GI 12: 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>GI 13: To recognise the biodiversity and archaeological importance of townland boundaries, including hedgerows, and promote their protection and retention.</p> <p>GI 14: To contribute towards the protection of, where possible, the trees which are considered an important component of demesne landscapes</p> <p>GI 15: 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>GI 16: To encourage the planting of woodlands, trees and hedgerows as part of new developments using native plants of local provenance.</p> <p>GIO 4: 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>GIO 5: To seek to retain and supplement existing tree, woodland and hedgerow planting on Council owned lands.</p> <p>GI 16: To contribute towards the protection of and manage the natural, historical and amenity value of the County's waterways and to strengthen a network of waterways at a regional level.</p> <p>GI 17: 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 otter surveys for developments along river, stream and canal corridors.</p> <p>GI 18: To maintain a biodiversity zone of not less than 10 metres from the top of the bank of all watercourses in the county, with the full extent of the protection zone to be determined on a case by case basis by the Council, based on site specific characteristics and sensitivities. Strategic Green Routes / Blueways / Trails will be open for consideration within the biodiversity protection zone, subject to appropriate safeguards and assessments, as these routes increase the accessibility of the Green Infrastructure Network.</p> <p>GI 19: To ensure that expert advice is sought in developing lighting proposals along river, stream and canal corridors in order to mitigate impacts of lighting on bats and other species.</p> <p>GI 20: 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>				
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<p>GI 21: To contribute towards the protection of 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>GI 22: To consult, as appropriate, with Inland Fisheries Ireland in relation to any development that could potentially impact on the aquatic ecosystems and associated riparian habitats.</p> <p>GI 23: To ensure the protection, improvement or restoration of riverine floodplains and to promote strategic measures to accommodate flooding at appropriate locations, to protect ground and surface water quality and build resilience to climate change.</p> <p>GI 24: To ensure the Green Infrastructure Strategy and Network is used to inform the development management process to ensure that new residential areas, business/industrial development and other relevant projects contribute towards the protection, management and enhancement of the existing green infrastructure of the local area in terms of the design, layout and landscaping.</p> <p>GI 25: To require all new developments to identify, protect and enhance ecological features by making provision for local biodiversity (e.g. through provision of swift boxes or towers, bat roost sites, green roofs, etc.) and providing links to the wider Green Infrastructure network as an essential part of the design process.</p> <p>GI 26: To restrict development that would fragment or prejudice the Green Infrastructure network</p> <p>GI 27: To strengthen ecological links between urban areas, Natura 2000 sites, proposed Natural Heritage Areas, parks and open spaces and the wider regional Green Infrastructure network</p> <p>GI 24: To require multifunctional open space provision within all new developments, this includes provision for ecology and sustainable water management.</p> <p>GI 25: To provide a hierarchy of high quality and multi-functional public parks and open spaces.</p> <p>GI 26: To support and facilitate the provision of a network of high quality, well located and multifunctional public parks and open spaces throughout the County and to protect and enhance the environmental capacity and ecological function of these spaces.</p> <p>GI 27: To connect parks and areas of open space with ecological and recreational corridors to aid the movement of biodiversity and people and to strengthen the overall Green Infrastructure network.</p> <p>GI 28: To enhance and diversify the outdoor recreational potential of public open spaces and parks, subject to the protection of the natural environment.</p> <p>GI 29: To minimise the environmental impact of external lighting at sensitive locations within the Green Infrastructure network to achieve a sustainable balance between the recreational needs of an area, the safety of walking and cycling routes and the protection of light sensitive species such as bats.</p> <p>GI 30: To promote the planting of woodlands, forestry, community gardens, allotments and parkland meadows within the County's open spaces and parks to promote the development of multifunctional amenity areas with enhanced biodiversity value.</p>				
<p>Commentary:</p> <p><i>The development of green infrastructure would facilitate: contributions towards increases in sustainable mobility and reductions in greenhouse gas emissions (SEO C1); increases in flood risk management (SEO W3) and protection of human health (SEO PHH1); protection and management biodiversity and water quality (SEOs B1 B2 B3 W1 W2); and protection cultural heritage and landscape sensitivities (SEOs CH1 CH2 L1).</i></p> <p><i>The development of green infrastructure potentially conflicts with most environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M2 M3 CH1 CH2 L1). This type of infrastructure is often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects (including in-combination effects across County borders) would be mitigated by measures which have been integrated into these provisions (e.g. GI 17 referring to Appropriate Assessments) on the conservation objectives of Natura 2000 sites, other provisions within the Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.</i></p>				

8.6.13 Chapter 14: Landscape, Recreation and Amenities

For an explanation of SEO codes e.g. **B1**, **B2**, **B3**, **PHH1**, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
<p>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.</p>	B1 B2 B3 S1 W1 CH1 CH2 L1			PHH1 W2 W3 C1 M1 M2 M3
<p>Commentary:</p> <p><i>This aim is primarily concerned with the protection and management of the landscape (SEO L1) and would also benefit the protection and management of:</i></p> <ul style="list-style-type: none"> • Cultural heritage (SEOs CH1 CH2); • Biodiversity, flora and fauna (SEOs B1 B2 B3); • Surface waters (SEO W1); • Soil (SEO S1). 				
<p>General Landscape Policies and Objectives</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, that are likely to significantly affect:</p> <ul style="list-style-type: none"> • Landscape Sensitivity Factors • A Class 4 or 5 Sensitivity Landscape (i.e. within 500m of the boundary) • A route or view identified in maps 14.2 and 14.3 (i.e. within 500m of the boundary) <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> <p>LA 7: To be informed by consideration of County Landscape Character Appraisal.</p> <p>LO 1: To have regard to the Landscape Sensitivity Factors in the vicinity of sites in the consideration of any significant development proposals.</p> <p>LO 2: To ensure landscape assessment will be an important factor in all land-use proposals.</p> <p>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.</p> <p>LO 4: To protect the visual and scenic amenities of County Kildare's built and natural environment.</p> <p>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.</p> <p>LO 6: To preserve and protect the character of those views and prospects obtainable from scenic routes identified in this Plan, listed in Table 14.5 and identified on Map 14.3.</p>	B1 B2 B3 S1 W1 CH1 CH2 L1			PHH1 W2 W3 C1 M1 M2 M3

<p>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.</p> <p>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.</p> <p>LO 9: To plant gateway roundabouts within the County with innovative design themes, having regard to traffic safety.</p> <p>LO 10: To review and update the County Landscape Character Assessment in accordance with all relevant legislation and guidance documents and to ensure consistency with the forthcoming National Landscape Character Assessment.</p> <p>LO 11: To prepare a Historic Landscape Characterisation of the County.</p>				
<p>Commentary:</p> <p><i>These policies and objectives are primarily concerned with the protection and management of the landscape (SEO L1) and would also benefit the protection and management of:</i></p> <ul style="list-style-type: none"> • <i>Cultural heritage (SEOs CH1 CH2);</i> • <i>Biodiversity, flora and fauna (SEOs B1 B2 B3);</i> • <i>Surface waters (SEO W1);</i> • <i>Soil (SEO S1).</i> 				
<p>Character Areas Policies</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>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>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 DECLG/DAHG in the protection and conservation of both the Royal and Grand Canals and the River 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 Royal and Grand Canals as Areas of Special Amenity, as per section 202 of the Planning and Development Act, 2000 as amended.</p>	<p>B1 B2 B3 S1 W1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>WC 8: To contribute towards the protection of waterbodies and watercourses, including rivers, streams, associated undeveloped riparian strips, wetlands and natural floodplains, from inappropriate development. This will include buffers free of development in riverine and wetland areas, as appropriate.</p> <p>WC 9: To have regard to the relevant aspects of the Inland Fisheries Ireland's publication 'Planning for watercourses in an Urban Environment.</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 all relevant stakeholders including the Department of Defence, the DECHLG, the racehorse industry, the owners of sheep grazing rights and the various interests currently with rights to the Curragh in the review of the protection and conservation of the Curragh, designated as a pNHA.</p> <p>CU 4: 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>PF 1: 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 DECLG/DAHG and other statutory bodies in the protection and conservation of the Fen, a designated pSAC and the immediate environs of the Fen.</p> <p>PF 3: To promote the amenity, ecological and educational value of the Pollardstown Fen Area.</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>Commentary:</p> <p><i>These provisions for the County's Landscape Character Areas are primarily concerned with the protection and management of the landscape (SEO L1) and would also benefit the protection and management of:</i></p> <ul style="list-style-type: none"> • <i>Cultural heritage (SEOs CH1 CH2);</i> • <i>Biodiversity, flora and fauna (SEOs B1 B2 B3);</i> • <i>Surface waters (SEO W1);</i> • <i>Soil (SEO S1).</i> <p><i>Certain types of development which are supported by some of the provisions – e.g. TA 3 "To continue to permit development"; TA 4 "To continue to facilitate appropriate development"; "To facilitate appropriate development" - could potentially conflict with environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 M1 M2 M3 C1 CH1 CH2 L1). Adverse effects would be mitigated by both measures which have been integrated into the Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.</i></p> <p><i>Any activities or developments in relation to bogland would need to be considered carefully in recognition of the level of ecological protection afforded to peatland habitats and species.</i></p>				
<p>Routes and Views</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>SR2: To review and update all Scenic Routes and Views in the county during the lifetime of the Plan</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>B1 B2 B3 S1 W1 CH1 CH2 L1</p>			<p>PHH1 W2 W3 C1 M1 M2 M3</p>

<p>WV 3: 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>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>Commentary:</p> <p><i>These provisions are primarily concerned with the protection and management of the landscape (SEO L1) and would also benefit the protection and management of:</i></p> <ul style="list-style-type: none"> • Cultural heritage (SEOs CH1 CH2); • Biodiversity, flora and fauna (SEOs B1 B2 B3); • Surface waters (SEO W1); • Soil (SEO S1). 				
<p>Other policies including Recreation</p>				
<p>CR 1: To support the diversification of the rural economy through the development of the recreational potential of the countryside in accordance with the <i>National Countryside Recreation Strategy</i>.</p> <p>CR 2: To support the development of woodland areas in conjunction with proposed development and on Council owned lands.</p> <p>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 the recommendations of the <i>County Kildare Walking Routes Project</i>, 2005. This strategy will seek to identify established walking routes in the county, evaluate these routes and make recommendations for their promotion.</p> <p>CR 4: To develop, in conjunction with the Irish Sports Council and adjoining Local Authorities, long 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 (eg 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 looped walks, 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, Government Departments 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>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</p>	<p>B1 B2 B3 S1 W1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p>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>OS 1: To implement the recommendations of the <i>Kildare Open Space Strategy 2012</i> and make provision for a hierarchy of parks, open spaces and outdoor recreation areas within towns 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>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: (i) The facility or amenity was established as an interim use pending the completion of an improved or satisfactory replacement facility, or (ii) The applicant can demonstrate that there is an insufficient local demand for the existing facility, or (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>RA 11: To commence the process of identifying the location, procurement and development of three regional type parks, as outlined in the Council's Kildare Open Space Strategy 2011.</p> <p>RAO 1 To facilitate the provision of a variety of amenities within the county, including natural amenities, walking</p>				
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<p>routes, cycling routes, and sports facilities.</p> <p>RAO 2: To develop and implement a county walking strategy in consultation with statutory bodies and landowners and in accordance with the recommendations of the <i>County Kildare Walking Routes Project, 2005</i>.</p> <p>RAO 3: To support Sports and Recreation Strategic Plan 2012 – 2016 or a maybe amended for the county in co-operation with Kildare Sports Partnership, during the lifetime of this Plan</p> <p>RAO 4: To develop a Play Policy for County Kildare.</p> <p>RAO 5: To complete the arts and community facility audit for the county to inform future requirements over the period of this Plan.</p> <p>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.</p> <p>RAO 7: To require passive and active open space to be provided in tandem with new residential development.</p> <p>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</p> <p>RAO 9: To identify flagship projects for the River Liffey Valley from Celbridge to Ballymore Eustace as recommended in the report <i>Towards a Liffey Valley Park Strategy</i>.</p> <p>RAO 10: To investigate the feasibility of creating a pedestrian link between the Liffey Valley the Wicklow Mountains and the Wicklow Way in consultation with Wicklow County Council as recommended in the report <i>Towards a Liffey Valley Park Strategy</i>.</p> <p>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 <i>Towards a Liffey Valley Park Strategy</i>.</p> <p>RAO 12: To seek to identify, list and map public rights of way in County Kildare that give access to seashore, mountain, lakeshore, riverbank or other places of natural beauty or recreational utility over the lifetime of the plan and to provide for the preservation of such public rights of way..</p> <p>RAO 13: To develop long distance walking routes throughout the county including along:</p> <ul style="list-style-type: none"> • The Royal Canal • The Grand Canal • The River Barrow <p>RAO 14: To identify the sites for three regional type parks in the Naas-Newbridge-Allenwood, Cellbridge-Maynooth-Leixlip and Athy areas, and to commence the process of delivery of same.</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> <ol style="list-style-type: none"> (i) The lands are situated within or immediately adjacent to the edge of towns/villages or are easily accessible to the residents of a particular town or village; and (ii) Adequate water supply and adequate parking facilities can be provided. <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> <ol style="list-style-type: none"> (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. <p>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.</p> <p>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.</p> <p>LV 1: To progress the implementation of the flagship projects identified in the <i>Towards a Liffey Valley Park Strategy</i>.</p> <p>LV 2: To pursue the creation of a <i>Liffey Valley Regional Park</i> together with Fingal and South Dublin County Councils within the lifetime of the Plan.</p> <p>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.</p> <p>CP 2: To provide play facilities adjacent to other community and childcare facilities, in so far as is possible, and to</p>				
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<p>ensure their proper management and maintenance.</p> <p>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.</p>				
<p>Commentary:</p> <p><i>These provisions provide for a range of recreation and amenity related developments which would potentially conflict with environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 M1 M2 M3 C1 CH1 CH2 L1). Walkways and cycleways in particular are often proposed for ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects (including in-combination effects across County borders) would be mitigated by both measures which have been integrated into the Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.</i></p> <p><i>Walkways and cycleways would contribute towards maximising sustainable mobility in the County and associated interactions with emissions to air, energy usage and human health (SEO C1 PHH1).</i></p> <p><i>The adoption as County Council policy of any recommendations arising from these provisions (e.g. CR 5 "To investigate the possibility of developing long distance walking routes "and CR 8 "To explore the feasibility of developing") would be required to be subject to lower tiers of assessment, including Appropriate Assessment (AA), as relevant.</i></p> <p><i>Many of these provisions contribute towards sustainable development and the protection and management of the environment, for example:</i></p> <ul style="list-style-type: none"> • <i>CR 7 "in co-operation with landowners, Waterways Ireland, Government Departments and other Local Authorities"</i> • <i>CR 11 "do not endanger the conservation of such natural amenities"</i> • <i>CR14 "subject to compliance with the requirements arising from the Habitats Directive"</i> • <i>RW 1 "without adversely affecting landscape conservation interests"</i> • <i>AL 1 "Adequate water supply"</i> • <i>GI 1 "protection and enhancement of heritage and landscape features"</i> • <i>GI 2 "habitat creation/maintenance and facilitate biodiversity"</i> 				
<p>GI 25: To provide a hierarchy of high quality and multi-functional public parks and open spaces.</p> <p>GI 26: To support and facilitate the provision of a network of high quality, well located and multifunctional public parks and open spaces throughout the County and to protect and enhance the environmental capacity and ecological function of these spaces.</p> <p>GI 27: To connect parks and areas of open space with ecological and recreational corridors to aid the movement of biodiversity and people and to strengthen the overall Green Infrastructure network.</p> <p>GI 28: To enhance and diversify the outdoor recreational potential of public open spaces and parks, subject to the protection of the natural environment.</p> <p>GI 29: To minimise the environmental impact of external lighting at sensitive locations within the Green Infrastructure network to achieve a sustainable balance between the recreational needs of an area, the safety of walking and cycling routes and the protection of light sensitive species such as bats.</p> <p>GI 30: To promote the planting of woodlands, forestry, community gardens, allotments and parkland meadows within the County's open spaces and parks to promote the development of multifunctional amenity areas with enhanced biodiversity value.</p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 CH1 CH2 L1 C1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 M3 CH1 CH2 M2 L1</p>	<p>M1</p>
<p>Commentary:</p> <p><i>The development of green infrastructure would facilitate: contributions towards increases in sustainable mobility and reductions in greenhouse gas emissions (SEO C1); increases in flood risk management (SEO W3) and protection of human health (SEO PHH1); protection and management biodiversity and water quality (SEOs B1 B2 B3 W1 W2); and protection cultural heritage and landscape sensitivities (SEOs CH1 CH2 L1).</i></p> <p><i>The development of green infrastructure potentially conflicts with most environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M2 M3 CH1 CH2 L1). This type of infrastructure is often constructed in ecologically and visually sensitive areas adjacent to the banks of rivers and streams. Potential adverse effects (including in-combination effects across County borders) would be mitigated by measures which have been integrated into these provisions (e.g. GI 29 referring to "minimise the environmental impact") on the conservation objectives of Natura 2000 sites), other provisions within the Plan (see Section 9) and any additional requirements arising through lower tier assessments or granting of permission.</i></p>				

