

EDENDERRY LOCAL AREA PLAN 2017-2023

Strategic Environmental Assessment Environmental Report

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Offaly County Council

DATE
September 2017

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GLOSSARY

<i>Appropriate Assessment</i>	An assessment of the effects of a plan or project on the Natura 2000 network. The Natura 2000 network comprises Special Protection Areas under the Birds Directive, Special Areas of Conservation under the Habitats Directive and Ramsar sites designated under the Ramsar Convention (collectively referred to as European sites).
<i>Baseline environment:</i>	A description of the present state of the environment of the P/P area.
<i>Birds Directive:</i>	Council Directive of 2nd April 1979 on the conservation of wild birds (79/409/EEC).
<i>Cumulative effects:</i>	Effects on the environment that result from incremental changes caused by the strategic action together with other past, present, and reasonably foreseeable future actions. These effects can result from individually minor but collectively significant actions taking place over time or space.
<i>Data:</i>	Includes environmental data, proxy data, and any other relevant statistical data.
<i>Designated authority</i> <i>(Designated environmental authority):</i>	An organisation that must be consulted in accordance with the SEA Regulations. For Ireland these are the Environmental Protection Agency (EPA), the Department of the Environment, Community and Local Government (DoECLG) and the Department of Agriculture, Food & the Marine (DoAFM).
<i>Environmental Assessment:</i>	The preparation of an environmental report, the carrying out of consultations, the taking into account of the environmental report and the results of the consultations in decision-making and the provision of information on the decision (in accordance with Articles 4 to 9 of the SEA Directive).
<i>Environmental Characteristics:</i>	Environmental resources, issues and trends in the area affected by the P/P.
<i>Environmental indicator:</i>	An environmental indicator is a measure of an environmental variable over time, used to measure achievement of environmental objectives and targets.
<i>Environmental objective:</i>	Environmental objectives are broad, overarching principles which should specify a desired direction of environmental change.
<i>Environmental receptors:</i>	Include biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage (including architectural and archaeological) and landscape as listed in the SEA Directive. This list is not exhaustive, and can include other receptors which may arise for a particular P/P.

<i>Environmental Report (ER):</i>	A document required by the SEA Directive as part of an environmental assessment which identifies, describes and evaluates the likely significant effects on the environment of implementing a plan or programme.
<i>Environmental targets:</i>	A target usually underpins an objective often having a time deadline that should be met and should be accompanied by limits or thresholds.
<i>Evolution of the baseline:</i>	A description of the future state of the baseline in the absence of a plan or programme assuming 'business as usual' or 'do nothing' scenarios, depending on which is more reasonable for the P/P being proposed.
<i>Habitats Directive:</i>	Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora.
<i>Hierarchy of Plans:</i>	Both higher and lower level P/P relevant to the P/P being assessed.
<i>Indirect effect:</i>	Any aspect of a P/P that may have an impact (positive or negative) on the environment, but that is not a direct result of the proposed P/P. May also be referred to as a secondary effect
<i>Interrelationships:</i>	Associations or linkages, related to environmental impact of the proposed P/P usually on environmental receptors.
<i>Issues Paper:</i>	Paper produced as part of the consultation process, usually for Land Use Plans, to facilitate consultation with stakeholders on key issues.
<i>Key environmental issues:</i>	Those significant environmental issues, which are of particular relevance and significance within a P/P area and/or the zone of influence of that P/P. These issues should be identified during SEA Scoping process.
<i>Key environmental receptors:</i>	Aspects of the environment likely to be significantly impacted by the proposed P/P.
<i>Material Assets:</i>	Critical infrastructure essential for the functioning of society such as: electricity generation and distribution, water supply, wastewater treatment transportation etc.
<i>Member States:</i>	Those countries that belong to the European Union.
<i>Mitigation measures:</i>	Measures to avoid, minimise/reduce, or as fully as possible, offset/compensate for any significant adverse effects on the environment, as a result of implementing a P/P.
<i>Monitoring:</i>	A continuing assessment of environmental conditions at, and surrounding, the plan or programme. This determines if effects occur as predicted or if operations remain within acceptable limits, and if mitigation measures are as effective as predicted.

The primary purpose of monitoring is to identify significant environmental effects which arise during the implementation stage against those predicted during the plan preparation stage.

<i>Monitoring Programme:</i>	A detailed description of the monitoring arrangements to be put in place to carry out the monitoring of the impact of the proposed P/P on the environment including; frequency of monitoring, who has responsibility for monitoring, and responses if monitoring identifies significant negative impacts.
<i>Non-technical summary:</i>	A summary of the findings of the ER, summarized under the headings listed in Annex 1 of the SEA Directive that can be readily understood by decision-makers and by the general public. It should accurately reflect findings of ER.
<i>Plan or Programme:</i>	<p>Including those co-financed by the European Community, as well as any modifications to them:</p> <ul style="list-style-type: none"> - which are subject to preparation and/or adoption by an authority at national, regional or local level or which are prepared by an authority for adoption, through a legislative procedure by Parliament or Government, and - which are required by legislative, regulatory or administrative provisions. In accordance with the SEA Directive, P/P that require SEA are those that fulfil the conditions listed in Article 2(a) and Article 3 of the SEA Directive.
<i>Post-mitigation residual impacts:</i>	Environmental effects that remain after mitigation measures have been employed.
<i>Proxy data:</i>	Is a measure of activity resulting from a P/P which provides information on environmental impact without the need for a direct measure of an environmental receptor for example, an increase in the number of vehicles (activity resulting from a P/P) can provide information on the impact on air quality and greenhouse gases without having to measure the concentration of these parameters in the receiving environmental receptor.
<i>Public:</i>	One or more natural or legal persons and, in accordance with national legislation or practice, their associations, organisations or groups.
<i>Reasonable alternatives:</i>	Alternatives should take into account the objectives and geographical scope of the P/P. There can be different ways of fulfilling the P/P objectives, or of dealing with environmental problems. The alternatives should be realistic, capable of implementation and should fall within the legal and geographical competence of the authority concerned.
<i>Scoping:</i>	The process of deciding the content and level of detail of a SEA, including the key environmental issues, likely significant environmental effects and alternatives which need to be considered, the assessment methods to be employed, and the structure and contents of the Environmental Report.

<i>Screening:</i>	<p>The determination of whether implementation of a P/P would be likely to have significant environmental effects on the environment.</p> <p>The process of deciding whether a P/P requires SEA.</p>
<i>SEA Directive:</i>	Directive 2001/42/EC 'on the assessment of the effects of certain plans and programmes on the environment'.
<i>SEA Statement:</i>	<p>A statement summarising:</p> <ul style="list-style-type: none"> - how environmental considerations have been integrated into the P/P - how the ER, the opinions of the public and designated authorities, and the results of transboundary consultations have been taken into account - the reasons for choosing the P/P as adopted in the light of other reasonable alternatives.
<i>Secondary effect:</i>	Effects that are not a direct result of the P/P, same as indirect effect.
<i>Short-term effects:</i>	These are typical of those effects that may occur during construction stage of a development, for example, the increased traffic going to and from a site during construction, or, the noise associated with construction activities.
<i>Significant effects:</i>	Effects on the environment, including on issues such as biodiversity, population, human health, fauna, flora, soil, water, air, climatic factors, material assets, cultural heritage including architectural and archaeological heritage, landscape and the interrelationship between the above factors.
<i>Statutory authority:</i>	The authority by which or on whose behalf the plan or programme is prepared.
<i>Statutory Instrument (S.I.):</i>	Any order, regulation, rule, scheme or bye-law made in exercise of a power conferred by statute.
<i>Synergistic effect:</i>	Effects that, when totalled, result in a greater or lesser effect than the sum of the individual effects.