8.6.14 Chapter 15: Urban Design

For an explanation of SEO codes e.g. **B1**, **B2**, **B3**, **PHH1**, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
Aim: To create vibrant and bustling towns and villages with a diverse mix of activities where residents can benefit from quality urban living.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Commentary: <i>Plan provisions in relation to urban design would contribute towards the achievement of the preferred alternative scenario for the Plan. The evaluation against Strategic Environmental Objectives (SEOs) that is provided above is consistent with the evaluation of the preferred scenario which is provided in Section 7, including contributing towards sustainable development and the protection of the environment.</i>				

8.6.15 Chapter 16: Rural Design

For an explanation of SEO codes e.g. **B1**, **B2**, **B3**, **PHH1**, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	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. Rural Design Strategy Objectives: RD 01: To prepare further guidance regarding how the principles of this chapter could be further implemented. RD 02: To run a Design Awards Scheme to encourage excellence in the built environment.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Commentary: <i>Plan provisions in relation to urban design would contribute towards the achievement of the preferred alternative scenario for the Plan. The evaluation against Strategic Environmental Objectives (SEOs) that is provided above is consistent with the evaluation of the preferred scenario which is provided in Section 7, including contributing towards sustainable development and the protection of the environment.</i>				

8.6.16 Chapter 17: Development Management Standards

For an explanation of SEO codes e.g. **B1**, **B2**, **B3**, **PHH1**, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	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 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Commentary:				
<i>The development management standards (many of which relate to sustainable development, environmental protection and environmental management) would contribute towards the achievement of the preferred alternative scenario for the Plan. The evaluation against Strategic Environmental Objectives (SEOs) that is provided above is consistent with the evaluation of the preferred scenario which is provided in Section 7, including contributing towards sustainable development and the protection of the environment.</i>				

8.6.17 Small Towns and Environs Plans (Volume 2, 1.0)

For an explanation of SEO codes e.g. **B1**, **B2**, **B3**, **PHH1**, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
Aim: To provide a coherent planning framework for the development of Athgarvan, Castledermot, Derrinturn, Kill, Prosperous and Rathangan designated as small towns in the County Settlement Strategy and for the environs lands of Blessington, Kilcock and Ladytown.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Compliance with Core Strategy Objectives				
To ensure that the future development of each town is facilitated in accordance with the provisions of the core strategy, appropriate monitoring will be conducted and development management measures applied as appropriate. In this regard; It is the policy of the Council: STP 1: To monitor carefully the scale, rate and location of newly permitted developments and apply appropriate development management measures to ensure compliance with the core strategy including population targets for each small town; and to achieve the delivery of strategic plan led and coordinated balanced development throughout the planning area.	B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1		B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1	
Commentary:				
<i>Small Town and Environs Plans in County Kildare are the smallest towns of the County that provide important economic and social services to their populations and immediate hinterland. Such towns normally have a good range of infrastructural services and are suited to accommodating urban generated housing demand.</i>				
<i>The Plans for Small Towns and Environs establish a framework for the planned, co-ordinated and sustainable development of each area, and enhance and facilitate the balancing of economic, social and environmental infrastructure in order to maintain and develop a high quality of life, without compromising the protection and management of the environment and efforts to contribute towards sustainable development. The Plans do this while contributing towards the overall development of the County which is described through the preferred alternative scenario at Section 7. The effects arising from implementation of the preferred alternative scenario are contributed towards by both the above provisions and the more detailed objectives and land use zonings contained within the settlement plans. The</i>				

interactions with SEO codes above, therefore, reflect the evaluation provided for the preferred alternative scenario at Section 7.

Measures facilitating appropriate levels of environmental protection and management have been integrated into the Small Towns and Environs Plans. These measures include those relating to both the provision of water services (and associated positive effects on the status of waters, ecology and human health - **SEOs M1 M2 W1 W2 B1 B2 B3 PHH1**) and the provision of transport infrastructure integrated with land use planning (and associated interactions with sustainable mobility, emissions and energy usage - **SEOs C1 PHH1**). The Plans accommodate development in zoned areas within existing settlements thereby facilitating an avoidance of the adverse effects that would otherwise with higher levels of greenfield development in more sensitive, unserviced areas for instance.

Environmental considerations were integrated into the zoning of the Plans through an interdisciplinary approach. The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that avoids inappropriate development being permitted in areas of high flood risk (**SEOs PHH1 W3**). The AA concluded that the Plans will not affect the integrity of the Natura 2000 network⁷⁸. The Planning Team also took into account other environmental considerations including sustainable mobility and sensitivities relating to cultural heritage, landscape and water when preparing these Plans (**SEOs C1 PHH1 CH1 CH2 L1 W1 W2**).

Key sensitivities in each of the villages and settlements which have been considered by the Plan preparation/SEA/AA/SFRA processes include those detailed below. The following will ensure that conflicts with the various environmental components (**SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1**) are mitigated:

- The detailed objectives and land use zonings contained within the Plans;
- The Small Towns and Environs Objectives (above);
- Objectives etc. contained in the main written statement of the Plan; and
- Any additional requirements arising through lower tier assessments or granting of permission.

Athgarvan Plan

- Located in central Kildare c. 3km south of Newbridge Town Centre and c. 4km north west of Kilcullen
- Historically evolved around the River Liffey
- The town has evolved since then to become a largely residential area
- Functions as a small local service centre for the resident population, also a commuter town
- Influenced by its proximity to The Curragh and has strong connections to the bloodstock industry, with numerous studs located nearby
- The 2011 Census identified a population of 1,016 for Athgarvan
- Water in Athgarvan is primarily supplied from the Ballymore Eustace Regional Water supply
- Athgarvan is served by Upper Liffey Valley Regional Sewerage Scheme, a communal septic tank and individual treatment systems
- Surface water drainage is problematic in places, particularly during periods of heavy rainfall. Surface water run-off is to the River Liffey
- A Strategic Flood Risk Assessment of the town has identified lands within the boundary which are to be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of development being proposed
- Athgarvan contains a number of buildings/structures of architectural merit which have been listed on the Record of Protected Structures (RPS). There are 3 archaeologically significant items to be found within the town
- Natural heritage assets within the town include the River Liffey and The Liffey Bank at Athgarvan. In addition, the view of the River Liffey from Athgarvan Bridge is a Protected View
- The town is also located in close proximity to the Curragh (also a designated NHA) which adjoins the development boundary of the town to the west. Views of the Curragh Plains are also protected in the vicinity of the town. Pollardstown Fen and Mouds Bog, both Special Areas of Conservation (cSAC) are located c. 5 to 6km north of the town

Castledermot Plan

- Located in the south of County Kildare
- From being an important religious centre in the 13th Century, it evolved to become a service centre for the surrounding rural hinterland- the main function of the town today
- The 2011 census identified Castledermot as having a population of 1,398 persons. This was a very significant increase of 58% on the 2006 population
- The construction of the new M9 motorway to the west of the town has improved environmental conditions by relieving traffic congestion in the town
- Water in Castledermot is mainly supplied by Carlow County Council with some of the northern parts of the town supplied by the Ballymore Eustace Plant. The supply is sufficient to cater for the

⁷⁸ Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

- (a) no alternative solution available;
- (b) imperative reasons of overriding public interest for the plan/programme/project to proceed; and
- (c) adequate compensatory measures in place.

needs of the town

- The existing Sewerage network was upgraded in 2005 with the construction of a new sewerage treatment plant which has a population equivalent of 2,400. It has sufficient capacity to cater for the needs of the town over the period of the Plan
- The SFRA made recommendations in relation to flood risk assessment and / or mitigation measures to accompany developments carried out within the land-use plan areas and also produced guidance on the management of surface water run-off
- Castledermot lies within the South-Eastern River Basin District for which a River Basin Management Plan 2009-2015 has been prepared. The River Lerr flows through the town and is a tributary of the River Barrow. The Lerr waterbody is part of the Greese Lerr Water Management Unit. The overall status of this waterbody is "Moderate". "Good Status" must be restored by 2015
- There are currently 15 structures within the town that are listed in the County's Record of Protected Structures (RPS)
- There are a number of archaeologically significant items to be found within the town. There are 38 items within the boundary of the town listed on the Register of Monuments and Places (RMP).
- The Urban Archaeological Survey in 1986 identified a Zone of Archaeological Potential (ZAP) in Castledermot
- The River Lerr, a tributary of the River Barrow, flows through the town of Castledermot. The River Barrow / River Nore is a designated Special Area of Conservation (cSAC, Site code 002162). The site is also selected as a candidate SAC

Derrinturn Plan

- Located in north west County Kildare
- The settlement developed mainly around the R.C. Chapel, now a local service centre for its surrounding hinterland
- The population of Derrinturn had increased to 1,541 by the 2011 census which represents a 26% increase on the 2006 population
- Derrinturn has developed in a linear urban form along the R403 with facilities and services accessed directly off the Regional Road
- The primary water supply for the town is from the Ballymore Eustace Regional Water Supply
- Derrinturn's new wastewater treatment plant was completed in 2009 and provides for a population equivalent of 1,600P. E
- The current surface water drainage situation in Derrinturn is unsatisfactory and would necessitate improvement so as not to impair future development
- A Strategic Flood Risk Assessment of the town has identified lands within the boundary which are to be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of development being proposed
- Derrinturn lies within the South-Eastern River Basin District for which a River Basin Management Plan 2009-2015 has been prepared
- The Record of Protected Structures (RPS) as contained in Chapter 12 identifies 2 structures within the development boundary of Derrinturn which are worthy of preservation
- The Sites and Monuments Records lists all certain or possible archaeological sites and monuments mainly dating to before 1700AD. Within Derrinturn there is one record (KD008-034 Holy Well) on the RMP
- There are no NHAs / SACs within the development boundary of Derrinturn. The nearest NHAs are Carbury Bog 2km to the north and the Grand Canal located 2.2km to the south west of the village the nearest SAC is Ballynafagh Lake and is located 10.3km from the boundary of Derrinturn

Kill Plan

- Located along the N7 National Primary Route, which is one of the most significant national transportation routes in the country
- The area around Kill has been settled from the very earliest times. Evidence of this can be seen on the inscribed stones which have been found in the locality, the rock art which has been dated back to the Neolithic or Stone Age period
- Kill has largely evolved into a commuter centre
- Kill also has strong equestrian and bloodstock links
- In the 2011 Census the population had increased to 3,095 or by 23.3% on the 2006 figure
- Water in Kill is primarily supplied from the Ballymore Eustace Regional Water supply
- Kill is served by the Upper Liffey Valley Regional Sewerage Scheme and potential future development may be impacted by limitations in the existing sewerage system. Development will be dependent on the delivery of Contract 2B of the ULVRSS which includes upgrades to the sewerage network from Kill to Osberstown WWTP
- A Strategic Flood Risk Assessment of the town has identified lands which are to be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of development being proposed
- Kill is situated in the Liffey Water Management Unit of the Eastern River Basin District and within the Kill and Painestown water bodies of this Water Management Unit. The overall status of surface water in these water bodies is "Poor to Moderate" and the objective is to restore them to "Good Status" by 2021
- There are currently 8 no. structures within the town that are listed on the Council's Record of Protected Structures (RPS)
- The Record of Monuments and Places (RMP) is the official record of archaeological sites and monuments. It provides the State with a record of known monuments protected under Section 12 of the National Monuments (Amendment) Act 1994. The record is updated on a constant basis
- There is also a Zone of Archaeological Potential (ZAP) in Kill (See Map 18.5.B), which was designated following the Urban Archaeological Survey of Kildare in 1986
- The most important habitats in the County are afforded protection under European and/or National legislation by way of designations such as Natural Heritage Areas (NHA) and candidate Special Areas of Conservation (cSAC). There are no such designated sites in the vicinity of Kill

Prosperous Plan

- Located in north Kildare, c. 4km west of Clane and 10km north of the county town of Naas
- Functions as an important service centre for the town and its hinterland population
- In the 2011 Census the population of Prosperous had risen to 2,248 or by 16% on the 2006 figure
- Water in Prosperous is primarily supplied from the Ballymore Eustace Regional Water supply
- Prosperous is served by the Upper Liffey Valley Regional Sewerage Scheme and potential future development may be impacted by the limitations of the existing plant and sewerage network. A phased upgrade is being carried out of the plant
- Surface water drainage in Prosperous is problematic in places, particularly during periods of heavy rainfall. Surface water run-off is to the River Slate. In order to reduce surface water run-off and to minimise the risk of flooding, land in Prosperous will be required to be developed in accordance with Sustainable Drainage System (SuDS) principles in compliance with the 'Greater Dublin Strategic Drainage Study'
- A Strategic Flood Risk Assessment of the town has identified lands within the development boundary which are to be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of development being proposed
- There are currently 11 no. structures within the town that are listed in the Record of Protected Structures (RPS)
- There are 4 archaeologically significant items within the town listed on the Record of Monuments and Places (RMP)
- Natural heritage assets in close proximity to the town include Donadea Forest Park, Hodgestown Bog and The Grand Canal, each of which is a designated Natural Heritage Area (NHA)
- There are two candidate Special Areas of Conservation (cSAC), Ballynafagh Lake and Ballynafagh Bog located outside the development boundary to the north of the town. In addition, Chapter 14 – Landscape, Recreation and Amenity identifies Scenic Routes including No. 40 – Views of Ballynafagh Lake. The scenic route is located to the north of the town
- The Slate River which flows to the north of the town is a tributary of the Figile River which in turn is a tributary of the River Barrow, a cSAC. The Slate River is a valuable amenity resource in the town and the Council is committed to protecting and enhancing this river

Rathangan Plan

- Located on the Grand Canal/Slate River
- The town prospered in the 19th century with the opening of the Grand Canal. Much of the present Main Street dates from this era
- Rathangan is primarily a service centre for north- west Kildare and east Offaly
- 2011 census figures identify Rathangan as having a population of 2,374 persons
- Water supply in Rathangan is a blended supply i.e. consists of a combination of water from the Ballymore Reservoir and water from the local wellfields. The water supply is adequate to meet the present and future needs of the town
- Rathangan is served by its own wastewater treatment plant. The waste water treatment plant has an existing design capacity of 4,000 population equivalent (P.E.) which is more than adequate to serve the development demands over the period of this plan
- In order to reduce surface water run-off and to minimise the risk of flooding, the development of lands in Rathangan should be in accordance with Sustainable Drainage System (SuDS) principles in compliance with the 'Greater Dublin Strategic Drainage Study'
- A Strategic Flood Risk Assessment of the town has identified lands within the town boundary which will be the subject of site specific Flood Risk Assessments appropriate to the type and scale of development being proposed
- Basin District and a River Basin Management Plan 2009-2015 has been prepared. The Slate River which flows through the town is a tributary of the Figile River, which is a tributary of the River Barrow. The Slate River waterbody is located within the Figile Water Management Unit Action Area. The Figile River has been classified as having 'Bad 'Status, based on bad fish status and the Slate River has been classified as having 'Poor' status
- The current Record of Protected (RPS) Structures identifies 29 structures within the development boundary of Rathangan
- An Architectural Conservation Area has also been designated in the town centre of Rathangan
- The ringfort adjacent the Church of Ireland, KD017-011001 is on the Record of Monuments and Places. This has been subject to a Preservation Order pursuant to the National Monuments Acts 1930-2004. Rathangan was also designated a Zone of Archaeological Potential in the Urban Archaeological Survey of Kildare (1986)
- Rathangan is located on the Grand Canal and the River Slate. The Grand Canal is designated as a proposed Natural Heritage Area (NHA)

Blessington Plan

- Significant amount of the lands in the environs plan area are unsuitable for residential development due to flooding
- There are no rivers running through, or adjacent to the environs plan area
- Poulaphouca Reservoir SPA is located to the east of the settlement area
- There are currently no structures within the environs area that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the environs area that are listed in the County's Record of Monuments and Places (RMP)
- There are currently no features within the environs area that are listed in the National Inventory of Architectural Heritage (NIAH)

Kilcock Plan

- There are no rivers running through, or adjacent to the environs plan area
- There are currently no Natura 2000 sites within the environs plan area
- There are currently structures within the environs plan area that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the environs plan area that are listed in the County's Record of Monuments and Places (RMP)
- There are currently no features within the environs plan area that are listed in the National Inventory of Architectural Heritage (NIAH)

Ladytown Plan

- There are no rivers running through, or adjacent to the environs plan area
- There are currently no Natura 2000 sites within the environs plan area
- There are currently no structures within the environs plan area that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the environs plan area that are listed in the County's Record of Monuments and Places (RMP)
- There are currently no features within the environs plan area that are listed in the National Inventory of Architectural Heritage (NIAH)

8.6.18 Village Plans and Rural Settlements (Volume 2, 2.0)

For an explanation of SEO codes e.g. **B1, B2, B3, PHH1**, etc. refer to Table 8.2 on page 68.

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Mitigated Conflicts	No Likely interaction with status of SEOs
<p>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</p> <p>Village and Rural Settlements Policies</p> <p>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.</p> <p>VRS 2: To facilitate sustainable population growth of the identified villages with growth levels of up to 25% over the Plan period to cater primarily for local demands</p> <p>VRS 3: To facilitate the sustainable population growth of the identified Rural Settlements with growth levels of up to 20% over the Plan period 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>VRS 4: To generally permit density levels in accordance with indicative levels outlined in Table 4.2 of this Plan. Proposals shall also conform to the Development Management Standards contained in Chapter 17 of this Plan. Exceptions may be made to development management standards in infill / brownfield sites within village centres or settlement cores where the scheme is of exceptional quality and design.</p> <p>VRS 5: To develop lands in both the 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 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>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 Plan in accordance with the <i>Sustainable Residential Development in</i></p>	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<p><i>Urban Areas Guidelines</i> (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 person's new housing schemes should not be larger than 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>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 section 4.6 of this Plan). 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>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 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 other local built/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; • Demonstration of contemporary and innovative architecture and design that ensures the creation of a unique sense of place; and • 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>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>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 Municipal District or adjoining Municipal District or to serviced towns within the upper range of the settlement hierarchy.</p> <p>VRS 11: To ensure that all development proposals have regard to Chapters 7 Infrastructure and 19, Development Management Standards of the County Development Plan.</p> <p>VRS 12: To encourage appropriate mixed use development(s) in the village centres to enhance the range of services and promote local employment opportunities.</p>				
<p>Village Objectives <u>Village Centre</u></p> <ul style="list-style-type: none"> • To provide for the development and improvement of appropriate village centre uses including residential, commercial, office and civic use. • The purpose of this zone is to protect and enhance the special character of the village centre and to provide for and improve retailing, residential, commercial, office, cultural and other uses appropriate to the centre of a developing village. 	<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>		<p>B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1</p>	

<ul style="list-style-type: none"> It will be an objective of the Council to encourage the use of buildings and backlands and especially the full use of upper floors. The size and scale of all new developments, particularly retail developments shall not be out of character with the already established village centre area. Warehousing and other industrial uses will generally not be permitted in the village centre. <p><u>Existing Residential / Infill</u></p> <ul style="list-style-type: none"> To protect and improve existing residential amenity, to provide for appropriate infill residential development and to provide for new and improved ancillary services. This zoning principally covers existing residential areas and provides for infill development within these existing residential areas. The primary aims of this zoning objective are to preserve and improve residential amenity and to provide for further infill residential development at an appropriate density. <p><u>New Residential</u></p> <ul style="list-style-type: none"> To provide for New Residential Development This zoning provides for new residential development and associated ancillary services. Permission may also be granted for home based economic activity within this zone subject to the preservation of residential amenity and traffic considerations. New residential areas should be developed in accordance with a comprehensive plan detailing the layout of services, roads, pedestrian and cycle routes and the landscaping of open space. Community and Educational to provide for community and educational facilities. The purpose of this zoning is to facilitate the extension of existing and the provision of new community and educational facilities. <p><u>Open Space and Amenity</u></p> <ul style="list-style-type: none"> To protect and provide for open space, amenity and recreation provision. The areas included in this zoning objective cover both private and public open space and are dispersed throughout the village. The aims of this land-use zoning objective are to protect recreation, open space and amenity areas, to maintain and improve amenity lands, to preserve private open space and to provide recreational facilities. <p><u>Agricultural</u></p> <ul style="list-style-type: none"> To retain and protect agricultural uses. The purpose of this zoning is to ensure the retention of agricultural uses and protect them from urban sprawl and ribbon development. Uses which are directly associated with agriculture or which would not interfere with this use are open for consideration. This includes limited housing for members of landowners' families or persons who can demonstrate a need to live in the agriculture zone, tourism related projects and amenity uses such as playing fields or parks. <p><u>Enterprise and Employment</u></p> <ul style="list-style-type: none"> To promote the development of employment generating uses. The purpose of this zoning is to promote the development of local employment. Permissible uses may include enterprise and incubator units, small scale industry and workshops. Uses will be considered on the merits of each planning application. Any proposal within this zone should have regard to the character of the village and of neighbouring uses. To facilitate the operation of Johnstown Garden Centre Any future development of the Garden Centre must be in accordance with the Retail Policies and objectives set out in Chapter 9 of this Plan. Any specific development proposal must also be in accordance with the proper planning and sustainable development of the area. 				
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<p><u>Utilities / Services</u></p> <ul style="list-style-type: none"> To provide for and improve public facilities. The purpose of this zone is to provide for and preserve land in the ownership of the Council or other bodies charged with the provision of services such as electricity, telecommunications, water, wastewater etc. <p>Rural Settlement Objectives</p> <p><u>Settlement Core</u></p> <ul style="list-style-type: none"> New development proposals should accord with the 20% population growth level designated for each settlement. A high-quality design proposal shall emerge from careful analysis of the sites location, surrounding context and the specific characteristics of the site itself. Applications for new developments (excluding minor developments) within the central core shall include a written design statement explaining the reasons for choosing the proposed design. Where the settlement core is more dispersed, proposals for local services, facilities and amenities outside of the core will be considered on a case-by-case basis. Any such development must reinforce the core as the centre of the settlement. All new development should have regard to the existing urban grain, density, height and built character of the existing core. Where there is an historic core of architectural importance, it shall be protected, with particular care taken that any new development does not negatively impact on its character. The development of backlands in a coherent and well-designed manner that creates a more compact settlement core, with good linkages and an appropriate urban grain will be encouraged. Infill development that optimises the available land in the settlement core for new services, facilities and residential use will be considered, subject to a high-quality design response. Particular care shall be taken to ensure that new development builds on or enhances the streetscape, landscape character and open space network of the settlement core through high quality design and landscaping. All proposals will be subject to the relevant development management standards set out in Chapter 17. <p><u>Existing Settlement</u></p> <ul style="list-style-type: none"> New development proposals shall accord with the population growth level of up to 20% designated for each settlement. Any proposals for residential infill should preserve or improve residential amenity, being at an appropriate scale, density and form to the existing residential character of the area. Extensions to other existing uses (employment, recreational, etc.) will be considered on a case-by-case basis subject to good design and protection of existing residential amenity. Any proposals for new amenities, local facilities and services should be planned in a sequential manner with strong linkages to the village core and located so as to facilitate ease of pedestrian access and to avoid local trip making by car. Preference will be given to applications that are contiguous to the settlement core. In all cases developments, must enhance the settlement core as the centre of the settlement. All infill development proposals will be subject to a high-quality design response and will not impact negatively on the residential character and residential amenity of the existing settlement. All proposals will be subject to the relevant development management standards set out in Chapter 17. <p><u>Settlement Expansion</u></p> <ul style="list-style-type: none"> New development proposals should accord with the population growth level of up to 20% designated for each settlement. All new development should have regard to the character, form and scale of the existing settlement. In determining a design response, new developments should reference the elements of the settlement that give character and a sense of place such as; the urban grain of the historic core, existing buildings of high architectural merit and local characteristics (such as local materials, building lines, walls, building heights, 				
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<p>rivers, streams, trees/hedgerows and other local landscape features).</p> <ul style="list-style-type: none"> • Protection and enhancement of the physical and natural environment in terms of its ecological and recreational potential is paramount. • To reuse where possible existing buildings / out buildings within the village boundary in order to maintain the historic character of the village • Quality design proposals should emerge from a careful analysis of a site's location, surrounding context and the specific characteristics of the site itself. • Developments that would not be considered suitable for the settlement core (e.g. industrial units, workshops, petrol stations) or which require a larger site than is available within the existing settlement core (e.g. sports playing fields) will also be considered on a case by case basis subject to being located in a sequential manner, good design and protection of existing residential amenity. • All proposals will be subject to the relevant development management standards set out in Chapter 17. 				
<p>Commentary:</p> <p><i>Villages and Rural Settlements in County Kildare provide important economic and social services to their populations and rural hinterland. Such areas normally have a reasonable range of infrastructural services and are suited to accommodating some urban generated housing demand, with necessary controls in place to ensure that local demand can also be met. 'Villages and Rural Settlements' are differentiated in the County Development Plan from 'Small Towns and Environs'.</i></p> <p><i>The Plans for Villages and Rural Settlements establish a framework for the planned, co-ordinated and sustainable development of each village and for each settlement, and enhance and facilitate the balancing of economic, social and environmental infrastructure in order to maintain and develop a high quality of life, without compromising the protection and management of the environment and efforts to contribute towards sustainable development. The Plans do this while contributing towards the overall development of the County which is described through the preferred alternative scenario at Section 7. The effects arising from implementation of the preferred alternative scenario are contributed towards by both the Village and Rural Settlements Objectives (listed above) and the more detailed objectives and land use zonings contained within the settlement plans. The interactions with SEO codes above, therefore, reflect the evaluation provided for the preferred alternative scenario at Section 7.</i></p> <p><i>Measures facilitating appropriate levels of environmental protection and management have been integrated into the Villages and Rural Settlements Plans. These measures include those relating to both the provision of water services (and associated positive effects on the status of waters, ecology and human health - SEOs M1 M2 W1 W2 B1 B2 B3 PHH1) and the provision of transport infrastructure integrated with land use planning (and associated interactions with sustainable mobility, emissions and energy usage - SEOs C1 PHH1). The Plans accommodate development in zoned areas within existing settlements thereby facilitating an avoidance of the adverse effects that would otherwise with higher levels of greenfield development in more sensitive, unserviced areas for instance.</i></p> <p><i>Environmental considerations were integrated into the zoning of the Plans through an interdisciplinary approach. The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that avoids inappropriate development being permitted in areas of high flood risk (SEOs PHH1 W3). The AA concluded that the Plans will not affect the integrity of the Natura 2000 network⁷⁹. The Planning Team also took into account other environmental considerations including sustainable mobility and sensitivities relating to cultural heritage, landscape and water when preparing these Plans (SEOs C1 PHH1 CH1 CH2 L1 W1 W2).</i></p> <p><i>Key sensitivities in each of the villages and settlements which have been considered by the Plan preparation/SEA/AA/SFRA processes include those detailed below. The following will ensure that conflicts with the various environmental components (SEOs B1 B2 B3 PHH1 S1 W1 W2 W3 M1 M2 M3 C1 CH1 CH2 L1) are mitigated:</i></p> <ul style="list-style-type: none"> • <i>The detailed objectives and land use zonings contained within the Plans;</i> • <i>The Villages and Rural Settlements Objectives (above);</i> • <i>Objectives etc. contained in the main written statement of the Plan; and</i> • <i>Any additional requirements arising through lower tier assessments or granting of permission.</i> <p>Allenwood</p> <ul style="list-style-type: none"> • Bordered by The Grand Canal to the south • Acts as a local service centre • Developed in the nineteenth century as a coaching post along the Clane / Edenderry Road 				

⁷⁹ Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

- (a) no alternative solution available;
- (b) imperative reasons of overriding public interest for the plan/programme/project to proceed; and
- (c) adequate compensatory measures in place.

- The 2011 census figure for Allenwood was 845 persons. This represents a significant increase on the 2006 census figure of 667
- To meet the projected population growth over the plan period 11.1ha of New Residential land has been zoned
- Allenwood has an adequate water supply at present
- Allenwood has a wastewater treatment plant which has been designed for a population equivalent (P.E.) of 1,500. Adequate capacity is available for anticipated growth in population in the village over the period of this Plan
- The majority of the employment opportunities are light industrial in nature

Ballitore

- The River Greese borders the village core to the east with the Glanbia industrial facility on the eastern side of the river
- The farmland surrounding the village is of high quality.
- Ballitore performs a role as a local service centre
- Ballitore is a small historic settlement which was founded in 1685 by Quakers
- The 2011 population of 556 persons represents a 20% increase on the 2006 population of 445 persons
- Growth is to be located on lands previously zoned in Ballitore with other appropriate social and community facilities
- Water supply in Ballitore is deemed satisfactory at present
- A new Wastewater Treatment Plant with a population equivalent (P.E.) of 1500 is currently in operation
- While the treatment of surface water is adequate in Ballitore at present, the continued cleaning and maintenance of the River Greese to the east of the village is essential to prevent flooding in the area
- As a result of the historic streetscape and the architectural merit of many of the buildings an Architectural Conservation Area has also been defined for the village

Ballymore Eustace

- Located on the River Liffey approximately one kilometre from the Kildare – Wicklow border
- Acts as a service centre for its rural hinterland
- The village developed in association with a mill in the early 19th century and the street layout and many of the houses date from this period
- Future expansion areas of the village are restricted due to the presence of sand and gravel pits to the north, the lands of Dublin City Council Waterworks and the Golden Falls hydroelectric station to the south-east and the River Liffey valley to the west
- The 2011 census shows the population increasing to 872 persons an increase of 20% on the 2006 figure
- Growth shall be located in the village core together with a residential expansion to the west of the village core and to the south of Ballymore Bridge
- Water is supplied from the Dublin City Council Treatment Plant, which is adjacent to the village, and is sufficient to serve the current needs and sustainable future development of the village
- The Ballymore Eustace Wastewater Treatment Plant has recently been completed and is in operation and has a population equivalent of 2000. This is adequate to serve the village for the foreseeable future
- No major new road development is required in the area

Caragh

- Located to the north west of Naas and the M7 motorway between the River Liffey and the Grand Canal on the R409
- Acts as a local service centre for the surrounding rural hinterland
- Located close to many modern and more historic transport routes namely the M7 motorway, the Dublin to Cork Railway line, the Grand Canal and the River Liffey. These routes contributed to the historic development of the village
- The 2011 Census reports a population of 882 persons for Caragh which represents a 37% increase on the 2009 estimate
- Growth shall primarily be located in an expansion of the village core, together with other appropriate social and community facilities
- Caragh has an adequate water supply and it is sufficient to serve the current needs and sustainable future development of the village
- Caragh is connected to the Upper Liffey Valley Sewerage Scheme, which pumps wastewater to the Osberstown Treatment Plant which is being upgraded. The wastewater infrastructure serving the village is adequate at present
- No major new road development is envisaged in the area; however various upgrading works will be required in tandem with development in the village.