1.0 Non-Technical Summary

1.1 Introduction

Offaly County Council has prepared a Local Area Plan (LAP) for Edenderry 2017-2023. This Local Area Plan (hereafter referred to as the LAP) is a land use plan and overall strategy for the development of Edenderry over the period of 2017 to 2023. The core objective of the Environmental Report is to gather a clear understanding of the likely environmental consequences, both positive and negative and to indicate where necessary, how improvements can be incorporated to improve its environmental performance.

This section of the Environmental Report is a Non-Technical Summary. The purpose of the Non-Technical Summary is to ensure that the key findings of the Environmental Report are readily understood by both decision makers and the general public. To this end, technical jargon has been avoided where possible.

The preparation of the Edenderry LAP runs in parallel with the Strategic Environmental Assessment (SEA), Appropriate Assessment (AA) Screening and Strategic Flood Risk Assessment which influenced the preparation of the Local Area Plan.



In this regard, environmental considerations were considered throughout the LAP process and have been incorporated into the final LAP ensuring a continuation of a qualitative environment.




The Environmental Report is the primary element in the SEA process and accompanied the Draft LAP while on public display.

1.2 Steps in the SEA Process

Table 1.1 below highlights the key stages in the SEA process and the progress made to date:

Table 1.1: Key Stages in SEA Process

Stage	Description	Status
Scoping	<p>The scoping of the proposed Draft LAP was carried out in accordance with Article 5(4) of the SEA Directive (2001/42/EC).</p> <p>The principal purpose of the scoping stage is to decide upon the range of issues to be included in the Environmental Report and level of detail appropriate to each subject. An overview of the relevant environmental issues requiring further analysis are given consideration in the Environmental Report. By highlighting any significant issues at an early stage, it ensures that the matters are firmly to the forefront when considering the policies and objectives of the LAP and reduces the Environmental potential for relevant issues to be overlooked.</p>	<p>Completed</p> 
Consultation with Statutory Bodies	<p>Submission have been received from the following bodies:</p> <ul style="list-style-type: none"> • The Environmental Protection Agency 	<p>Completed</p> 

Stage	Description	Status
	<ul style="list-style-type: none"> Inland Fisheries Ireland 	
Preparation of Draft LAP & SEA Environmental Report	<ul style="list-style-type: none"> A multi-disciplinary team was established to create policy consistent documents and to examine the effects on the environment of implementing the objectives and policies. Policies and objectives created in the Draft LAP were assessed in the Environmental Report and proposed measures for the area examined. Feedback has been received throughout the LAP preparation process & Environmental Report preparation. Mitigation measures have been discussed and chosen. Monitoring incorporated into existing methods. 	Completed 
Consultation	Consultation on the Draft LAP and accompanying Environmental Report, Appropriate Assessment Screening and Strategic Flood Risk Assessment.	Completed 
Evaluation of submissions	Evaluation of submissions and observations were made on the Draft LAP, Environmental Report, Strategic Flood Risk Assessment and Appropriate Assessment Screening.	Completed 
Finalisation of the LAP, Environmental Report & SEA Statement	Finalisation of the Edenderry LAP and SEA Environmental Report. SEA Statement prepared identifying how environmental considerations and consultations have been integrated into the final plan.	Current
Monitoring	Monitoring of significant environmental effects over the lifetime of the Edenderry LAP 2017-2023	Future Stage

1.3 Content of Environmental Report

The Environmental Report considers all of the following in accordance with the requirements of the SEA Directive:

1. Biodiversity and Flora & Fauna
2. Population
3. Human Health
4. Soil and Geology
5. Water
6. Air Quality and Climate Change
7. Material Assets
8. Architectural, Archaeological and Cultural Heritage
9. Landscape
10. Interaction of the foregoing

Table 1.2 below summarises the content of the Environmental Report. In the first instance, the Environmental Report details the current condition of the environment of the study area of the LAP under each of the sub-headings set out above. The Environmental Report also summarises the significant environmental pressures that may affect each of the environmental topics and the current (baseline) condition of the environment.

Table 1.2: Content of Environmental Report

Section	Description
1. Non-Technical Summary	A brief summary of the Environmental Report, its main points and conclusions.
2. Introduction & Background	A description of the proposed LAP and a summary of its key policies and objectives. This section outlines the purpose of the SEA process, SEA requirements, its benefits and how the plan and Environmental Report have progressed.
3. Methodology	The steps taken in preparation of the SEA, including the methods used and technical difficulties encountered.
4. Review of Relevant Policies, Plans and Programmes.	The relationship of the LAP to other relevant plans and programmes is highlighted.
5. Baseline Environment	A description of the current environment of the plan area of the LAP is given, highlighting any existing environmental problems. This exercise results in a comprehensive baseline against which the likely effects of implementing the Draft Plan can be examined.
6. Strategic Environmental Objectives	A number of environmental protection objectives which have been established at international, EU or national Level and are relevant to the Plan are listed. Following this, a description of how the objectives and any environmental considerations have been taken into account in the preparation of the LAP is given.
7. Alternatives	An assessment of proposed alternatives to the Edenderry LAP are considered at this stage.
8. Strategic Environmental Assessment	An examination of the Edenderry LAP and policies in terms of their potential effects on the various environmental parameters.
9. Mitigation Measures	Should potentially significant effects be discovered, measures to avoid, reduce or offset these effects are proposed and integrated into the LAP.
10. Monitoring	Proposals for monitoring the significant effects of the LAP on the environment are put forward. A number of indicators of change and targets are identified and existing monitoring arrangements are utilised.

11. Conclusion	A conclusion with regard to the overall potential impact on the environment resulting from the implementation of the Edenderry LAP.
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1.4 Policy Context

The preparation of the Edenderry LAP is considered within the context of a hierarchy of policies, plans and strategies of international, national, regional and local level as detailed in Section 3 of the Environmental Report. Other relevant plans, policies and programmes were considered in this report and are referenced throughout.

1.5 Screening for Appropriate Assessment

The need for 'Appropriate Assessment' (AA) arises out of Article 6(3) and 6(4) of the Habitats Directive (92/43/EEC) (on the conservation of natural habitats and of wild fauna and flora), which requires that proposed plans and programmes undergo screening for likely or potential effects on European Sites (also Natura 2000 sites) arising from their implementation.

The Edenderry LAP is subject to separate screening assessment for AA.

1.6 Strategic Environmental Objectives, Targets and Indicators

Strategic Environmental Objectives (SEOs) assist in the prediction, description and monitoring of impacts on the environment as a result of the LAP. The Strategic Environmental Objectives are environmental protection objectives which have been established at international, EU or national Level, and are relevant to the LAP as set out in Table 1.3 below. These Strategic Environmental Objectives take into account feedback from Statutory Authorities on the Scoping Report.

Table 1.3: Strategic Environmental Objectives (SEOs)

Environmental Component	Strategic Environmental Objectives
BIODIVERSITY, FLORA & FAUNA	B1: Conserve and protect the diversity of habitats and species by limiting adverse impacts on habitats and species of conservation concern.
POPULATION	P1: Improve people's quality of life based on high quality residential, working and recreational environments and on sustainable travel pattern
SOILS & GEOLOGY	S1: Protect quality and quantity of existing soil and geology.
WATER	W1: Improve/maintain and protect water quality and the management of watercourses to comply with the standards of the Water Framework Directive and incorporate the objectives of the Floods Directive into sustainable planning and development.
AIR CLIMATE & NOISE	A1: Maintain and promote continuing environmental improvement where possible of emissions to air (including noise emissions).
MATERIAL ASSETS	M1: Make best use of existing infrastructure, promote the sustainable development of new infrastructure and promote the sustainable efficient use of resources.
CULTURAL HERITAGE	C1: Promote the protection and conservation of the archaeological, architectural and cultural heritage.
LANDSCAPE	L1: Conserve and enhance valued natural and historic landscapes and features within them.

1.7 Alternative Plan Scenarios

The SEA Directive requires the consideration of SEA Alternatives. This consideration is outlined in Chapter 7 of the Environmental Report.