Coill Dubh / Coolearagh

- Coill Dubh / Coolearagh are two separate settlements located in close proximity to each other in the north west of the County
- They act as local service centres for their inhabitants and the surrounding hinterland
- Coill Dubh was established in the 1950s to accommodate workers on the Bord na Mona works supplying the Allenwood peat fired power station.
- The current population is approximately 1,095 persons
- Coill Dubh / Coolearagh have an adequate water supply at present however to cater for the projected population growth

- Coill Dubh / Coolearagh are served by their own waste water treatment plant located to the west of Coolearagh. The plant has a P.E. of 2,000 and is considered adequate to meet the needs of the villages during the period of this Plan
- The local services and businesses are the main source of employment in the villages

Crookstown

- There are no obvious natural or historic boundaries to the settlement
- Crookstown performs a role as a local service centre for its environs including Ballitore and to a lesser extent Moone and Timolin
- Developed around the Church which was built in 1867
- The population is approximately 129 persons
- Water supply in Crookstown is deemed satisfactory at present
- Wastewater from parts of Crookstown is diverted to the Ballitore Waste Water Treatment Plant which has capacity to cater for both villages
- While the treatment of surface water is adequate in Crookstown at present, the continued cleaning and maintenance of the River Greese to the west of the village is essential to prevent flooding in the area
- There are a number of protected structures on the RPS in Crookstown listed in this Plan

Johnstown

- Local roads link the village with Naas to the south and Kill to the north and the village is surrounded by high quality agricultural land
- Johnstown acts as a local service centre
- The village has a fine architectural streetscape with fine stands of mature trees forming a backdrop to several fine buildings
- The 2011 Census indicates a further increase in the population to 1004 persons
- Growth is to be located on lands previously zoned in Johnstown, with an additional area closer to the village core identified, which provides an opportunity to consolidate the village and enhance its character
- Johnstown has an adequate water supply and it is sufficient to serve the current needs and sustainable future development of the village
- Johnstown is connected to the Upper Liffey Valley Sewerage Scheme, which pumps wastewater to the Osberstown Treatment Plant in Naas. The wastewater situation will be improved once Contract 2B of the Upper Liffey Valley Sewerage Scheme is delivered

Johnstownbridge

- The River Blackwater flows to the north of the village
- Johnstownbridge acts as a local service centre for its inhabitants and the surrounding rural area
- The 2011 census has recorded the population of the village at 650 persons which represents a 21% increase
- Growth shall be located in an expansion of the village core with other appropriate social and community facilities
- Johnstownbridge has an adequate water supply and it is sufficient to serve the current needs and sustainable future development of the village
- Johnstownbridge is connected to a wastewater treatment plant operated by Meath County Council. Kildare County Council has use of one third of the capacity of this plant which is 1,000 P.E

Kildangan

- Kildangan is located in southwest Kildare close to the Laois border and to the south of Monasterevin town
- Acts as a local service centre for its inhabitants and the surrounding hinterland
- Developed as an Anglo-Norman settlement
- The population is approximately 470 persons
- Kildangan receives its water supply from the Ballymore Eustace Water Treatment Plant. This plant provides an adequate water supply and it is sufficient to serve the current needs and sustainable future development of the village
- Currently serviced by two separate waste water treatment systems. The most recently commissioned treatment system has a capacity of 500 Population Equivalent (p.e.) and its current loading is approximately 196 p.e
- It should be noted that in the event that any further development is carried out in the village that the capacity of the new treatment system will need to be increased
- No major new road development is required in the area however various upgrading works will be required in tandem with development in the village

Kilmeague

- Located in northwest County Kildare, approximately 13km from Naas town
- Acts as a local service centre for its inhabitants and the surrounding hinterland
- The site for the village was carefully selected with the lands to the north rising to provide protection from the wind
- The 2011 census recorded the population of Kilmeague at 997 persons an increase of 46% from the 2006 census figure of 682 persons

- Kilmeague receives its water supply from the Ballymore Eustace Water Treatment Plant. This plant provides an adequate water supply and it is sufficient to serve the current needs and the sustainable future development of the village
- Currently served by the Kilmeague Sewerage Scheme which terminates at the Kilmeague Waste Water Treatment System. This treatment system has a capacity of 700PE, which is currently overloaded
- The Kilmeague treatment system requires urgent upgrading and the provision of a new outfall. Development will be restricted in the village until the system upgrade is carried out and completed

Moone

- Moone is located in South Kildare, approximately 23 km from Athy and 33km from Naas
- Functions as a centre of local facilities and acts as a complementary village to Timolin to the north
- The village is linear in form extending for a distance of 1km
- Following a survey of the village in 2015 it was estimated that the population within the village boundary was approximately 144 persons
- Water supply in Moone is deemed satisfactory at present
- Currently there is no wastewater treatment system available in Moone
- There are a number of protected structures listed on the RPS in Moone and the vicinity of the village
- An Architectural Conservation Area has been identified to the west of Moone

Robertstown

- The Barrow Line of the Grand Canal connects to the main line of the Canal west of the village, at Lowtown
- Located within the western boglands, physically the village core has a T-shape form, along the canal between Binn's Bridge and the former Canal Hotel, and the intersection with Robinstown Hill
- The 2011 Census figure for the village is 669 persons
- Growth is to be located on lands previously identified for development in Robertstown with other appropriate social and community facilities.
- Water supply in Robertstown is deemed satisfactory at present
- Robertstown has a wastewater treatment plant with a design capacity of 1,000 P.E. and a current loading of 375 PE. The plant is located outside of the village to the northwest and discharges to the River Slate. The plant is considered robust and no upgrades are currently required or planned
- There have been no on-going issues with surface water in the village
- Robertstown is rich in architectural heritage and many protected structures are located in the village
- There are no recorded sites / monuments within the village plan boundary. The Grand Canal is a proposed Natural Heritage Area, and Ballynafagh Lake (including the Blackwood Feeder less than 1km from the village centre) is a Special Area of Conservation

Straffan

- The village is surrounded by good agricultural land and is in close proximity to the River Liffey
- The village developed around the two crossroads each one overlooked by either the Church of Ireland or Roman Catholic Church
- The 2011 Census recorded a population of 635 persons an increase of 44% on the 2006 population
- Straffan is serviced by the Ballygoran reservoir with water from the Fingal County Council Treatment Plant in Leixlip
- Straffan forms part of the Lower Liffey Valley Regional Sewerage Scheme. Water and wastewater infrastructure serving the village are adequate at present
- The majority of historical flood events in the centre of Straffan Village were resolved by the construction of a new surface water collection system in 2006
- The River Liffey flows to the south of the village and is used for recreational purposes including canoeing and angling
- Straffan has a rich archaeological and architectural heritage due to its historic origins. It contains a number of protected structures and recorded monuments. There is also an abundance of mature trees throughout the village

Suncroft

- Located to the south of the Curragh and to the south east of Kildare Town
- Suncroft acts as a local service centre for its inhabitants and the surrounding hinterland
- The village centre has a relatively compact form with long established residential developments extending from the core. A number of newer developments are located at some distance from the village core and are separated from it by agricultural lands
- 2011 census recorded an increase in population of 21% to 735
- Suncroft has an adequate water supply to serve the needs of its population during the Plan period
- Suncroft is connected to the Upper Liffey Valley Sewerage Scheme, which pumps wastewater to the Osbertown Treatment Plant in Naas. This system requires upgrading. Development shall be restricted in the village until the system upgrade is complete

Timolin

- Located in South Kildare, approximately 21 km from Athy and 31km from Naas
- Timolin has a strong village core with the majority of development being concentrated in the core
- Following a survey of the village in 2015 it was estimated that the current population within the village boundary is approximately 135 persons
- Water supply in Timolin is deemed satisfactory at present
- Currently there is no wastewater treatment system available in Timolin
- There are a number of structures listed on the RPS in Timolin. There are a number of sites listed on the Record of Monuments and Places which, themselves, together with their settings, should be protected

Allen Plan

- Development proposals for lands located within 50m of the stream which crosses the R415 at the southern boundary of the settlement shall be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of the development being proposed
- There are currently no Natura 2000 sites within the settlement area
- There are no rivers running through, or adjacent to the settlement area
- There are currently structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Ardclough Plan

- Development proposals for the following lands shall be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of the development being proposed:
 - (i) development incorporating lands east of the canal identified for Settlement Expansion
 - (ii) development incorporating lands identified as Settlement Core and Existing Settlement
- There are currently no Natura 2000 sites within the settlement area
- The Grand Canal runs through the settlement area
- There are currently structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently no features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Brannockstown Plan

- Development proposals for development incorporating lands located north and/or west of the Kilcullen Road junction shall be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of the development being proposed
- There are currently no Natura 2000 sites within the settlement area
- There are no rivers running through, or adjacent to the settlement area
- There are currently no structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Broadford Plan

- Development proposals for development incorporating lands located north and/or within 50m of Broadford Bridge shall be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of the development being proposed
- There are currently no Natura 2000 sites within the settlement area
- The Glash River runs through the settlement area
- There are currently no structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Brownstown.

- There are currently no Natura 2000 sites within the settlement area
- There are no rivers running through, or adjacent to the settlement area
- There are currently no structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)

- There are currently no features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Calverstown Plan

- Development proposals for all lands within 100m of any watercourse (culverted or otherwise) shall be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of the development being proposed
- There are currently no Natura 2000 sites within the settlement area
- There are no rivers running through, or adjacent to the settlement area
- There are currently no structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Cutbush Plan

- Development proposals for lands identified for Settlement Expansion at the eastern side of the settlement shall be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of the development being proposed
- There are currently no Natura 2000 sites within the settlement area
- There are no rivers running through, or adjacent to the settlement area
- There are currently no structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Kilberry Plan

- Development proposals for the following lands shall be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of the development being proposed:
 - lands identified for Settlement Expansion;
 - lands located within 100m of a recorded flood event (as shown on OPW flood maps).
- There are currently no Natura 2000 sites within the settlement area
- The Finney River runs adjacent to the settlement area
- There are currently no structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently no features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Kilmead Plan

- There are currently no Natura 2000 sites within the settlement area
- There are no rivers running through, or adjacent to the settlement area
- There are currently structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Kilteel Plan

- There are currently no Natura 2000 sites within the settlement area
- There are no rivers running through, or adjacent to the settlement area
- There are currently no structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP), however there are many located just outside the settlement boundary
- There are currently features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Maddenstown Plan

- There are currently no Natura 2000 sites within the settlement area
- There are no rivers running through, or adjacent to the settlement area
- There are currently no structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently no features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Maganey / Levitstown Plan

- Development proposals for lands located within 150m of the banks of the River Barrow shall be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of the development being proposed
- The lands identified for "Settlement Expansion" at Levitstown are considered to be at significant risk of flooding. The development strategy proposal for these lands should be the subject of a Level 3 Site Specific Flood Risk Assessment to inform the application of the Sequential Approach to the decision-making process
- The River Barrow and River Nore cSAC is located to the immediate west of the settlement area
- The River Barrow and the River Greese run adjacent to the settlement area
- There are currently no structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Miltown Plan

- Development proposals for lands located within 75m of the Grand Canal Feeder shall be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of the development being proposed
- There are currently no Natura 2000 sites within the settlement area
- There are no rivers running through, or adjacent to the settlement area
- There are currently structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Narraghmore Plan

- Development proposals for lands located west and south-west of the Settlement Core shall be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of the development being proposed
- There are currently no Natura 2000 sites within the settlement area
- There are no rivers running through, or adjacent to the settlement area
- There are currently no structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Nurney Plan

- Development proposals for lands located within 100m of the river flowing through Nurney shall be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of the development being proposed
- There are currently no Natura 2000 sites within the settlement area
- The Tully River runs through the settlement area
- There are currently no structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Rathcoffey Plan

- Development proposals for lands identified for Settlement Expansion and for lands identified as Existing Settlement located south thereof shall be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of the development being proposed
- There are currently no Natura 2000 sites within the settlement area
- There are no rivers running through, or adjacent to the settlement area
- There are currently no structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Staplestown Plan

- Development proposals for the following lands shall be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of the development being proposed:
 - lands identified for Settlement Expansion;

- development incorporating lands located within 75m of the banks of the River
- There are currently no Natura 2000 sites within the settlement area
- There are no rivers running through, or adjacent to the settlement area
- There are currently no structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently no monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

Twomilehouse Plan

- Development proposals for lands located within 50m of watercourses shall be the subject of a site-specific Flood Risk Assessment appropriate to the type and scale of the development being proposed
- There are currently no Natura 2000 sites within the settlement area
- There are no rivers running through, or adjacent to the settlement area
- There are currently no structures within the settlement that are listed in the County's Record of Protected Structures (RPS)
- There are currently monuments or places within the settlement that are listed in the County's Record of Monuments and Places (RMP)
- There are currently features within the settlement that are listed in the National Inventory of Architectural Heritage (NIAH)

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 Plan. Various environmental sensitivities and issues have been communicated to the Council through the SEA, Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) processes. By integrating all related recommendations into the Plan, the Council have ensured that both the beneficial environmental effects of implementing the Plan have been and will be maximised and that potential adverse effects have been and will be avoided, reduced or offset.

Mitigation was achieved through the:

- Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development;
- Integration of individual SEA, AA and SFRA provisions into the text of the Plan; and
- Integration of environmental considerations into zoning provisions of the Plan.

9.2 Strategic work undertaken by the Council to ensure contribution towards environmental protection and sustainable development

Far in advance of the placing of the Draft Plan (and associated SEA, AA and SFRA documents) on public display, Kildare County Council undertook various works in order to inform the preparation of the Draft Plan and final adopted Plan.

The findings of this strategic work were integrated into the Plan and will contribute towards both environmental protection and management and sustainable development within the County.

9.3 Integration of individual SEA, AA and SFRA provisions into the text of the Plan

Various provisions have been integrated into the text of the Plan through the Plan-preparation and SEA, SFRA and AA processes. Both the Planning and the assessment teams contributed towards the mitigation which was developed over multiple iterations and was informed by, inter alia, various communications through the SEA, AA and SFRA processes.

Table 9.1 links key mitigation measure(s) to the likely significant effects of implementing the Plan, if unmitigated. The measures generally benefit multiple environmental components i.e. a measure providing for the protection of biodiversity, flora and fauna could beneficially impact upon the minimisation of flood risk and the protection of human health, for example.

9.4 Integration of environmental considerations into Zoning of the Plan

Environmental considerations were integrated into the Plan's zoning through an interdisciplinary approach.

The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the AA process facilitated zoning that avoids impacts upon sensitive ecology and Natura 2000 sites.

The detailed Plan preparation process undertaken by the Planning Department combined with specialist input from the SFRA process facilitated zoning that avoids inappropriate development being permitted in areas of high flood risk.

Also, taken into account were other environmental considerations including sustainable mobility and sensitivities relating to cultural heritage, landscape and water, as well as the overlay mapping of environmental sensitivities.

Table 9.1 Integration of Environmental Considerations into the Plan

Environmental Component	Potential Effect, if unmitigated	Mitigation Measures, including
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> • Arising from both construction and operation of development and associated infrastructure: loss of/damage to biodiversity in designated sites (including Natura 2000 Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna • Habitat loss, fragmentation and deterioration, including patch size and edge effects • Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species 	<ul style="list-style-type: none"> • Chapter 13: Natural Heritage and Green Infrastructure Aim • Policies: NH 1 to NH 16, GI 1 to GI 30, WE 2, EI 16, WC 4, PF 2, WS 13 • Objectives: NHO1 to NHO 10, GIO 1 to GIO 5 <p>See also various provisions under the environmental components of soil and water</p>
Population and Human Health	<ul style="list-style-type: none"> • Potential interactions if effects upon environmental vectors such as water and air are not mitigated 	<ul style="list-style-type: none"> • Environmental Services Aim • Policies: ECD 21, ECD 22, RS 3, RS 4, WM 2, WM 3, PC 1 to PC 10, WS 7 • Objectives: RSO 3 <p>See also various provisions under the environmental components of soil, water, air and material assets</p>
Soil	<ul style="list-style-type: none"> • Damage to the hydrogeological and ecological function of the soil resource 	<ul style="list-style-type: none"> • Policies: ECD 21, ECD 22, • See also various provisions under the environmental components of water and material assets
Water	<ul style="list-style-type: none"> • Adverse impacts upon the status of water bodies, including downstream bathing waters, arising from changes in quality, flow and/or morphology • Increase in the risk of flooding 	<ul style="list-style-type: none"> • Policies WS 9, WS 10, WS 11, WS12, WQ 1 to WQ 6, SW 1, SW 2, SW 3, SW 18 • (Flood) Policies SW 1 to SW 20 • (Flood) Objectives WDO 2, WDO 3, WDO 5 and WDO 7 • See also various provisions under the environmental components of soil and material assets
Material Assets	<ul style="list-style-type: none"> • Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts) • Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts) • Increases in waste levels 	<ul style="list-style-type: none"> • Water Infrastructure and Flooding Strategy, Objectives • Policies WS 1 to WS13, WW 1 to WW 13, WM 1 to WM 18 • Objectives WDO 1, WDO 8

Environmental Component	Potential Effect, if unmitigated	Mitigation Measures, including
Air and Climatic Factors	<ul style="list-style-type: none"> Emissions to air including greenhouse gas emissions and other emissions 	<ul style="list-style-type: none"> Policies EB 1, RE 10, GI 23 Objectives ERO 1 Overall approach by the Plan and all provisions relating to development and sustainable mobility in the County
Cultural Heritage	<ul style="list-style-type: none"> Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities 	<ul style="list-style-type: none"> Policies PS 1 to PS 21, CH1 to CH 9, VA 1 to VA8, ACA 1 to ACA 5, AH 1 to AH 11, AH 1 to AH 2, HF 1 Objectives PSO 1 to PSO 8, ACO 1 to ACO 4, CHO 1 to CHO 2, VAO 1 to VAO 2, ACAO 1 to ACAO 3, AO 1 to AO 5, HFO 01 to HFO 02
Landscape	<ul style="list-style-type: none"> Occurrence of adverse visual impacts and conflicts with the appropriate protection of statutory designations relating to the landscape 	<ul style="list-style-type: none"> Policies LA 1 to LA 7, LU 1 to LU 5, TA 1 to TA 4, WC 1 to WC 8, CU 1 to CU 4, PF 1 to PF 3, LL 1 to LL 5, SR 1 to SR2, WV 1 to WV 3 Objectives LO 1 to LO 11

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 the measures which will be used in order to monitor the likely significant effects of implementing the Plan.

Monitoring can enable, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action.

10.2 Indicators and Targets

Monitoring is based around indicators which allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives identified in Section 5 and used in the evaluation. Each indicator to be monitored is accompanied by the target(s) which were identified with regard to the relevant strategic actions.

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

The Monitoring Programme may be updated to deal with specific environmental issues - including unforeseen effects - as they arise. Such issues may be identified by the Council or identified to the Council by other agencies.

10.3 Sources

Measurements for indicators generally come from existing monitoring sources. Existing monitoring sources include those maintained by the Council and the relevant authorities e.g. the Environmental Protection Agency, the National Parks and Wildlife Service and the Central Statistics Office.

Internal monitoring of the environmental effects of grants of permission in the Council will provide monitoring of various indicators

and targets on a *grant of permission*⁸⁰ basis. Where significant effects - including positive, negative, cumulative and indirect - have the potential to occur upon, for example, entries to the RMP, entries to the RPS or ecological networks as a result of the undertaking of individual projects or multiple individual projects such instances should be identified and recorded and should feed into the monitoring evaluation.

10.4 Reporting

A stand-alone Monitoring Report on the significant environmental effects of implementing the Plan will be prepared in advance of the beginning of the review of the Plan. This report should address the indicators set out below.

The Council is responsible for the ongoing review of indicators and targets, collating existing relevant monitored data, the preparation of monitoring evaluation report(s), the publication of these reports and, if necessary, the carrying out of corrective action.

Kildare County Council is responsible for the implementation of the SEA Monitoring Programme including:

- Linking SEA monitoring output with the mid-term review of the Development Plan;
- Monitoring specific indicators and identifying any significant effects, including cumulative effects;
- Reviewing the effectiveness of monitoring/mitigation measures during the lifetime of the Plan; and
- Identifying any cumulative effects.

⁸⁰ The likely significant effects of development proposals on environmental sensitivities are further determined during the development management process. By documenting this determination (e.g. whether a proposed development will impact upon a Protected Structure or whether a proposed development can be adequately served with water services) while granting permissions, or at a later date, the requirement to monitor the effects of implementing the Plan can be achieved.

10.5 Thresholds

Thresholds at which corrective action will be considered include:

- The occurrence of flood events;
- Court cases taken by the Department of Arts, Heritage and the Gaeltacht regarding impacts upon archaeological heritage including entries to the RMP;
- Complaints received from statutory consultees regarding avoidable environmental impacts resulting from development which is granted permission under the Plan;
- Boil notices on drinking water; and
- Fish kills.

Table 10.1 Selected Indicators, Targets and Monitoring Sources

This table shows the indicators and targets which have been selected for monitoring the likely significant environmental effects of implementing the Plan, if unmitigated. A stand-alone Monitoring Report on the significant environmental effects of implementing the Plan will be prepared by Kildare County Council in advance of the beginning of the review of the Plan.

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Biodiversity, Flora and Fauna	B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive	B1: Maintenance of favourable conservation status for all habitats and species protected under National and International legislation to be unaffected by implementation of the Plan ⁸¹	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Department of Arts, Heritage and the Gaeltacht report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive (every 6 years). Department of Arts, Heritage and the Gaeltacht's National Monitoring Report for the Birds Directive under Article 12 (every 3 years). Consultations with the NPWS (at monitoring evaluation - see Section 10.4).
	B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the Plan	B2: No significant ecological networks or parts thereof which provide functional connectivity to be lost without remediation resulting from development provided for by the Plan	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). CORINE mapping resurvey (every c. 5 years). Review of Council Ecological Network Mapping
	B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan B3ii: Number of significant impacts on the protection of listed species	B3i: Avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan B3ii: No significant impacts on the protection of listed species	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Consultations with the NPWS (at monitoring evaluation - see Section 10.4).
Population and Human Health	PHH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors resulting from development provided for by the Plan, as identified by the Health Service Executive and Environmental Protection Agency	PHH1: No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan	<ul style="list-style-type: none"> Consultations with EPA and Health Service Executive (at monitoring evaluation - see Section 10.4).
Soil	S1: Soil extent and hydraulic connectivity	S1: To minimise reductions in soil extent and hydraulic connectivity	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).

⁸¹ Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

- no alternative solution available;
- imperative reasons of overriding public interest for the plan to proceed; and
- adequate compensatory measures in place.

SEA Environmental Report for the Kildare County Development Plan 2017-2023

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Water	W1i: 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) W1ii: Mandatory and Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)	W1i: Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' ⁸² by 2015 W1ii: To achieve - as a minimum - Mandatory values and, where possible, to achieve Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Data issued under the Water Framework Directive Monitoring Programme for Ireland (multi-annual). EPA <i>the Quality of Bathing Water in Ireland</i> reports.
	W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	W2: Not to affect the ability of groundwater to comply with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). Data issued under the Water Framework Directive Monitoring Programme for Ireland (multi-annual).
	W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	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>	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).
Material Assets	M1: Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan	M1: All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the Plan	<ul style="list-style-type: none"> Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).
	M2: 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 as a result of implementing the Plan	M2: 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	<ul style="list-style-type: none"> EPA The Provision and Quality of Drinking Water in Ireland reports (multi-annual). EPA Remedial Action List (every quarter).
	M3i: Total collected and brought household waste M3ii: Packaging recovered (t) by self-complying packagers	M3i: Minimise increases in and, where possible, reduce household waste generation M3ii: Maximise increases in packaging recovered (t) by self-complying packagers	<ul style="list-style-type: none"> EPA National Waste Reports EPA Ireland's Environment Reports
Air and Climatic Factors	C1: Percentage of population travelling to work, school or college by public transport or non-mechanical means	C1: An increase in the percentage of the population travelling to work, school or college by public transport or non-mechanical means	<ul style="list-style-type: none"> CSO Population Data (every c. 5 years).

⁸² Good status as defined by the WFD equates to approximately Q4 in the current national biological classification of rivers as set out by the EPA.

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Environmental Component	Selected Indicator(s)	Selected Target(s)	Source (Frequency)
Cultural Heritage	CH1: Percentage of entries to the Record of Monuments and Places - including Areas of Archaeological Potential and Significance (and the context of the above within the surrounding landscape where relevant) - protected from significant adverse effects arising from new development granted permission under the Plan	CH1: Protect entries to the Record of Monuments and Places - including Areas of Archaeological Potential and Significance (and their context of the above within the surrounding landscape where relevant) from significant adverse effects arising from new development granted permission under the Plan	<ul style="list-style-type: none"> • Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). • Consultation with Department of Arts, Heritage and the Gaeltacht (at monitoring evaluation - see Section 10.4).
	CH2: Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan	CH2: Protect entries to the Record of Protected Structures and Architectural Conservation Areas and their context from significant adverse effects arising from new development granted permission under the Plan	<ul style="list-style-type: none"> • Internal monitoring of likely significant environmental effects of grants of permission (grant by grant). • Consultation with Department of Arts, Heritage and the Gaeltacht (at monitoring evaluation - see Section 10.4).
Landscape	L1: Number of complaints received from statutory consultees regarding avoidable adverse visual impacts on the landscape resulting from development which is granted permission under the Plan	L1: No developments permitted which result in avoidable adverse visual impacts on the landscape resulting from development which is granted permission under the Plan	<ul style="list-style-type: none"> • Internal monitoring of likely significant environmental effects of grants of permission (grant by grant).

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.

Table 11.1 SEA Summary Table: Likely Significant Effects, Mitigation Measures and Indicators for Monitoring

Environmental Component	Potential Effect, if unmitigated	Mitigation Measures	Indicators for Monitoring
Biodiversity and Flora and Fauna	<ul style="list-style-type: none"> • Arising from both construction and operation of development and associated infrastructure: loss of/damage to biodiversity in designated sites (including Natura 2000 Sites and Wildlife Sites) and Annexed habitats and species, listed species, ecological connectivity and non-designated habitats; and disturbance to biodiversity and flora and fauna • Habitat loss, fragmentation and deterioration, including patch size and edge effects • Disturbance (e.g. due to noise and lighting along transport corridors) and displacement of protected species 	<ul style="list-style-type: none"> • Chapter 13: Natural Heritage and Green Infrastructure Aim • Policies: NH 1 to NH 16, GI 1 to GI 30, WE 2, EI 16, WC 4, PF 2, WS 13 • Objectives: NHO1 to NHO 10, GIO 1 to GIO 5 • See also various provisions under the environmental components of soil and water 	<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 without remediation resulting from development provided for by the Plan</p> <p>B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in designated sites including Wildlife Sites resulting from development provided for by the Plan</p> <p>B3ii: Number of significant impacts on the protection of listed species</p>
Population and Human Health	<ul style="list-style-type: none"> • Potential interactions if effects upon environmental vectors such as water and air are not mitigated 	<ul style="list-style-type: none"> • Environmental Services Aim • Policies: ECD 21, ECD 22, RS 3, RS 4, WM 2, WM 3, PC 1 to PC 10, WS 7 • Objectives: RSO 3 • See also various provisions under the environmental components of soil, water, air and material assets 	<p>PHH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors resulting from development provided for by the Plan, as identified by the Health Service Executive and Environmental Protection Agency</p>
Soil	<ul style="list-style-type: none"> • Damage to the hydrogeological and ecological function of the soil resource 	<ul style="list-style-type: none"> • Policies: ECD 21, ECD 22, • See also various provisions under the environmental components of water and material assets 	<p>S1: Soil extent and hydraulic connectivity</p> <p>Selected Indicator(s)</p>
Water	<ul style="list-style-type: none"> • Adverse impacts upon the status of water bodies, including downstream bathing waters, arising from changes in quality, flow and/or morphology • Increase in the risk of flooding 	<ul style="list-style-type: none"> • Policies WS 9, WS 10, WS 11, WS12, WQ 1 to WQ 6, SW 1, SW 2, SW 3, SW 18 • (Flood) Policies SW 1 to SW 20 • (Flood) Objectives WDO 2, WDO 3, WDO 5 and WDO 7 • See also various provisions under the environmental components of soil and material assets 	<p>W1i: 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>W1ii: Mandatory and Guide values as set by the EU Bathing Water Directive and transposing Bathing Water Quality Regulations (SI No. 79 of 2008)</p> <p>W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC</p> <p>W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk</p>

Environmental Component	Potential Effect, if unmitigated	Mitigation Measures	Indicators for Monitoring
Material Assets	<ul style="list-style-type: none"> Failure to provide adequate and appropriate waste water treatment (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts) Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean (water services infrastructure and capacity is needed to ensure the mitigation of potential conflicts) Increases in waste levels 	<ul style="list-style-type: none"> Water Infrastructure and Flooding Strategy, Objectives Policies WS 1 to WS13, WW 1 to WW 13, WM 1 to WM 18 Objectives WDO 1, WDO 8 	<p>M1: Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the Plan</p> <p>M2: Number of non-compliances in 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>M3i: Total collected and brought household waste</p> <p>M3ii: Packaging recovered (t) by self-complying packagers</p>
Air and Climatic Factors	<ul style="list-style-type: none"> Emissions to air including greenhouse gas emissions and other emissions 	<ul style="list-style-type: none"> Policies EB 1, RE 10, GI 23 Objectives ERO 1 Overall approach by the Plan and all provisions relating to development and sustainable mobility in the County 	<p>C1: Percentage of population travelling to work, school or college by public transport or non-mechanical means</p>
Cultural Heritage	<ul style="list-style-type: none"> Potential effects on protected and unknown archaeology and protected architecture arising from construction and operation activities 	<ul style="list-style-type: none"> Policies PS 1 to PS 21, CH1 to CH 9, VA 1 to VA8, ACA 1 to ACA 5, AH 1 to AH 11, AH 1 to AH 2, HF 1 Objectives PSO 1 to PSO 8, ACO 1 to ACO 4, CHO 1 to CHO 2, VAO 1 to VAO 2, ACAO 1 to ACAO 3, AO 1 to AO 5, HFO 1 to HFO 2 	<p>CH1: Percentage of entries to the Record of Monuments and Places - including Areas of Archaeological Potential and Significance (and the context of the above within the surrounding landscape where relevant) - protected from significant adverse effects arising from new development granted permission under the Plan</p> <p>CH2: Percentage of entries to the Record of Protected Structures and Architectural Conservation Areas and their context protected from significant adverse effects arising from new development granted permission under the Plan</p>
Landscape	<ul style="list-style-type: none"> Occurrence of adverse visual impacts and conflicts with the appropriate protection of statutory designations relating to the landscape 	<ul style="list-style-type: none"> Policies LA 1 to LA 7, LU 1 to LU 5, TA 1 to TA 4, WC 1 to WC 8, CU 1 to CU 4, PF 1 to PF 3, LL 1 to LL 5, SR 1 to SR2, WV 1 to WV 3 Objectives LO 1 to LO 11 	<p>L1: Number of complaints received from statutory consultees regarding avoidable adverse visual impacts on the landscape resulting from development which is granted permission under the Plan</p>

Appendix I Relationship with Legislation and Other Plans and Programmes

This appendix is not intended to be a full and comprehensive review of EU Directives, the transposing regulations or the regulatory framework for environmental protection and management. The information is not exhaustive and it is recommended to consult the Directive, Regulation, Plan or Programme to become familiar with the full details of each.