Particular reference is drawn to the Core Strategy of the Offaly County Development plan which must be complied with. Six alternatives were considered in the drafting of the SEA and the preparation of the LAP:

- Alternative 1: To retain the land use zonings as per the existing Edenderry 2011-2017 LAP

Overview

- to allow completion of unfinished residential areas,
- to consolidate and encourage infill and brownfield site developments in the town core and
- to focus on the provision of services, community facilities and amenities responding to the rapid growth of the existing population.

- Alternative 2: Design and development of greenfield area to the north of Edenderry Town Hall, west of Clonmullen Lane, as a masterplan area.

Overview

- focusing on the delivery of large scale development,
- provision of new distributor road (to north),
- widening of existing road to east and access road to backlands of town centre area to south.
- Alternative 3: Development of Greenfield area to south east of the town on Tunnel Road/Rathangan Road.

Overview

- Focus of large scale residential development.
- Alternative 4: Development of lands off Dublin Road for residential purposes.
- Alternative 5: Development of all lands proposing/requesting residential land uses across the town and environs area at pre-draft stage.
- Alternative 6: Planned approach towards consolidated and coherent growth of Edenderry

Overview

- Facilitation of appropriate employment and enterprise for the town,
- Provision of quality residential environments to accommodate the targeted population growth in line with the core strategy of the Offaly CDP 2014-2020
- Town Centre revitalization, encouraging for the most economic and beneficial use of brownfield and infill sites and promoting regeneration.

Following consideration and assessment of the six development alternatives put forward, it was concluded that Alternative 6, which provides for consolidating growth through efforts to revitalise the Town Centre, using brownfield and infill sites for regeneration and facilitating appropriate employment and enterprise for the town was the most appropriate and sustainable for the future development of Edenderry.

This approach is most cognisant of the Strategic Environmental Objectives and would positively influence air quality, quality of life arising from a reduction commuting distances and times and visual impressions of the town

1.8 Evaluation of Edenderry LAP (Policies and Objectives)

The SEA aims to highlight the potential conflicts, if they are present, between the stated policies and objectives contained in the LAP with the Strategic Environmental Objectives. Furthermore, the assessment examines the potential impact arising from the adoption of the LAP policies and objectives on sensitive environmental receptors.

The process of SEA and the LAP formulation is an iterative one and environmental considerations have informed the LAP preparation. SEA is carried out in order to minimise the potential for significant adverse effects arising from adoption of the LAP. Where the environmental assessment identifies significant adverse effects, consideration is given in the first instance to avoid such

impacts. Where avoidance is not possible, the LAP will seek to lessen or offset those effects through mitigation measures.

In some instances, there is little or no relationship between the various policies/objectives and the respective environmental receptor. In some instances there is little or no relationship between the various Plan Policies/Objectives and the respective environmental receptor. Where this occurs, the potential impact is regarded as neutral and no further discussion is deemed necessary.

The assessment of the LAP provides a comparative evaluation of the environmental effect of implementing the stated policies and objectives of the Edenderry LAP and determines whether each measure is likely to have a positive, neutral, uncertain or negative relationship with the Strategic Environmental Objectives (SEO's) outlined in Chapter 6. Using the above SEOs, the policies and objectives of the LAP are evaluated in the context of their impact on these environmental objectives; the results of the assessment are presented in a table format below. The potential effects are categorised into Potential Positive Impacts, Uncertain impacts, Neutral or No relationship, Potential Negative impact

Where the evaluation identifies a potential uncertain or negative impact with the status of an SEO, the relevant SEO code and provision is entered into a Mitigation Table (Table 9.1) to assess what mitigation is available to offset uncertain or potentially negative impacts arising from the provision.

In general terms, the LAP, in its current form will have a positive effect on the environment as a whole.

1.9 Mitigation Measures

While every effort will be taken to ensure that the impact of the LAP on the environment is neutral to positive, certain unavoidable negative impacts may occur as a result of its adoption. The Environmental Report details mitigation measures to reduce or avoid identifiable adverse impacts in Table 9.1 in Section 9 of this report.

Similarly, monitoring of the LAP, in accordance with the Planning and Development Act, 2000 – 2014 will incorporate proposals to monitor various environmental receptors. A schedule of monitoring and reporting is proposed in order to ensure that any unforeseen negative impact is identified at the earliest opportunity and subsequently appropriate mitigation measures are put in place to eliminate or at a minimum limit the level of impact to an acceptable degree. Environmental Indicators, as prescribed in the EPA publication "Ireland's Environment: An Assessment 2012" are provided where relevant and presented as a yardstick against which the success of the LAP can be monitored.

In general terms, all proposals for development will be required to have due regard to the environmental considerations outlined in the final Plan. Proposals for development which are deemed contrary to the objectives and policies contained within the plan will not normally be permitted, and if permitted, not without the appropriate site and development specific mitigation measures. In addition, certain individual applications for developments within the county may be subject to individual Environmental Impact Assessment and Appropriate Assessment.

1.10 Local Area Plan Monitoring

Monitoring of the LAP and its implications on the environment is paramount to ensure that the Edenderry study area is not adversely affected by the adoption of the LAP.

It is proposed to build monitoring criteria on a series of indicators which measure changes in the environment, especially changes which are critical in terms of environmental quality, for example water or air pollution levels. A list of environmental indicators is provided in Table 10.1 in Section 10 of this Report. The indicators are based on the Strategic Environmental Objectives presented in Chapter 6 and have been derived from knowledge of the existing environmental issues within the study area

Where significant effects such as including positive, negative, cumulative and indirect have the potential to occur 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.

1.11 Sources

Measurements for indicators generally come from existing monitoring sources. Existing monitoring sources include those maintained by the relevant authorities including the National Transport Authority, the Environmental Protection Agency, the National Parks and Wildlife Service and the Central Statistics Office and the Local Authority itself.

The output of lower-tier environmental assessment and decision making – including a review of project approvals granted and associated documents – will also be utilised as part of the Monitoring Programme.

Where significant effects - including positive, negative, cumulative and indirect - have the potential to occur 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.

2.0 Introduction & Background

2.1 Introduction to Environmental Report

Offaly County Council has prepared a Local Area Plan (LAP) for Edenderry 2017-2023. This Local Area Plan (hereafter referred to as the Edenderry LAP) is a land use plan and overall strategy for the development of Edenderry over the period of 2017 to 2023. The core objective of this Environmental Report is to gather a clear understanding of the likely environmental consequences, both positive and negative and to indicate where necessary, how improvements can be incorporated to improve its environmental performance.

The SEA for the Edenderry LAP is carried out in order to comply with the requirements of the 'SEA Directive' (2001/42/EC) and the provisions of the Planning and Development (Strategic Environmental Assessment) Regulations 2004.

This Environmental Report should be read in conjunction with the Edenderry LAP, the Strategic Flood Risk Assessment and the Appropriate Assessment (AA) Screening carried out under the provisions of the EU Habitats Directive (1992/43/EEC).

The Environmental Report is the primary element in the SEA process and accompanied the LAP on public display.

2.2 Strategic Environmental Assessment

Strategic Environmental Assessment (SEA) is the formal, systematic environmental assessment of the likely significant effects of implementing a plan or programme. It is carried out during the preparation period of the plan or programme to ensure that environmental implications arising from its implementation is taken into account in decision-making prior to its finalisation.

2.2.1 SEA Legislative and Guideline Context

The requirement to undertake SEA derives from the 2001 European Community Directive 2001/42/EC (also known as the 'SEA Directive') on the assessment of the effects of certain plans and programmes on the environment. Article 1 of the SEA Directive states:

"The objective of this directive is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment."

The SEA Directive was subsequently transposed into Irish law through:

- **S.I. No. 435 of 2004** (*European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004*, as amended by **S.I. No. 200 of 2011** (*European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011*), and
- **S.I. No. 436 of 2004** (*Planning and Development (Strategic Environmental Assessment) Regulations 2004*, as amended by **S.I. No. 201 of 2011** (*Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011*) and **S.I. 262 of 2011** (*Planning and Development (Amendment) Regulations 2011*).