European				
Directive/ Protocol/ Strategy/Programme	High Level Aim/ Purpose/ Objective	Lower level objectives, actions etc.	Relevant legislation in Ireland	Relevance to the CDP
UN Kyoto Protocol and the Second European Climate Change Programme (ECCP II)	The UN Kyoto Protocol set of policy measures to reduce greenhouse gas emissions The Second European Climate Change Programme (ECCP II) aims to identify and develop all the necessary elements of an EU strategy to implement the Kyoto Protocol	<ul style="list-style-type: none"> The Kyoto Protocol is implemented through the European Climate Change Programme (ECCP II) EU member states implement measures to improve on or compliment the specified measures and policies arising from the ECCP 	National Policy Position and final Heads of the Climate Action and Low-Carbon Development Bill	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
EU 2020 climate and energy package	<ul style="list-style-type: none"> Binding legislation which aims to ensure the European Union meets its climate and energy targets for 2020 Aims to achieve a 20% reduction in EU greenhouse gas emissions from 1990 levels Aims to raise the share of EU energy consumption produced from renewable resources to 20% Achieve a 20% improvement in the EU's energy efficiency 	Four pieces of complimentary legislation: <ul style="list-style-type: none"> Reform of the EU Emissions Trading System (EU ETS) to include a cap on emission allowances in addition to existing system of national caps Member States have agreed national targets for non-EU ETS emissions from countries outside the EU Meet the national renewable energy targets of 16% for Ireland by 2020 Preparing a legal framework for technologies in carbon capture and storage 	The Framework for Climate Change Bill European Communities (Renewable Energy) Regulations 2011 (S.I. No. 147/2011)	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Habitats Directive (92/43/EEC)	<ul style="list-style-type: none"> Promote the preservation, protection and improvement of the quality of the environment, including the conservation of natural habitats and of wild fauna and flora Contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora Maintain or restore to favourable conservation status, natural habitats and species of wild fauna and flora of Community interest Promote the maintenance of biodiversity, taking account of economic, social, cultural and regional requirements. 	<ul style="list-style-type: none"> Propose and protect sites of importance to habitats, plant and animal species Establish a network of Natura 2000 sites hosting the natural habitat types listed in Annex I and habitats of the species listed in Annex II, to enable the natural habitat types and the species' habitats concerned to be maintained or, where appropriate, restored at a favourable conservation status in their natural range Carry out comprehensive assessment of habitat types and species present Establish a system of strict protection for the animal species and plant species listed in Annex IV 	European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011) The Wildlife Act 1976 and the Wildlife (Amendment) Act 2000	The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations

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<p>Birds Directive (2009/147/EC)</p>	<ul style="list-style-type: none"> • Conserve all species of naturally occurring birds in the wild state including their eggs, nests and habitats • Protect, manage and control these species and comply with regulations relating to their exploitation • The species included in Annex I shall be the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution 	<ul style="list-style-type: none"> • Preserve, maintain or re-establish a sufficient diversity and area of habitats for all the species of birds referred to in Annex 1. • Preserve, maintain and establish biotopes and habitats to include the creation of protected areas (Special Protection Areas); ensure the upkeep and management in accordance with the ecological needs of habitats inside and outside the protected zones, re-establish destroyed biotopes and creation of biotopes • Measures for regularly occurring migratory species not listed in Annex I is required as regards their breeding, moulting and wintering areas and staging posts along their migration routes. The protection of wetlands and particularly wetlands of international importance. 	<p>European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011)</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations</p>
<p>European Union Biodiversity Strategy to 2020</p>	<ul style="list-style-type: none"> • Aims to halt or reverse biodiversity loss and speed up the EU's transition towards a resource efficient and green economy • Halting the loss of biodiversity and the degradation of ecosystem services in the EU by 2020, and restoring them in so far as feasible 	<ul style="list-style-type: none"> • Outlines six targets and twenty actions to aid European in halting the loss to biodiversity and eco-system services • The six targets cover: <ul style="list-style-type: none"> ○ Full implementation of EU nature legislation to protect biodiversity ○ Maintaining, enhancing and protecting for ecosystems, and green infrastructure ○ Ensuring sustainable agriculture, and forestry ○ Sustainable management of fish stocks ○ Reducing invasive alien species ○ Addressing the global need to contribute towards averting global biodiversity loss 	<p>Actions for Biodiversity 2011-2016 Ireland's National Biodiversity Plan, 2011</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>

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<p>The Clean Air for Europe Directive (2008/50/EC)</p> <p>Fourth Daughter Directive (2004/107/EC)</p>	<ul style="list-style-type: none"> The CAFE Directive merges existing legislation into a single directive (except for the fourth daughter directive) Sets new air quality objectives for PM2.5 (fine particles) including the limit value and exposure related objectives Accounts for the possibility to discount natural sources of pollution when assessing compliance against limit values Allows the possibility for time extensions of three years (PM10) or up to five years (NO2, benzene) for complying with limit values, based on conditions and the assessment by the European Commission. The Fourth Daughter Directive lists pollutants, target values and monitoring requirements for the following: arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air 	<ul style="list-style-type: none"> Sets objectives for ambient air quality designed to avoid, prevent or reduce harmful effects on human health and the environment as a whole Aims to assess the ambient air quality in Member States on the basis of common methods and criteria; Obtains information on ambient air quality in order to help combat air pollution and nuisance and to monitor long-term trends and improvements resulting from national and Community measures; Ensures that such information on ambient air quality is made available to the public; Aims to maintain air quality where it is good and improving it in other cases; Aims to promote increased cooperation between the Member States in reducing air pollution. 	<p>Air Quality Standards Regulations 2011 (S.I. No. 180 of 2011)</p> <p>Arsenic, Cadmium, Mercury, Nickel and Polycyclic Aromatic Hydrocarbons in Ambient Air Regulations 2009 (S.I. No. 58 of 2009)</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations</p>
<p>Noise Directive 2002/49/EC</p>	<p>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 existing Community policy on noise reduction from source.</p>	<p>The Directive requires competent authorities in Member States to:</p> <ul style="list-style-type: none"> Draw up strategic noise maps for major roads, railways, airports and agglomerations, using harmonised noise indicators 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. <p>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.</p>	<p>Environmental Noise Regulations 2006 (S.I. No. 140 of 2006)</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations</p>

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<p>Floods Directive (2007/60/EC)</p>	<ul style="list-style-type: none"> Establishes a framework for the assessment and management of flood risks Reduce adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods in the Community 	<ul style="list-style-type: none"> Assess all water courses and coast lines at risk from flooding through Flood Risk Assessment Prepare flood hazard maps and flood risk maps outlining the extent or potential of flooding and assets and humans at risk in these areas at River Basin District level (Article 3(2) (b)) and areas covered by Article 5(1) and Article 13(1) (b) in accordance with paragraphs 2 and 3 Implement flood risk management plans and take adequate and coordinated measures to reduce flood risk for the areas covered by the Articles listed above Inform the public and allow the public to participate in planning process 	<p>European Communities (Assessment and Management of Flood Risks) Regulations (S.I. 122/2010)</p> <p>European Union (Environmental Impact Assessment) (Flood Risk) Regulations 2012 (S.I. No. 470/2012)</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations</p>
<p>Water Framework Directive (2000/60/EC)</p>	<ul style="list-style-type: none"> Establish a framework for the protection of water bodies to include inland surface waters, transitional waters, coastal waters and groundwater and their dependent wildlife and habitats Preserve and prevent the deterioration of water status and where necessary improve and maintain "good status" of water bodies Promote sustainable water usage The Water Framework Directive repealed the following Directives: <ul style="list-style-type: none"> The Drinking Water Abstraction Directive Sampling Drinking Water Directive Exchange of Information on Quality of Surface Freshwater Directive Shellfish Directive Freshwater Fish Directive Groundwater (Dangerous Substances) Directive Dangerous Substances Directive 	<ul style="list-style-type: none"> Protect, enhance and restore all water bodies and meet the environmental objectives outlined in Article 4 of the Directive Achieve "good status" for all waters by December 2015 Manage water bodies based on identifying and establishing river basins districts Involve the public and streamline legislation Prepare and implement a River Basin Management Plan for each river basin districts identified and a Register of Protected Areas Establish a programme of monitoring for surface water status, ground water status and protected areas Recover costs for water services 	<p>European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003) (as amended)</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations</p>
<p>Groundwater Directive (2006/118/EC)</p>	<ul style="list-style-type: none"> Protect, control and conserve groundwater Prevent the deterioration of the status of all bodies of groundwater Implements measures to prevent and control groundwater pollution, including criteria for assessing good groundwater chemical status and criteria for the identification of significant and sustained upward trends and for the definition of starting points for trend reversals. 	<ul style="list-style-type: none"> Meet minimum groundwater standards listed in Annex 1 of Directive Meet threshold values adopted by national legislation for the pollutants, groups of pollutants and indicators of pollution which have been identified as contributing to the characterisation of bodies or groups of bodies of groundwater as being at risk, also taking into account Part B of Annex II 	<p>European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9/2010) (as amended)</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations</p>

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<p>Bathing Water Directive (2006/7/EC)</p>	<ul style="list-style-type: none"> • Preserve, protect and improve the quality of the environment and to protect human health by complementing the Water Framework Directive 2000/60/EC 	<ul style="list-style-type: none"> • Identify all bathing waters and define the length of the bathing season • Monitor bathing water quality as per Annex 1, Column A at the frequency outlined in Annex IV of the Directive • Determine the quality status of the bathing water • Achieve at least 'sufficient' standard by 2015 with the aim increase the standard to 'excellent' or 'good' • Prepare, review and update a bathing water profile of each in accordance with Annex III • Manage bathing water areas in exceptional circumstances to prevent an adverse impact on bathing water quality and on bathers' health • Provide public information on bathing water quality 	<p>Bathing Water Quality (Amendment) Regulations 2008 (S.I. No. 79 of 2008) (as amended)</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations</p>
<p>Drinking Water Directive (98/83/EC)</p>	<ul style="list-style-type: none"> • Improve and maintain the quality of water intended for human consumption • Protect human health from the adverse effects of any contamination of water intended for human consumption by ensuring that it is wholesome and clean 	<ul style="list-style-type: none"> • Set values applicable to water intended for human consumption for the parameters set out in Annex I • Set values for additional parameters not included in Annex I, where the protection of human health within national territory or part of it so requires. The values set should, as a minimum, satisfy the requirements of Article 4(1) (a) • Implement all measures necessary to ensure that regular monitoring of the quality of water intended for human consumption is carried out, in order to check that the water available to consumers meets the requirements of this Directive and in particular the parametric values set in accordance with Article 5 • Ensure that any failure to meet the parametric values set in accordance with Article 5 is immediately investigated in order to identify the cause • Ensure that the necessary remedial action is taken as soon as possible to restore its quality and shall give priority to their enforcement action • Undertake remedial action to restore the quality of the water where necessary to protect human health • Notify consumers when remedial action is being undertaken except where the competent authorities consider the non-compliance with the parametric value to be trivial 	<p>European Union (Drinking Water) Regulations 2014 (S.I. No. 106 of 2007) (as amended)</p> <p>European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003)</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations</p>

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<p>Urban Waste Water Treatment Directive (91/271/EEC)</p>	<ul style="list-style-type: none"> • This Directive concerns the collection, treatment and discharge of urban waste water and the treatment and discharge of waste water from certain industrial sectors • The objective of the Directive is to protect the environment from the adverse effects of waste water discharges 	<ul style="list-style-type: none"> • Urban waste water entering collecting systems shall before discharge, be subject to secondary treatment • Annex II requires the designation of areas sensitive to eutrophication which receive water discharges • Establishes minimum requirements for urban waste water collection and treatment systems in specified agglomerations to include special requirements for sensitive areas and certain industrial sectors 	<p>European Communities (Urban Waste Water Treatment) Regulations 2001 (S.I. No. 254/2001)</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations</p>
<p>Environmental Liability Directive (2004/35/EC)</p>	<ul style="list-style-type: none"> • Establish a framework of environmental liability based on the 'polluter-pays' principle, to prevent and remedy environmental damage 	<ul style="list-style-type: none"> • Relates to environmental damage caused by any of the occupational activities listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities; damage to protected species and natural habitats caused by any occupational activities other than those listed in Annex III, and to any imminent threat of such damage occurring by reason of any of those activities, whenever the operator has been at fault or negligent • Where environmental damage has not yet occurred but there is an imminent threat of such damage occurring, the operator shall, without delay, take the necessary preventive measures • Where environmental damage has occurred, the operator shall, without delay, inform the competent authority of all relevant aspects of the situation and take all practicable steps to immediately control, contain, remove or otherwise manage the relevant contaminants and/or any other damage factors in order to limit or to prevent further environmental damage and adverse effects on human health or further impairment of services and the necessary remedial measures, in accordance with Article 7. • The operator shall bear the costs for the preventive and remedial actions taken pursuant to this Directive • The competent authority shall be entitled to initiate cost recovery proceedings against the operator • The operator may be required to provide financial security guarantees to ensure their responsibilities under the directive are met 	<p>European Communities (Environmental Liability) Regulations, 2008</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations</p>

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<p>SEA Directive (2001/42/EC)</p>	<ul style="list-style-type: none"> • Contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development • Provide for a high level of protection of the environment by carrying out an environmental assessment of plans and programmes which are likely to have significant effects on the environment 	<ul style="list-style-type: none"> • Carry out an environmental assessment for plans or programmes referred to in Articles 2 to 4 of the Directive • Prepare an environmental report which identifies, describes and evaluates the likely significant effects on the environment of implementing the plan or programme and reasonable alternatives that consider the objectives and the geographical scope of the plan or programme • Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission • Consult other Member States where the implementation of a plan or programme is likely to have transboundary environmental effects • Inform relevant authorities and stakeholders on the decision to implement the plan or programme • Issue a statement to include requirements detailed in Article 9 of the Directive • Monitor and mitigate significant environmental effects identified by the assessment 	<p>European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (S.I. No. 435/ 2004) (as amended)</p> <p>Planning and Development (Strategic Environmental Assessment) Regulations 2004 (S.I. No. 436/2004) (as amended)</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations</p>
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<p>EIA Directive (2011/92/EU as amended by 2014/52/EU)</p>	<ul style="list-style-type: none"> Requires the assessment of the environmental effects of public and private projects which are likely to have significant effects on the environment Aims to assess and implement avoidance or mitigation measures to eliminate environmental effects, before consent is given of projects likely to have significant effects on the environment by virtue, inter alia, of their nature, size or location are made subject to a requirement for development consent and an assessment with regard to their effects. Those projects are defined in Article 4 	<ul style="list-style-type: none"> All projects listed in Annex I are considered as having significant effects on the environment and require an EIA For projects listed in Annex II, a "screening procedure" is required to determine the effects of projects on the basis of thresholds/criteria or a case by case examination. This should take into account Annex III. The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case and in accordance with Articles 4 to 12, the direct and indirect effects of a project on the following factors: human beings, fauna and flora, soil, water, air, climate and the landscape, material assets and the cultural heritage, the interaction between each factor Consult with relevant authorities, stakeholders and public allowing sufficient time to make a submission before a decision is made The information to be provided by the developer in accordance with paragraph 1 shall include at least: <ul style="list-style-type: none"> a description of the project comprising information on the site, design and size of the project; a description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects; the data required to identify and assess the main effects which the project is likely to have on the environment; an outline of the main alternatives studied by the developer and an indication of the main reasons for his choice, taking into account the environmental effects; a non-technical summary of the information referred to each of the above 	<p>European Communities (Environmental Impact Assessment) Regulations 1989 (S.I. No. 349/1989) (as amended)</p> <p>European Union (Environmental Impact Assessment) (Flood Risk) Regulations 2012 (S.I. No. 470/2012)</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of the Directive and transposing regulations</p>
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National				
Policy/ Framework / Initiative / Strategy	High Level Aim/ Purpose/ Objective	Lower level relevant objectives, actions etc.	Relevant legislation	Relevance to the CDP
Infrastructure and Capital Investment 2012-16: Medium Term Exchequer Framework	<ul style="list-style-type: none"> Reviews infrastructure and capital spending over a medium timeframe to ensure investment is made in the best areas Identifies gaps in existing infrastructure that require addressing to aid economic recovery, social cohesion and environmental sustainability 	<p>The approach identifies four main components of the investment strategy as follows:</p> <ul style="list-style-type: none"> Economic infrastructure – encompassing transport networks, energy provision and telecommunications capacity Investment in the productive sector and human capital – such as direct supports for enterprise development; science, technology and innovation advancement; supports for tourism, agriculture, fisheries and forestry; and capital investment in education infrastructure Environmental infrastructure – including our waste and water systems and investment for environmental sustainability Critical social investment – such as the health service and social housing programmes 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Smarter Travel Initiative 2012-2016	Sustainable transport investment programme to encourage transport initiatives such as cycling, car sharing, the use of public transport etc.	Limerick, Dungarvan and Westport were targeted demonstration areas for smarter transport initiatives and allocated funds to implement same	not applicable	In combination with this Initiative the CDP will contribute towards smarter travel and associated positive environmental effects.
Smarter Travel – A Sustainable Transport Future – A New Transport Policy for Ireland 2009 – 2020 (2009)	<ul style="list-style-type: none"> Outlines a policy for how a sustainable travel and transport system can be achieved Sets out five key goals: <ul style="list-style-type: none"> To reduce overall travel demand. To maximise the efficiency of the transport network. To reduce reliance on fossil fuels. To reduce transport emissions. To improve accessibility to transport. 	<ul style="list-style-type: none"> Others lower level aims include: <ul style="list-style-type: none"> reduce distance travelled by private car and encourage smarter travel, including focusing population growth in areas of employment and to encourage people to live in close proximity to places of employment ensuring that alternatives to the car are more widely available, mainly through a radically improved public transport service and through investment in cycling and walking improving the fuel efficiency of motorised transport through improved fleet structure, energy efficient driving and alternative technologies strengthening institutional arrangements to deliver the targets 	not applicable	In combination with this Policy the CDP will contribute towards smarter travel and associated positive environmental effects.

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Ireland's First National Cycle Policy Framework (2009)	<ul style="list-style-type: none"> • Outlines objectives and actions aimed at developing a strong cycle network in Ireland • Sets out 19 specific objectives, and details the 109 actions, aimed at ensuring that a cycling culture is developed 	<ul style="list-style-type: none"> • Sets a target where 10% of all journeys will be made by bike by 2020 • Proposes the planning, infrastructure, communication, education and stakeholder participations measures required to implement the initiative 	not applicable	In combination with this Framework the CDP will contribute towards smarter travel and associated positive environmental effects.
Scoping Study for a National Cycle Network (NCN)	<ul style="list-style-type: none"> • Investigated the feasibility of developing a National Cycle Network for recreational routes in rural areas, urban areas and connecting larger urban areas • The scoping study and subsequent workshops resulted in a recommended National Cycle Network 	not applicable	not applicable	In combination with this Study the CDP will contribute towards smarter travel and associated positive environmental effects.
Strategic Framework for Integrated Land use and Transport (SFILT) – Department of Transport, Tourism and Sport	<ul style="list-style-type: none"> • Presents the findings and conclusions of a steering group which was convened and tasked with overseeing the preparation of an integrated, evidence-based framework that would guide key land transport investment decisions. 	Key features of the framework policy include the following: <ul style="list-style-type: none"> • Focus on economic growth • Principles to frame future investment 	not applicable	In combination with this Study the CDP will contribute towards smarter travel and associated positive environmental effects.
National Climate Change Strategy 2007 – 2012 (2007)	<ul style="list-style-type: none"> • Outlines measures to be undertaken to meet greenhouse gas emission commitments 	not applicable	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007 – 2020 (2007)	<ul style="list-style-type: none"> • White paper setting out a framework for delivering a sustainable energy future in Ireland • Outlines strategic Goals for: <ul style="list-style-type: none"> ○ Security of Supply ○ Sustainability of Energy ○ Competitiveness of Energy Supply 	The underpinning Strategic Goals are: <ul style="list-style-type: none"> • Ensuring that electricity supply consistently meets demand • Ensuring the physical security and reliability of gas supplies to Ireland • Enhancing the diversity of fuels used for power generation • Delivering electricity and gas to homes and businesses over efficient, reliable and secure networks • Creating a stable attractive environment for hydrocarbon exploration and production • Being prepared for energy supply disruptions 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Climate Change Adaptation Framework (DECLG, 2012)	The National Climate Change Adaptation Framework provides a strategic policy focus to ensure adaptation measures are taken across different sectors and levels of government to reduce Ireland's vulnerability to the negative impacts of climate change.	Actions include those relating to: <ul style="list-style-type: none"> • Research and Knowledge Base • Governance • Local Plans • Stakeholder Consultation 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management

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National Renewable Energy Action Plan	<ul style="list-style-type: none"> A strategic approach for Ireland including measures to meet European targets for 2020 including Ireland's 16% target of gross final consumption to come from renewables by 2020 	not applicable	Renewable Energy Directive 2009/28/EC	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Energy Efficiency Action Plan for Ireland 2007 – 2020 (2007)	<ul style="list-style-type: none"> This is the second National Energy Efficiency Action Plan for Ireland 	<ul style="list-style-type: none"> The Plan reviews the original 90 actions outlined in the first Plan and updates/renews/removes them as appropriate 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Sustainable Development – A Strategy for Ireland (1997)	<ul style="list-style-type: none"> Provides an analysis and a strategic framework for sustainable development in Ireland Identifies the approaches required to support sustainable development 	not applicable	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Wildlife Act of 1976 Wildlife (Amendment) Act, 2000	<ul style="list-style-type: none"> The act provides protection and conservation of wild flora and fauna 	<ul style="list-style-type: none"> Provides protection for certain species, their habitats and important ecosystems Give statutory protection to NHAs Enhances wildlife species and their habitats Includes more species for protection 	not applicable	The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation
Actions for Biodiversity 2011-2016 Ireland's National Biodiversity Plan, 2011	<ul style="list-style-type: none"> Sets out strategic objectives, targets and actions to conserve and restore Ireland's biodiversity and to prevent and reduce the loss of biodiversity in Ireland and globally 	<ul style="list-style-type: none"> To mainstream biodiversity in the decision-making process across all sectors To substantially strengthen the knowledge base for conservation, management and sustainable use of biodiversity To increase awareness and appreciation of biodiversity and ecosystems services To conserve and restore biodiversity and ecosystem services in the wider countryside To conserve and restore biodiversity and ecosystem services in the marine environment To expand and improve on the management of protected areas and legally protected species To substantially strengthen the effectiveness of international governance for biodiversity and ecosystem services 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management

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<p>The Planning System and Flood Risk Management – Guidelines for Planning Authorities (2009)</p>	<ul style="list-style-type: none"> • Sets out comprehensive mechanisms for the incorporation of flood risk identification, assessment and management into the planning process • Ensures flood risk is a key consideration in preparing development plans and local area plans and in the assessment of planning applications • Implementation of the Guidelines is through actions at national, regional, local authority and site-specific levels 	<ul style="list-style-type: none"> • Avoid inappropriate development in areas at risk of flooding • Avoid new developments increasing flood risk elsewhere, including that which may arise from surface water run-off • Ensure effective management of residual risks for development permitted in floodplains • Avoid unnecessary restriction of national, regional or local economic and social growth • Improve the understanding of flood risk among relevant stakeholders • Ensure that the requirements of EU and national law in relation to the natural environment and nature conservation are complied with at all stages of flood risk management. 	<p>Planning and Development Act 2000 (as amended)</p> <p>S.I. No. 122/2010 EC (Assessment and Management of Flood Risks) Regulations 2010</p> <p>S.I. No. 470/2012 European Union (Environmental Impact Assessment) (Flood Risk) Regulations 2012.</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of these Guidelines</p>
<p>European Communities (Water Policy) Regulations of 2003 (SI 722 of 2003)</p> <p>European Communities (Water Policy) Regulations of 2003 (SI 350 of 2014)</p>	<ul style="list-style-type: none"> • Transpose the Water Framework Directive into legislation • Outlines the general duty of public authorities in relation to water • Identifies the competent authorities in charge of water policy (amended to Irish Water in 2013) and gives EPA and the CER the authority to regulate and supervise their actions 	<ul style="list-style-type: none"> • Implements River basin districts and characterisation of RBDs and River Basin Management Plans • Requires the public to be informed and consulted on the Plan and for progress reports to be published on RBDs • Implements a Register of protected areas, Classification systems and Monitoring programmes for water bodies • Allows the competent authority to recover the cost of damage/destruction of status of water body • Outlines environmental objectives and programme of measures and environmental quality standards for priority substances • Outlines criteria for assessment of groundwater 	<p>Water Framework Directive 2000/60/EC</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation</p>
<p>European Communities Environmental Objectives (Surface waters) Regulations of 2009 (SI 272 of 2009)</p>	<ul style="list-style-type: none"> • Transpose the requirements of the Water Framework Directive into Irish Legislation 	<ul style="list-style-type: none"> • Outlines environmental objectives to be achieved for surface water bodies • Outlines surface water quality standards • Establishes threshold values for the classification and protection of surface waters against pollution and deterioration in quality 	<p>Water Framework Directive 2000/60/EC</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation</p>
<p>European Communities Environmental Objectives (Groundwater) Regulations of 2010 (SI 9 of 2010)</p>	<ul style="list-style-type: none"> • Transpose the requirements of the Groundwater Directive 2006/118/EC into Irish Legislation 	<ul style="list-style-type: none"> • Outlines environmental objectives to be achieved for groundwater bodies of groundwater against pollution and deterioration in quality • Sets groundwater quality standards • Outlines threshold values for the classification and protection of groundwater 	<p>Water Framework Directive 2000/60/EC</p> <p>Groundwater Directive (2006/118/EC)</p> <p>European Communities Environmental Objectives (Groundwater) Regulations 2010 (S.I. No. 9/2010) (as amended)</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation</p>

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<p>Water Pollution Acts 1977 to 1990</p>	<ul style="list-style-type: none"> The Water Pollution Acts allow Local Authorities the authority regulate and supervise actions relating to water in their division 	<p>The Water Pollution Acts enable local authorities to:</p> <ul style="list-style-type: none"> prosecute for water pollution offences; attach appropriate pollution control conditions in the licensing of effluent discharges from industry, etc., made to waters; issue notices ("section 12 notices") to farmers, etc., specifying measures to be taken within a prescribed period to prevent water pollution; issue notices requiring a person to cease the pollution of waters and requiring the mitigation or remedying of any effects of the pollution in the manner and within the period specified in such notices; seek court orders, including High Court injunctions, to prevent, terminate, mitigate or remedy pollution/its effects; prepare water quality management plans for any waters in or adjoining their functional areas 	<p>Water Services Act 2013</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation</p>
<p>European Communities (Urban Waste Water Treatment) Regulations 2001 (S.I. No. 254/2001)</p>	<ul style="list-style-type: none"> Transpose the Urban Waste Water Treatment Directive into Irish Legislation Aims to protect receiving waters from environmental damage arising from Urban Wastewater 	<ul style="list-style-type: none"> Sets out the legislative requirements for urban waste water collection and treatment systems Provides for monitoring programmes of discharges Specifies threshold values and minimum standards for water quality 	<p>Urban Waste Water Treatment Directive (91/271/EEC)</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation</p>

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<p>Water Services Act 2007</p> <p>Water Services (Amendment) Act 2012</p> <p>Water Services Act (No. 2) 2013</p>	<ul style="list-style-type: none"> Provides the water services infrastructure Outlines the responsibilities involved in delivering and managing water services Identifies the authority in charge of provision of water and waste water supply Irish Water was given the responsibility of the provision of water and wastewater services in the amendment act during 2013, therefore these services are no longer the responsibility of the 34 Local Authorities in Ireland 	<p>Key strategic objectives include:</p> <ul style="list-style-type: none"> Ensuring Irish Water delivers infrastructural projects that meet key public health, environmental and economic objectives in the water services sector. Ensuring the provision of adequate water and sewerage services in the gateways and hubs listed in the National Spatial Strategy, and in other locations where services need to be enhanced. Ensuring good quality drinking water is available to all consumers of public and group water supplies, in compliance with national and EU drinking water standards Ensuring the provision of the remaining infrastructure needed to provide secondary wastewater treatment, for compliance with the requirements of the EU Urban Wastewater Treatment Directive. Promoting water conservation through Irish Water's Capital Investment Plan, the Rural Water Programme and other measures. Monitoring the on-going implementation of septic tanks inspection regime and the National Inspection Plan for Domestic Waste Water Treatment Systems. Ensuring a fair funding model to deliver water services. Overseeing the establishment of an economic regulation function under the CER. 	<p>not applicable</p>	<p>The Council is obliged to comply with, as relevant and appropriate, the requirements of this legislation</p>
<p>Irish Water's Water Services Strategic Plan 2015 and associated Proposed Capital Investment Plan 2014-2016</p>	<ul style="list-style-type: none"> This Water Services Strategic Plan sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. It details current and future challenges which affect the provision of water services and identifies the priorities to be tackled in the short and medium term. 	<p>Six strategic objectives as follows:</p> <ul style="list-style-type: none"> Meet Customer Expectations. Ensure a Safe and Reliable Water Supply. Provide Effective Management of Wastewater. Protect and Enhance the Environment. Support Social and Economic Growth. Invest in Our Future. 	<p>The Water Services (No. 2) Act (2013)</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>
<p>National Spatial Strategy 2002-2020 (2002)</p>	<ul style="list-style-type: none"> Planning framework for Ireland Aims to achieve a better balance of social, economic and physical development across Ireland, supported by effective planning 	<ul style="list-style-type: none"> Proposes that areas of sufficient scale and critical mass will be built up through a network of gateways, hubs and key town 	<p>Planning and Development Act 2000 (as amended)</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>

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Grid25 Implementation Programme	<ul style="list-style-type: none"> Framework for the development of the electricity transmission grid in the short, medium and long terms, to support a long-term sustainable and reliable electricity supply 	<ul style="list-style-type: none"> Seeks to implement the provisions of the 2007 Government White Paper on Energy - "Delivering a Sustainable Energy Future for Ireland" in terms of development of electricity transmission infrastructure 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Landscape Strategy 2015	<ul style="list-style-type: none"> Aims to implement the European Landscape Convention in Ireland by providing for specific measures to promote the protection, management and planning of the landscape. 	<p>The objectives of the National Landscape Strategy are to:</p> <ul style="list-style-type: none"> Recognise landscapes in law Develop a National Landscape Character Assessment; Develop Landscape Policies; Increase Landscape Awareness; Identify Education, Research and Training Needs; and Strengthen Public Participation. 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Rural Development Programme	<ul style="list-style-type: none"> The National Rural Development Programme, prepared by the Department of Agriculture, Fisheries and Food, sets out a national programme based on the EU framework for rural development and prioritises improving the competitiveness of agriculture, improving the environment and improving the quality of life in rural areas 	<p>At a more detailed level, the programme also:</p> <ul style="list-style-type: none"> Supports structural change at farm level including training young farmers and encouraging early retirement, support for restructuring, development and innovation; Aims to improve the environment, biodiversity and the amenity value of the countryside by support for land management through funds such as Natura 2000 payments etc.; and Aims to improve quality of life in rural areas and encouraging diversification of economic activity through the implementation of local development strategies such as non-agricultural activities 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Forestry Programme 2014-2020	<ul style="list-style-type: none"> Represents Ireland's proposals for 100% State aid funding for a new Forestry Programme for the period 2014 – 2020. 	<p>Measures include the following:</p> <ul style="list-style-type: none"> Afforestation and Creation of Woodland NeighbourWood Scheme Forest Roads Reconstitution Scheme Woodland Improvement Scheme Native Woodland Conservation Scheme Knowledge Transfer and Information Actions Producer Groups Innovative Forest Technology Forest Genetic Reproductive Material Forest Management Plans 	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management