The preparation of the Environmental Report for the LAP has had particular regard to the above legislation and to a range of guidance documents on the implementation and practice of SEA, including:

Environmental Protection Agency

- 2016: GISEA Manual 2015.
- 2015: Development and Assessing Alternatives in Strategic Environmental Assessment (SEA).
- 2015: Integrating Climate Change into Strategic Environmental Assessment in Ireland – A Guidance Note.
- 2015: SEA Scoping Guidance Document.
- 2015: SEA Spatial Information Sources May 2015.
- 2013: SEA Pack.
- 2013: Integrated Biodiversity Impact Assessment – Streamlining AA, SEA and EIA Processes: Practitioner’s Manual.
- 2013: SEA Resource Manual for Local and Regional Planning Authorities – Integration of SEA Legislation and Procedures for Landuse Plans (Draft).
- 2008: SEA Process Checklist – Consultation Draft.
- 2003: Development of Strategic Environmental Assessment (SEA) Methodologies for Plans and Programmes in Ireland.

Department of Environment, Community and Local Government

- 2011: Circular Letter PSSP 6/2011: Further Transposition of EU Directive 2001/42/EC on Strategic Environmental Assessment (SEA).

Department of Environment, Heritage and Local Government

- 2008: Circular Letter SEA 1/08 & NPWS 1/08: Appropriate Assessment of Land Use Plans.
- 2004: Implementation of SEA Directive (2001/42/EC): Guidelines for Regional Authorities and Planning Authorities.

European Commission

- 2003: Implementation of Directive 2001/42 on the assessment of the effects of certain plans and programmes on the environment.

2.3 The Edenderry Local Area Plan 2017-2023

The Edenderry LAP is the primary tool available to Offaly County Council when assessing development proposals for the Edenderry area and aims to ensure that future developments in the area take place in a planned, structured and sustainable manner.

Offaly County Council has prepared the Edenderry LAP 2017-2023 to replace the existing Edenderry LAP. The LAP is being prepared under the provisions of the Planning and Development Act 2000 (as amended) to develop and improve in a sustainable manner the environmental, social economic and cultural assets of Edenderry.

The strategic vision for Edenderry as set out in the LAP is:

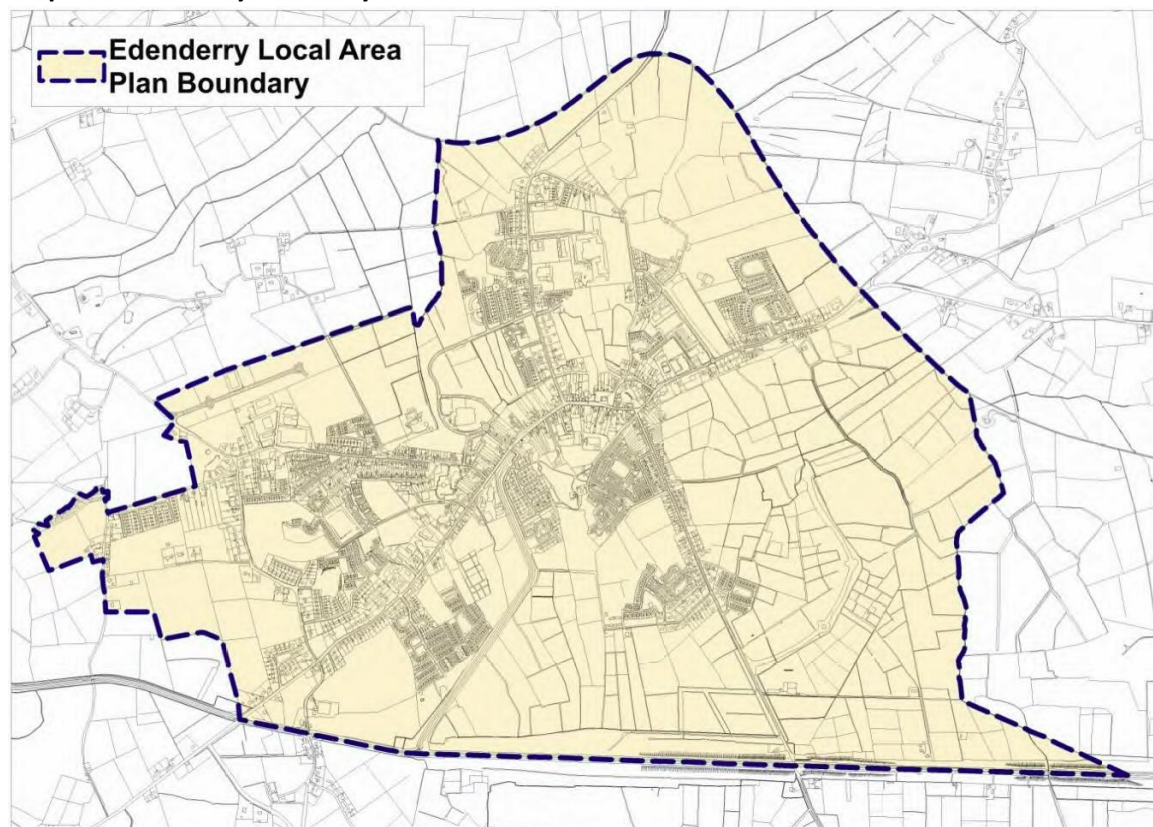
‘A vibrant, successful and sustainable town reinforced by strong local identity and civic pride.’

The mission to achieving this vision is built around the principle of the sustainable development of the town and encouraging development to take place in a consolidated and coherent manner. Offaly County Council is committed to actively pursuing this mission and impressing upon other stakeholders the need:

‘To work towards the consolidation and coherent economic growth of Edenderry’

Figure 2.1 below shows the LAP Boundary for Edenderry.

Map 2.1: Edenderry Boundary Area



2.4 Relationships with other relevant Plans and Programmes

The Edenderry LAP sits within a hierarchy of strategic plans and programmes, including those listed below and detailed in Section 4 of this Report. The LAP must comply with relevant higher level strategic plans such as policies and objectives of the relevant County Development Plan.

The LAP is subject to a number of high level environmental protection policies and objectives with which it must comply, including those which have been identified as Strategic Environmental Objectives in Section 6. Examples of Environmental Protection Objectives include the aims of the EU Habitats Directive - which is to contribute towards ensuring biodiversity through the conservation of natural habitats and of wild fauna and flora in the European territory of Member States - and the purpose of the Water Framework Directive - which is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwater which, among other things, avoids deterioration in the status of all water bodies and protects, enhances and restores all waters with the aim of achieving good status.

2.5 Implications for the Edenderry LAP

Article 9 of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004, as amended, sets out criteria for determining whether SEA should be undertaken on certain types of plans. Considering these criteria, Offaly County Council concluded that a SEA was required for the LAP, as it is within the mandatory requirement for SEA where the population for the preparation of a local area plan for an area has a target population of 5,000 persons or greater.

The findings of the SEA are set out in this Environmental Report, which accompanied the LAP on public display. These findings have been altered in order to take account of recommendations contained in submissions and/or in order to take account of any changes which are made to the LAP on foot of submissions. Offaly County Council also took into account the findings of this Environmental Report during their consideration of the Draft LAP and before it is finalised. When the LAP is finalised, a SEA Statement will be prepared which will summarise, inter alia, how environmental considerations have been integrated into the document.

3.0 Methodology

3.1 Introduction

The methodology used to carry out the Strategic Environmental Assessment (SEA) of the Edenderry LAP reflects the requirements of the SEA Directive (2001/42/EC), SEA Regulations (S.I. 435 & 436 of 2004, as amended by S.I. 200 & 201 of 2011 respectively) and various SEA Guidance documentation as noted in sub-section 2.2.1 of this Environmental Report.

The SEA process follows a sequential step by step process as set out in Table 3.1 and the preparation of the LAP is integrated with the SEA and AA processes as illustrated in Figure 3.1. The preparation of the LAP is finalised and this SEA Environmental Report, Strategic Flood Risk Assessment and a separate Appropriate Assessment Screening (AA) have been prepared to accompany the final LAP.