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National Peatlands Strategy (draft/in preparation)	<ul style="list-style-type: none"> This Draft Strategy, prepared by the National Parks and Wildlife Service, will, when finalised, establish principles in relation to Irish peatlands in order to guide Government policy. The Draft Strategy aims to provide a framework for which all of the peatlands within the State can be managed responsibly in order to optimise their social, environmental and economic contribution. 	not applicable	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
National Biodiversity Action Plan	<ul style="list-style-type: none"> This Action Plan sets out an integrated strategy for collective delivery of the potential benefits of bioenergy resources across the agriculture, enterprise, transport, environment and energy sectors. 	Includes detailed actions for the electricity sector, transport fuel sector, heat sector, research and development sector.	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Flood Risk Management Plans arising from National Catchment Flood Risk Assessment and Management Programme	<ul style="list-style-type: none"> The national Catchment Flood Risk Assessment and Management (CFRAM) programme commenced in Ireland in 2011 and is being overseen by the Office of Public Works. The CFRAM Programme is intended to deliver on core components of the National Flood Policy, adopted in 2004, and on the requirements of the EU Floods Directive. The Programme is being implemented through CFRAM Studies which are being undertaken for each of the six river basin districts in Ireland. 	CFRAM Studies are being undertaken for all River Basin Districts. The studies are focusing on areas known to have experienced flooding in the past and areas that may be subject to flooding in the future either due to development pressures or climate change. In 2016 Flood Risk and Hazard Maps were published. The final output from the studies will be CFRAM Plans which will be finalised in 2017. The Plans will define the current and future flood risk in the River Basin Districts and set out how this risk can be managed.	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
Regional and Inter-County				
Plan / Programme / Guidelines	High Level Aim/ Purpose/ Objective	Lower level relevant objectives, actions etc.	Relevant legislation in Ireland	Relevance to the CDP
Regional Planning Guidelines for the Greater Dublin Area	<ul style="list-style-type: none"> Provides a long-term strategic planning framework for the development of the Greater Dublin Area 	<ul style="list-style-type: none"> Aim to give regional effect to the National Spatial Strategy Guide the Development Plans and lower tier plans of planning authorities 	Requirement of the Planning and Development Act (2000), as amended	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management

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<p>Eastern and South Eastern River Basin Management Plans and associated Programmes of Measures</p>	<ul style="list-style-type: none"> Establish a framework for the protection of water bodies at River Basin District (RBD) level Preserve, prevent the deterioration of water status and where necessary improve and maintain "good status" of water bodies in that RBD before 2015 Promote sustainable water usage 	<ul style="list-style-type: none"> Aim to protect and enhance all water bodies in the RBD and meet the environmental objectives outlined in Article 4 of the Water Framework Directive Identify and manages water bodies in the RBD Establish a programme of measures for monitoring and improving water quality in the RBD Involve the public through consultations 	<p>Requirement of the Water Framework Directive (2000/60/EC)</p> <p>European Communities (Water Policy) Regulations, 2003 (SI No. 722) (as amended)</p> <p>Guidelines for the Establishment of River Basin District Advisory Councils (RBDAC)</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>
<p>Water Quality Management Plans</p>	<ul style="list-style-type: none"> Ensure that the quality of waters covered by the plan is maintained Maintain and improve the quantity and quality of water included in the Plan scope 	<ul style="list-style-type: none"> Monitoring of water bodies against quality standards Outlines management programmes for water catchments Purpose is to maintain and improve the quantity and quality of groundwater 	<p>Water Pollution Acts 1977 to 1990</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>
<p>Management Plans for Natura 2000 sites</p>	<p>Article 6(1) of the Habitats Directive requires that Member States establish the necessary conservation measures for Special Area of Conservation involving, if need be, appropriate management plans specifically designed for the sites or integrated into other development plans.</p>	<p>Integrated Management Plans can be practical, achievable and sustainable and have regard to all relevant ecological, cultural, social and economic considerations and with special regard to local communities.</p>	<p>Habitats Directive</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>
<p>Greater Dublin Area Transport Strategy 2016-2035</p>	<p>This Strategy provides a framework for the planning and delivery of transport infrastructure and services in the Greater Dublin Area over the next two decades. It also provides a transport planning policy around which other agencies involved in land use planning, environmental protection, and delivery of other infrastructure such as housing, water and power, can align their investment priorities. It is, therefore, an essential component, along with investment programmes in other sectors, for the orderly development of the Greater Dublin Area over the next 20 years.</p>	<p>Detailed infrastructure proposals are presented by mode of transport in the Strategy, as follows:</p> <ul style="list-style-type: none"> Heavy Rail Infrastructure; Light Rail Infrastructure; Bus Infrastructure; Cycling Infrastructure; Walking; and Road Network. <p>Additional sections address the issues of freight movement, parking provision, the provision of park and ride sites and transport demand management.</p>	<p>Dublin Transport Authority Act 2008</p> <p>Public Transport Regulation Act 2009</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>

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<p>Greater Dublin Area Cycle Network Plan</p>	<ul style="list-style-type: none"> • Sets out a ten-year cycling strategy for Counties Dublin, Kildare, Meath and Wicklow • Plan to increase regions cycle network dramatically 	<p>Aims to identify and determine:</p> <ul style="list-style-type: none"> • The Urban Cycle Network at the Primary, Secondary and Feeder level • The Inter-Urban Cycle Network linking the relevant sections of the Urban Network including the elements of the National Cycle Network within the GDA including linkages to key transport locations outside of urban areas such as airports and ports • The Green Route Network being cycle routes for development of tourist, recreational and leisure purposes. 	<p>not applicable</p>	<p>In combination with this Plan the CDP will contribute towards smarter travel and associated positive environmental effects.</p>
<p>Outputs from the Eastern and South Eastern Catchment Flood Risk Assessment and Management Programme</p>	<ul style="list-style-type: none"> • The national Catchment Flood Risk Assessment and Management (CFRAM) programme commenced in Ireland in 2011 and is being overseen by the Office of Public Works. The CFRAM Programme is intended to deliver on core components of the National Flood Policy, adopted in 2004, and on the requirements of the EU Floods Directive. The Programme is being implemented through CFRAM Studies which are being undertaken for each of the six river basin districts in Ireland. 	<p>CFRAM Studies are being undertaken for all River Basin Districts. The studies are focusing on areas known to have experienced flooding in the past and areas that may be subject to flooding in the future either due to development pressures or climate change. In 2016 Flood Risk and Hazard Maps were published. The final output from the studies will be CFRAM Plans which will be finalised in 2017. The Plans will define the current and future flood risk in the River Basin Districts and set out how this risk can be managed.</p>	<p>not applicable</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>
<p>Eastern-Midlands Regional Waste Management Plan 2015</p>	<p>The regional plan provides the framework for waste management for a period of six years and sets out a range of policies and actions in order to meet specified mandatory and performance targets. The strategic vision of the regional waste plan is to rethink our approach to managing waste, by viewing our waste streams as valuable material resources, leading to a healthier environment and sustainable commercial opportunities for our economy.</p>	<p>Strategic objectives:</p> <ul style="list-style-type: none"> • Policy & Legislation • Prevention • Resource Efficiency • Coordination • Infrastructure Planning • Enforcement & Regulations • Protection • Other Wastes 	<p>European Directive (2008/98/EC) on Waste (Waste Framework Directive); Council Decision (200/532/EC) establishing a list of wastes; and Regulation (1013/2006) on the shipments of waste</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>
<p>Freshwater Pearl Mussel Basin Management Plans</p>	<ul style="list-style-type: none"> • Identifies the current status of the species and the reason for loss or decline • Identifies measure required to improve or restore current status 	<ul style="list-style-type: none"> • Identifies pressures on Freshwater Pearl Mussels for each of the designated populations in Ireland • Outlines restoration measures required to ensure favourable conservation status 	<p>Requirement of Water Framework Directive (2000/60/EC) and Habitats Directive (92/43/EEC) European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003) European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477/2011) The Wildlife Act 1976 and the Wildlife (Amendment) Act 2000</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>

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County and Local				
Plan / Programme / Guidelines	High Level Aim/ Purpose/ Objective	Lower level relevant objectives, actions etc.	Relevant legislation in Ireland	Relevance to the CDP
County Kildare Biodiversity and Heritage Plans	<p>The County Kildare Heritage Plan provides one framework through which the Council works actively with other partner organisations on initiatives to further our understanding, protection and appreciation of Kildare’s natural heritage resource.</p> <p>The current County Kildare Biodiversity Action Plan 2009 – 2014 sets out a strategy for increasing our understanding and appreciation of biodiversity in the County along with measures for enhancing the protection of this valuable resource.</p>	The County Kildare Biodiversity Action Plan, an action of the County Wicklow Heritage Plan, contains 26 actions that ensure the conservation and enhancement of biodiversity.	not applicable	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management
<p>County and Town Development Plans including:</p> <p>Athy Town Development Plan 2012-2018</p> <p>Naas Town Development Plan 2011-2017</p> <p>South County Dublin Development Plan 2016 – 2022</p> <p>Fingal County Development Plan 2017-2023</p> <p>Dublin City Development Plan 2016 - 2022</p> <p>Meath County Development Plan 2013-2019</p> <p>Offaly County Development Plan 2015-2021</p> <p>Laois County Development Plan 2011-2017</p> <p>Carlow County Development Plan 2015-2021</p> <p>Wicklow County Development Plan 2016-2022</p>	<ul style="list-style-type: none"> • Statutory documents which provide detailed planning policies to ensure proper planning and sustainable development of towns/County’s • Set out objectives for future planning and development • The County Development Plans provide the key parameters for lower tier plans such the future population and housing targets and sets out the broad strategy for the future economic and social development of these towns. 	<ul style="list-style-type: none"> • Identify issues of relevance to the town/county and outlines principles for future development • Is consistent with relevant County/Town Development Plans, National Spatial Strategy and Regional Planning Guidelines 	Planning and Development Act 2000 (as amended)	To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management

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<p>Local land use plans including: Sallins Local Area Plan 2016 - 2022, Monasterevin Local Area Plan 2016-2022, Kilcock Local Area Plan 2015 - 2021, Kilcullen LAP 2014-2020, Newbridge LAP 2013-2019, Maynooth LAP 2013-2019, Kilcullen LAP 2008, Collinstown LAP, Kilcock LAP 2009, Clane Local Area Plan, Celbridge LAP Leixlip LAP, Monasterevin LAP 2008, Sallins LAP 2009, Edenderry Local Area Plan 2011-2017 Naas Northwest, Quadrant Masterplan 2007</p>	<ul style="list-style-type: none"> • Statutory documents which provide detailed planning policies to ensure proper planning and sustainable development of Local Area's • Set out objectives for future planning and development 	<ul style="list-style-type: none"> • Identify issues of relevance to the area and outlines principles for future development of area • Is consistent with relevant County/Town Development Plans, National Spatial Strategy and Regional Planning Guidelines 	<p>Planning and Development Act 2000 (as amended)</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>
<p>Groundwater Protection Scheme for Kildare</p>	<p>Undertaken jointly between the GSI and Kildare County Council, the purpose of the scheme is to preserve the quality of groundwater, particularly for drinking water purposes, for the benefit of present and future generations.</p>	<p>The scheme identifies the vulnerability of areas within the County and Groundwater protection responses for existing and new potentially polluting activities.</p>	<p>Groundwater Protection Schemes Guidelines document (DELG/EPA/GSI, 1999).</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>
<p>Local Economic and Community Plan for County Kildare 2016-2021</p>	<p>The LECP is to set out, for a six-year period, the objectives and actions needed to promote and support the economic development and the local and community development of the local authority area, both by itself directly and in partnership with other economic and community development stakeholders.</p> <p>The LECP and development plan are closely linked. The LECP must be consistent with the Core Strategy of the development plan and the development plan will need to underpin the aims of the LECP where there are 'land use' or 'development' related objectives contained in the LECP. The development plan gives effect to the objectives of the LECP.</p>	<p>The LECP relate to issues including:</p> <ul style="list-style-type: none"> • Population • Urban/Rural County in the Greater Dublin Area • Economic and Employment • Housing • Education • A commuting county • Health and Wellbeing • Safe Communities • Children and young people • Community, Recreation, Arts & Culture • Environmental Quality • Economically Sustainable County 	<p>Local Government Reform Act 2014</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>

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<p>Draft National Bioenergy Plan (DCENR, currently under preparation)</p>	<ul style="list-style-type: none"> • To harness the market opportunities presented by bioenergy in order to achieve economic development, growth and jobs • To increase awareness of the value, opportunities and societal benefits of developing bioenergy • To ensure that bioenergy developments do not adversely impact the environment and its living and non-living resources 	<p>The plan aims to ensure secure and sustainable supplies of competitively priced energy to all consumers.</p>	<p>Strategy for Renewable Energy 2012-2020</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>
<p>Renewable Electricity Policy and Development Framework (DCENR) recently commenced</p>	<p>The reduction of greenhouse gas emissions, to combat climate change, and of carbon fuel imports,</p> <p>To safeguard security of energy supply, are among the principal objectives of energy policy in Ireland.</p>	<p>To develop a Policy and Development Framework for renewable electricity generation on land to serve both the All Island Single Electricity Market and any future regional market within the European Union, with particular focus on large scale projects for indigenous renewable electricity generation. This will, inter alia, provide guidance for planning authorities and An Bord Pleanála.</p>	<ul style="list-style-type: none"> • Government White Paper: Delivering a Sustainable Energy Future for Ireland, 2007-2020. • National Renewable Energy Action Plan (NREAP) • The Strategy for Renewable Energy 2012-2020 • Policy Statement on the Strategic Importance of Transmission and Other Energy Infrastructure • Energy White Paper: Ireland’s Transition to a Low Carbon Energy Future 2015 – 2030. 2050 Low Carbon Roadmaps 	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>

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<p>National Mitigation Plan (DECLG) currently being prepared</p>	<p>To ensure that Ireland can effectively and equitably contribute to the EU objective of reducing greenhouse gas emissions by 80-95% and for the purposes of compliance with EU law, it is necessary to develop a low-carbon development strategy for the period to 2050.</p>	<p>The policy sets a fundamental national objective to achieve transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050.</p>	<ul style="list-style-type: none"> • National Climate Change Strategy 2000; • National Climate Change Strategy 2007-2012; • National Climate Change Adaptation Framework 2012; • National Policy Position on Climate Action and Low-Carbon Development 2014; and • Climate Action and Low Carbon Development Bill 2015 	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>
<p>National Alternative Fuels Infrastructure for the Transport Sector (DTTAS)</p>	<p>Reduce overall travel demand</p> <p>Maximise the efficiency of the transport network</p> <p>Reduce reliance on fossil fuels</p> <p>Reduce transport emissions</p> <p>Improve accessibility to transport</p>	<p>Reducing reliance on fossil fuels and switching to the use of alternatives will be an integral part of the transport sector’s efforts to decarbonise, and this will also be reflected in Ireland’s first National Mitigation Plan, which is due to be published in 2017</p>	<p>EU legislation – Setting CO2 Emissions Performance Standards for Light Duty Vehicles EU White Paper on Transport European Strategy for Low Emission Mobility Smarter Travel – A New Transport Policy for Ireland 2009–2020 EU emissions policy National Policy Position on Climate Action and Low Carbon Development</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>
<p>Food Wise 2025 (DAFM)</p>	<p>The Department of Agriculture, Food and the Marine is currently preparing a national strategy for the Agri-Food Sector up to 2025 which will outline the key actions required to ensure that the agri-food sector (primary agriculture, the food and beverage industry, fisheries and fish processing, forestry and forestry processing) maximises its contribution to overall economic growth, job creation and environmental sustainability over the coming decade and builds upon the progress achieved under Food Harvest 2020.</p>	<p>Food Wise 2025 sets out the practical ways in which aspirations for growth can be made tangible and the sector supported as it strives for new levels of success in the decade ahead.</p>	<p>2030 EU Climate and Energy Policy Framework.</p>	<p>To cumulatively contribute towards – in combination with other users and bodies – the achievement of the objectives of the regulatory framework for environmental protection and management</p>