This Environmental Report takes account of the content of SEA scoping submissions from environmental authorities, submissions arising from public display of the LAP and submissions arising from the public display of the material alterations. The environmental impacts of the LAP have then been predicted, evaluated and mitigated.

Table 3.1 – Stages in the SEA Process

STAGE	DESCRIPTION
Screening	<p>The screening process is the first stage of the Strategic Environmental Assessment. Screening assesses the need to undertake a Strategic Environmental Assessment.</p> <p>In accordance with Section 14 A(1) of the Planning and Development Regulations, as amended, SEA must be carried out on the likely significant effects on the environment of implementing a Local Area Plan for towns with a population or target population of 5,000 or more; therefore a Strategic Environmental Assessment is a mandatory requirement for the implementation of the Draft Edenderry LAP 2017-2023.</p>
Scoping	<p>Scoping, which is the second stage in the SEA process, allows for determination of the range of key issues, to be addressed in the Environmental Report (Stage 3) as set out in S.I. 436/2004, as amended by S.I. 201 of 2011 and in Annex I of the SEA Directive.</p> <p>Scoping ensures that the SEA is focused on the relevant environmental issues and examines issues at the appropriate level of detail. The scoping stage also allows for consultation via a Scoping Report with the Statutory Authorities. By highlighting some of the significant issues at an early stage, it ensures that the issues are firmly to the forefront when considering each of the policies and objectives of the Draft LAP and reduces the possibility of relevant issues not being addressed.</p>
Consultation with Environmental Authorities	<p>Submissions were received from:</p> <ul style="list-style-type: none"> • The Environmental Protection Agency • Inland Fisheries Ireland <p>Submissions received from Environmental Authorities were reviewed and incorporated into the SEA process as appropriate.</p>

STAGE	DESCRIPTION
Preparation of Draft Edenderry LAP & SEA Environmental Report	<p>A multi-disciplinary team has been established to create policy consistent documents and to examine the effects on the environment of implementing the objectives and policies.</p> <p>Objectives created in the Draft LAP have been assessed in the Environmental Report and proposed measures for the area examined.</p> <p>Feedback has been received throughout the LAP preparation process & Environmental Report preparation</p> <p>Mitigation measures have been discussed and selected.</p> <p>Monitoring of implementation of proposed LAP</p>
Consultation	Consultation on the Draft Edenderry LAP and accompanying Environmental Report, Appropriate Assessment and Strategic Flood Risk Assessment.
Evaluation of submissions	Evaluation of submissions and observations made on the Draft LAP, Environmental Report, Strategic Flood Risk Assessment and Appropriate Assessment Screening.
Finalisation of the Edenderry LAP, Environmental Report & SEA Statement	Finalisation of the LAP and SEA Environmental Report. SEA Statement prepared identifying how environmental considerations and consultations have been integrated into the final LAP.
Monitoring	Monitoring of significant environmental effects over the lifetime of the Edenderry LAP 2017-2023

3.2 SEA Screening

The SEA Directive and Regulations state that full SEA is a mandatory requirement in respect of certain Plans or Programmes. In particular, Article 14A (1) (of S.I. 436 of 2004 as amended by S.I. 201 of 2011) determines that this mandatory requirement for SEA applies to the preparation of a local area plan for an area where the population or the target population is 5,000 persons or greater.

The population of the area of the Edenderry LAP 2017-2023 is greater than 5,000 persons (i.e. 7,480 persons, Census 2016) and as such, the preparation of the local area plan will be subject to full strategic environmental assessment.

3.3 Scoping

SEA Scoping allows for determination of the range of key issues, to be addressed in the environmental assessment and detailed in the Environmental Report. Scoping took place with the following environmental authorities:

- the Environmental Protection Agency
- The Minister of the Housing, Planning, Community and Local Government;

- the Minister of Communications, Climate Action and Environment
- the Minister of Agriculture, Food and the Marine
- The Minister of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, and
- The Seven adjoining planning authorities of Meath County Council, Kildare County Council, Laois County Council, Tipperary County Council, Galway County Council, Roscommon and Westmeath County Council.

3.3.1 Scoping Responses

Submissions were received from the following statutory consultees:

- The Environmental Protection Agency
- Inland Fisheries Ireland

Table 3.2 below outlines the issues raised in submissions and the response and how these issues have been addressed within the preparation of the Environmental Report.

Table 3.2 – Summary of Scoping Submissions

CONSULTEE AND COMMENTS	RESPONSE
Environmental Protection Agency	
<ul style="list-style-type: none"> • Acknowledged receipt of Scoping Report • Recommended <i>Ireland's Environment – An Assessment (EPA, 2016)</i> should be taken into account, as relevant and appropriate to the Plan area, in preparing the Draft Plan and associated SEA. • Guidance for integration of environmental considerations were also attached to the response. 	Comments and suggestions have been considered in the preparation of the Environmental Report
Inland Fisheries Ireland	
<ul style="list-style-type: none"> • Acknowledged receipt of Scoping Report and recommended the Environmental Report address not only water quality but also include the protection of the aquatic environment/habitat not only requires the protection of water quality but also necessitates the protection and maintenance of physical habitat and hydrological processes/regimes. 	Comments and suggestions have been considered in the preparation of the Environmental Report

3.4 Environmental Report

The information to be provided in the Environmental Report is set out in Annex I of the SEA Directive and reproduced in Schedule 2B of the Planning and Development Regulations 2001 (as inserted by Article 12 of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 as amended). This report contains the sections as outlined in Table 3.3.

In this SEA Environmental Report, which is placed on public display alongside the Edenderry LAP, the likely environmental effects of the LAP and the alternatives are predicted and their significance evaluated with regard to the environmental baseline. The Environmental Report provides stakeholders and the public with a clear understanding of the likely environmental consequences of implementing the LAP.

Mitigation measures to avoid or reduce potential negative effects posed by the the LAP are identified in Section 9.

The Environmental Report will be updated in order to take account of recommendations contained in submissions and to take account of changes which are made to the original LAP that is being placed on public display.

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

Table 3.3: SEA Report Structure

SECTION	DESCRIPTION
Non-Technical Summary	A brief summary of the Environmental Report, its main points and conclusions.
Introduction & Background	This section outlines the purpose of the Environmental Report and Strategic Environmental Assessment as well as providing a brief description of the LAP.
SEA Process	The steps taken in Strategic Environmental Assessment and in the preparation of the Environmental Report, including the methods used and technical difficulties encountered.
Review of Relevant Policies, Plans and Programmes	The relationship of the LAP to other relevant plans and programmes is highlighted.
Baseline Environment	A description of the current environment of the Edenderry LAP boundary area is given, highlighting any existing environmental problems. This exercise results in a comprehensive baseline against which the likely effects of implementing the LAP can be examined.
Strategic Environmental Objectives	A number of environmental protection objectives which have been established at international, EU or national Level and are relevant to the LAP are listed. Following this, a description of how the objectives and any environmental considerations have been taken into account in the preparation of the LAP is given.
Alternatives	An assessment of proposed alternatives to the approach as set out in the LAP are considered and assessed.
Environmental Assessment	An examination of the measures and objectives of the Plan in terms of its potential effects on the various Environmental parameters.
Mitigation Measures	Should potentially significant effects be discovered, measures to avoid, reduce or offset these effects are proposed and integrated into the final LAP, as appropriate.
Monitoring	Proposals for monitoring the significant effects of the LAP on the environment are put forward. A number of indicators of change

SECTION	DESCRIPTION
	and targets are identified and existing monitoring arrangements are utilised.



Figure 3.1 Outline of Edenderry Local Area Plan and integration with SEA Process

3.5 SEA Statement

When the Edenderry LAP is finalised, a SEA Statement will be prepared which will include information on:

- How environmental considerations have been integrated into the amended plan, highlighting the changes to the amended 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 other alternatives considered, identifying these alternatives, commenting on their potential effects and explaining why the final LAP was selected; and the measures decided upon to monitor the significant environmental effects of implementing of the plan.

3.6 Appropriate Assessment (AA)

The need for 'Appropriate Assessment' (AA) arises out of Article 6(3) and 6(4) of the Habitats Directive (92/43/EEC) (on the conservation of natural habitats and of wild fauna and flora).

An Appropriate Assessment (AA) Screening has also been carried out in accordance with Article 6 of the EU Habitats Directive and as required under the Planning and Development Acts 2000-2013. The AA Screening is a separate but parallel process that has influenced the SEA process in the drafting of the Local Area Plan. The Appropriate Assessment Screening specifically assesses the potential impact on Natura 2000 sites (and their conservation objectives) arising from the implementation of the plan based on the Screening Report and other supplementary information with the ultimate aim to avoid significant adverse impacts on these sites. The Screening Report determined that there is no requirement to proceed to Stage 2 of the AA as there is no significant detrimental effect identified as the result of implementation of the plan to the integrity of any European Site. The Appropriate Assessment Screening shall be published parallel to the LAP and Environmental Report.

3.7 Strategic Flood Risk Assessment (SFRA)

A Strategic Flood Risk Assessment (SFRA) has also been carried out and accompanies the LAP at public consultation. The findings of the SFRA have been considered in the preparation of this Environmental Report.

4.0 Review of Relevant Policies, Plans and Programmes

4.1 Introduction

The LAP is framed within a hierarchy of spatial plans which range from the international down to site specific level. These plans are informed by International, National and Regional level policy guidelines. This hierarchy of plans, programmes, policies and strategies sets the legislative and policy framework by which the LAP must be formulated. The National, Regional and County strategies and policies play a central role in establishing higher level agendas and the county level plan objectives. The Edenderry LAP is required to conform to and translate the objectives of these higher levels plans, in particular the Offaly County Development Plan 2014-2020, to a local area basis.

The SEA Directive requires that the SEA process should include a review of other plans or programmes, which are associated to and concern the assessment of the LAP. The key issue is that the LAP and its SEA has taken due consideration of the objectives set out in the legislative and policy framework. The following plans, programmes, policies, strategies and guidelines are relevant to the making of the LAP.

4.2 European and National Legislation & Policy

4.2.1 National Spatial Strategy 2002-2020

The National Spatial Strategy (NSS) is a coherent national planning framework for Ireland for the next 20 years. The NSS aims to achieve a better balance of social, economic and physical development across Ireland, supported by more effective planning. The Strategy aims to achieve balanced development throughout the country by setting out a range of measures to be implemented at the national, regional, county and local level.

The focus of the NSS is on people, places and building communities. The NSS is intended to provide an upper-tier of strategic guidance that feeds into general government policy-making and also into the regional and local development planning framework. In order to further these aims, the NSS sets down a series of policies in relation to: employment, housing, rural development, access to services, and quality of life/environmental quality. The strategy identifies a limited number of Regional Gateways and Hubs. Offaly is located within the midlands region as designated by the NSS.

A new National Planning Framework is currently being developed to succeed the National Spatial Strategy. It will provide a framework for national planning, pulling together relevant Government policies and investment on national and regional development. It will have a focus on economic development and investment in housing, water services, transport, communications, energy, and health and education infrastructure at national, regional and local level.

The National Planning Framework will be a statement of the Government's objectives for Ireland's spatial development and it will form the top tier of Ireland's planning policy hierarchy.

4.2.2 Sustainable Rural Housing – Guidelines for Planning Authorities 2005

The Rural Housing Guidelines seek to ensure that sustainable housing development patterns are supported in rural areas and that the policies and practices of planning authorities should seek to:

- (1) Ensure that the needs of rural communities are identified in the development plan process and that policies are put in place to ensure that the type and scale of residential and other development in rural areas, at appropriate locations, necessary to sustain rural communities is accommodated.
- (2) Manage pressure for overspill development from urban areas in the rural areas closest to the main cities and towns such as the gateways, hubs, and other large towns.
- (3) Take account of other related dimensions in relation to rural settlement such as environmental and heritage protection and the need to maintain the integrity of economic resources

The Guidelines suggest that settlement strategies should start by putting forward a development vision for rural areas that:

- Aims to support the sustainable development of these areas in economic, social and environmental terms in a way that supports the rural economy and rural communities,
- Ensures that development of rural areas takes place in a way that is compatible with the protection of key economic, environmental and natural and cultural heritage assets such as the road network, water quality, important landscapes, key identified areas with wind energy potential, habitats and built heritage, and
- Promotes the development and consolidation of key settlements in rural areas.

4.2.3 Delivering Homes, Sustaining Communities, (2007)

This 2007 policy statement provides for an integrated approach to housing and planning in Ireland. The policy recognises that continued strong demand for housing presents major challenges in respect of the planning of new housing and associated services. Sustainable neighbourhoods involve the efficient use of land and quality urban design, effectively integrated with the supply of appropriate physical and social infrastructure by providing a quality environment; sustainable neighbourhoods also contribute to the provision of attractive locations to support the NSS objective for a more coherent form of future regional development.

4.2.4 Quality Housing for Sustainable Communities, (2007)

Design guidelines intended to assist in the implementation of the policies set out in *Delivering Homes Sustaining Communities* (above). The aim of these Guidelines is to identify principles and criteria that are important in the design of housing and to highlight specific design features, requirements and standards that have been found to be particularly relevant.

4.2.5 Sustainable Urban Housing: Design Standards for New Apartments. Guidelines for Planning Authorities (2007)

The primary aim of these guidelines is to promote sustainable urban housing, by ensuring that the design and layout of new apartments will provide satisfactory accommodation for a variety of household types and sizes – including families with children - over the medium to long term.

These guidelines provide recommended minimum standards for:

- floor areas for different types of apartments,
- storage spaces,
- sizes for apartment balconies / patios, and
- room dimensions for certain rooms

4.2.6 Smarter Travel, A Sustainable Transport Future, A New Transport Policy for Ireland 2009-2020

This document represents the transport policy for Ireland for the period 2009-2020

Key goals of this policy are:

- (i) To reduce overall travel demand,
- (ii) To maximise the efficiency of the transport network,
- (iii) To reduce reliance on fossil fuels,
- (iv) To reduce transport emissions, and
- (v) To improve accessibility to transport.

The policy sets out 49 Key Actions for achieving sustainable transport. They can be grouped into the following four themes:

- Actions to reduce distance travelled by private car and encourage smarter travel.
- Actions aimed at ensuring that alternatives to the car are more widely available.
- Actions aimed at strengthening institutional arrangements to deliver the targets.
- Actions aimed at improving the fuel efficiency of motorised transport.

4.2.7 Rebuilding Ireland, Action Plan for Housing and Homelessness

This Government Strategy states: *“Since 2009, persistent under-supply, means that the housing supply deficit is likely to currently exceed 50,000 homes, suggesting that to address both accumulated under-supply and meet future needs, the objective may well need to be to reach supply levels in excess of 25,000 units per annum. The first step, however, is to move from current levels (12,666 in 2015) towards 25,000 per annum as quickly as possible – and it is this transition, coupled with a significant increase and acceleration in social housing delivery, that is the primary focus of the Plan”.*

The document outlines actions based on 5 pillars (referenced below).

The detailed strategy and actions of the Plan are based around 5 pillars:

1. Address homelessness
2. Accelerate social housing
3. Build more homes
4. Improve the rental sector
5. Utilise existing housing

The Plan outlines that boosting supply is fundamentally linked to all housing sector stakeholders re-shaping the entire delivery process, from land to infrastructure provision and through to construction methods, to match market affordability trends. In addition, the State sector must support an inherently affordable supply of housing through the measures under its control.

4.2.8 Water Framework Directive (2000/60/EC) as amended

The EU Water Framework Directive (2000/60/EC) requires all Member States to protect and improve water quality in all waters so that we achieve good ecological status by 2015 or, at the latest, by 2027. It was given legal effect in Ireland by the European Communities (Water Policy) Regulations 2003 (S.I. No. 722 of 2003). It applies to rivers, lakes, groundwater, and transitional

coastal waters. The Directive requires that management plans be prepared on a river basin basis and specifies a structured method for developing these plans.

River Basin Management Plans (RBMPs) are plans to protect and improve Ireland's water environment. They are prepared and reviewed every six years. Preparation of the 2nd Cycle RBMPs is now underway.

For the 2nd Cycle, the Eastern, South Eastern, South Western, Western and Shannon River Basin Districts will be merged to form one national River Basin District. In relation to the North Western and Neagh Bann International River Basin Districts a single administrative area will be established in the Republic of Ireland portion of these two IRBDs for the purpose of coordinating their management with authorities in Northern Ireland. While this rearrangement will lead to efficiencies in relation to matters such as assessment and reporting, regionalised administrative structures will be put in place to support implementation (e.g. river basin district characterisation, the development of programmes of measures, enforcement, public consultation and awareness activities). Arrangements will also need to be put in place to facilitate the input of communities at local catchment level.

4.2.9 The European Union (Water Policy) Regulations 2014 (S.I No. 350 of 2014)

The European Union (Water Policy) Regulations 2014 (S.I. No. 350 of 2014) sets out the roles and responsibilities of the various stakeholders and the associated requirements in relation to river basin management planning and should be integrated as appropriate. These responsibilities should be reflected in the Plan and the associated environmental monitoring.

4.2.10 Floods Directive (2007/60/EC)

Directive 2007/60/EC on the assessment and management of flood risks entered into force on 26 November 2007. The Directive aims to establish a common framework for assessing and reducing the risk that floods within the European Union pose to human health, the environment, property and economic activity. This Directive requires Member States to assess if all water courses and coast lines are at risk from flooding, to map the flood extent and assets and humans at risk in these areas and to take adequate and coordinated measures to reduce this flood risk. This includes the preparation and implementation of flood risk management plans for each river basin district. This Directive also reinforces the rights of the public to access this information and to have a say in the planning process.

4.2.11 EC Freshwater Fish Directive, (78/659/EEC) 1978

The aim of the EU Freshwater Fish Directive (78/659/EEC) is to protect fish life from pollution discharge into waters and lays out water sampling and monitoring procedures and definitions. The Directive was ratified by Ireland by S.I. No. 293 of 1988, and aims to protect those fresh water bodies identified by Member States as waters suitable for sustaining fish populations. The Directive is due to be repealed in 2013 by the EU Water Framework Directive.

4.2.12 The Groundwater Directive, (2006/118/EC) 2006

This directive establishes a regime which sets underground water quality standards and introduces measures to prevent or limit inputs of pollutants into groundwater. The directive establishes quality criteria that takes account local characteristics and allows for further improvements to be made based on monitoring data and new scientific knowledge. The directive thus represents a proportionate and scientifically sound response to the requirements of the Water Framework Directive (WFD) as it relates to assessments on chemical status of groundwater and the identification and reversal of significant and sustained upward trends in pollutant concentrations.

Member States will have to establish the standards at the most appropriate level and take into account local or regional conditions.

The groundwater directive complements the Water Framework Directive. It requires:

- groundwater quality standards to be established by the end of 2008;
- pollution trend studies to be carried out by using existing data and data which is mandatory by the Water Framework Directive (referred to as "baseline level" data obtained in 2007-2008);
- pollution trends to be reversed so that environmental objectives are achieved by 2015 by using the measures set out in the WFD;
- measures to prevent or limit inputs of pollutants into groundwater to be operational so that WFD environmental objectives can be achieved by 2015;
- reviews of technical provisions of the directive to be carried out in 2013 and every six years thereafter;
- compliance with good chemical status criteria (based on EU standards of nitrates and pesticides and on threshold values established by Member States).

A public consultation on the review of Annexes I and II of the Groundwater Directive was carried out in 2013 with the aim of collecting opinions on different policy options for the review of the Annexes, and to identify missing options and gather data on impacts.

4.2.13 EC Bathing Water Quality Directive, (2006/7/EC) 2006

This Directive strengthens the rules guaranteeing bathing water quality. It supplements Directive 2000/60/EC on water protection and management.

Each year, the Member States are required to identify the bathing waters in their territory and define the length of the bathing season.

They shall establish monitoring at the location most used by bathers or where the risk of pollution is greatest. Monitoring shall take place by means of sampling:

- four samples, including one before the start of the bathing season.
- three samples only if the season does not exceed eight weeks or if the region is subject to special geographical constraints.

Member States shall communicate the results of their monitoring to the European Commission with a description of the water quality management measures. Monitoring may be suspended exceptionally once the Commission has been informed.

4.2.14 The Quality of Bathing Water in Ireland – A Report for the Year 2015,

The EPA's most recent report on bathing water quality „The Quality of Bathing Water in Ireland – A Report for the Year 2015, (EPA, 2016)' sets out the status of Irish Seawater and Freshwater Bathing areas and should be integrated as appropriate. The EPA's available bathing water advice/guidance includes an online GIS resource called "Splash" which should be considered.

4.2.15 EU Directive on the Conservation of Wild Birds, (2009/147/EC) 1979

This Directive ensures far-reaching protection for all of Europe's wild birds, identifying 194 species and sub-species among them as particularly threatened and in need of special conservation measures. There are a number of components to this scheme:

Member States are required to designate Special Protection Areas (SPAs) for 194 particularly threatened species and all migratory bird species. SPAs are scientifically identified areas critical for the survival of the targeted species, such as wetlands. They are part of the Natura 2000 ecological network set up under the Habitats Directive 92/43/EEC.

A second component bans activities that directly threaten birds, such as the deliberate killing or capture of birds, the destruction of their nests and taking of their eggs, and associated activities such as trading in live or dead birds (with a few exceptions).

A third component establishes rules that limit the number of bird species that can be hunted and the periods during which they can be hunted. It also defines hunting methods which are permitted (e.g. non-selective hunting is banned).

4.2.16 EU Directive on the Conservation of Natural Habitats and of Wild Flora and Fauna, (92/43/EEC), 1992

In conjunction with the Birds Directive, the Habitats Directive forms the backbone of EU nature protection legislation.

Known as the Habitats Directive (92/43/EEC) this legislation was transposed into Irish law by the European Communities (Natural Habitats) Regulations, 1997 (S.I. No. 94 of 1997). The main goal of the Directive is to promote the maintenance of biodiversity by requiring Member States to take measures to maintain, protect or restore natural habitats, animal and plant species to a favourable conservation status, introducing robust protection for those habitats and species of European importance. For Ireland, these habitats include raised bogs, active blanket bogs, turloughs, sand dunes, machair (flat sandy plains on the north and west coasts), heaths, lakes, rivers, woodlands, estuaries and sea inlets. The Directive provides for a network of protected sites known as The Natura 2000 network, which limits the extent and nature of development which may have a detrimental effect on the flora or fauna identified therein. Special Areas of Conservation (SACs) are part of the Natura 2000 Network and as such Ireland is required to propose relevant areas for designation as SACs to ensure the natural habitats and species habitats are maintained and restored if necessary to a favourable conservation status. Animals and plant species that are in need of strict protection are listed in Annexes to the Directive. The Habitats Directive is considered the most important EU initiative to support National and International biodiversity.

4.2.17 European Communities (Birds and Natural Habitats) Regulations 2011

These regulations consolidate the European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats)(Control of Recreational Activities) Regulations 2010, as well as addressing transposition failures identified in the CJEU judgements.

Articles 6(1) and (2) of the Regulations require Member States to take appropriate conservation measures to maintain and restore habitats and species, for which a site has been designated, to a favourable conservation status. Furthermore the Regulations require Member States to avoid damaging activities that could significantly disturb these species or deteriorate the habitats of the protected species or habitat types. Under these regulations any plan or project likely to have a significant effect on a Natura 2000 site, either individually or in combination with other plans or projects, shall undergo an Appropriate Assessment to determine its implications for the site.

The competent authorities can only agree to the plan or project after having ascertained that it will not adversely affect the integrity of the site concerned. In exceptional circumstances, a plan or project may still be allowed to go ahead, in spite of a negative assessment, provided there are

no alternative solutions and the plan or project is considered to be of overriding public interest. In such cases the Member State must take appropriate compensatory measures to ensure that the overall coherence of the Natura 2000 Network is protected. Article 12 of the Regulations is also important as it affords protection to specific species regardless of their location.

4.2.18 SEA Directive - Assessment of the effects of certain plans and programmes on the Environment, (2001/42/EC) 2001

This Directive requires plan-makers to carry out an assessment of the likely significant environmental effects of implementing a plan or programme before the plan or programme is adopted. There are two statutory instruments which transposed the SEA Directive into Irish Law:

The SEA Directive (2001/42/EEC) came into force in 2004 and was subsequently transposed into Irish law through S.I. No. 435 of 2004 European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 and S.I. No. 436 of 2004 Planning and Development (Strategic Environmental Assessment) Regulations 2004 as amended by S.I. No. 200 of 2011 European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 and S.I. No. 201 of 2011 Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011 respectively.

4.2.19 Environmental Impact Assessment Directive (85/337/EEC) (97/11/EC), 1985

The EIA Directive (85/337/EEC) came into force in 1985 and applies to a wide range of defined public and private projects, which are defined in Annexes I and II of the Directive. The Directive has been amended three times, in 1997, 2003 and 2009. Under the Directive Member States are required to carry out Environmental Impact Assessments (EIA) of certain public and private projects, before they are authorised, where it is believed that the projects are likely to have a significant impact on the environment.

The initial Directive of 1985 and its three amendments have been codified by Directive 2011/92/EU of 13 December 2011.

4.2.20 Environmental Impact Assessment Directive 2014/52/EU

The EIA Directive (2014/52/EU) updates the above Directive by providing EU guidance on the interpretation of project, which are defined in Annexes I and II of the Directive. The Directive is expected to be transposed into Irish law in May 2017 and will include amendments to quality assurance, assessment of alternatives, Post-consent monitoring conditions and penalties.

4.2.21 European Landscape Convention 2000

The 2000 European Landscape Convention, adopted in Florence (and was ratified by Ireland in 2002), requires a commitment to introduce policies on landscape protection and management. It promotes the protection, management and planning of EU landscapes as a response to European-wide concerns that the quality and diversity of landscapes were deteriorating. The underlying purpose of the Convention is to encourage public authorities to adopt policies and measures at local, Regional, National and International level to protect and manage landscapes throughout Europe.

4.2.22 The Planning System and Flood Risk Management Guidelines (and Technical Appendices) for Planning Authorities (DoEHLG, OPW), 2009

These guidelines require the planning system at national, regional and local levels to:

- Avoid development in areas at risk of flooding, particularly floodplains, unless there are proven wider sustainability grounds that justify appropriate development and where the

flood risk can be reduced or managed to an acceptable level without increasing flood risk elsewhere;

- Adopt a sequential approach to flood risk management when assessing the location for new development based on avoidance, reduction and mitigation of flood risk; and
- Incorporate flood risk assessment into the process of making decisions on planning applications and planning appeals

In relation to planning the guidelines require planning authorities to:

- introduce flood risk assessment as an integral and leading element of their forward planning functions at the earliest practicable opportunity.
- Align strategic flood risk assessment (SFRA) with the SEA process.
- Establish flood risk assessment requirements as part of the preparation of statutory land use plans.
- Assess planning applications against the guidance set out in the Guidelines.
- Ensure development is not permitted in areas of flood risk except where there are no suitable alternative sites.

4.2.23 National Renewable Energy Action Plan, (NREAP) 2010

Submitted under Article 4 of Directive 2009/28/EC this plan sets out Ireland's renewable energy targets to be achieved by 2020. Ireland's overall target is to achieve 16% of energy from renewable sources by 2020. Member states are to achieve their individual target across the heat, transport and electricity sectors and apart from a sub-target of a minimum of 10% in the transport sector that applies to all Member States, there is flexibility for each country to choose how to achieve their individual target across the sectors.

4.2.24 Appropriate Assessment of Plans and Projects in Ireland. Guidelines for Planning Authorities (2009)

Formulated to assist with compliance with Article 6 of the Habitats Directive Article 6(3) states that:

Any plan or project not directly connected with or necessary to the management of a Natura 2000 site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives.

Appropriate Assessment is a focused and detailed impact assessment of the implications of the plan or project, alone and in combination with other plans and projects, on the integrity of a Natura 2000 site in view of its conservation objectives.

4.2.25 Wildlife (Amendment) Act 2000

The Wildlife Act is Ireland's primary national legislation for the protection of wildlife. It covers a broad range of issues, from the designation of nature reserves, the protection of species, regulation of hunting and controls in wildlife trading. It is implemented by a series of regulations. The Act provides strict protection for nearly all birds, 22 other animal species, and 86 plant species. These species are protected from injury, or from disturbance / damage to their breeding or resting place wherever these occur. The 2000 Act was amended in 2010.

The main objectives of the Wildlife (Amendment) Act, 2000 are to:

- provide a mechanism to give statutory protection to NHAs;

- provide for statutory protection for important geological and geomorphological sites, including fossil sites by designation as NHAs;
- improve some existing measures, and introduce new ones, to enhance the conservation of wildlife species and their habitats;
- enhance a number of existing controls in respect of hunting, which are designed to serve the interests of wildlife conservation;
- broaden the scope of the Wildlife Acts to include most species, including the majority of fish and aquatic invertebrate species which were excluded from the 1976 Act;
- introduce new provisions to enable regulation of the business of commercial shoot operators;
- ensure or strengthen compliance with international agreements and, in particular, enable Ireland to ratify the Convention on International Trade in Endangered Species (CITES) and the African-Eurasian Migratory Waterbirds Agreement (AEWA).
- increase substantially the level of fines for contravention of the Wildlife Acts and to allow for the imposition of prison sentences;
- provide mechanisms to allow the Minister to act independently of forestry legislation, for example, in relation to the acquisition of land by agreement;
- strengthen the provisions relating to the cutting of hedgerows during the critical bird-nesting period and include a requirement that hedgerows may only be cut during that period by public bodies, including local authorities, for reasons of public health or safety;
- strengthen the protective regime for Special Areas of Conservation (SACs) by removing any doubt that protection will in all cases apply from the time of notification of proposed sites;
- and give specific statutory recognition to the Minister's responsibilities in regard to promoting the conservation of biological diversity, in light of Ireland's commitment to the UN Convention on Biological Diversity.

4.2.26 Architectural Heritage Protection - Guidelines for Planning Authorities (2011)

The 2004 guidelines were reissued in 2011 following the transfer of architectural heritage protection functions to the Department of Arts, Heritage and the Gaeltacht.

Part IV of the Planning and Development Acts 2000 – 2011 sets out the legislative provisions for the protection and conservation of our architectural heritage. The main features of the act in this respect are:

- Local authorities must create and maintain a Record of Protected Structures (RPS) which is to include all structures within the administrative area which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest. The RPS must form part of the Development Plan for each county.
- Local authorities must also protect the character of places and townscapes which are comply with the special interests listed above. This is done through the designation of Architectural Conservation Areas (ACAs) which are also to be contained within Development Plans.
- Development plans must include objectives for the protection of such structures and the preservation of the character of such areas to ensure proper and sustainable planning and development.
- Owners and occupiers of protected structures can be held responsible in ensuring that buildings are not endangered either directly or through neglect.

4.2.27 National Climate Change Strategy (2007-2012)

The National Climate Change Strategy 2007 - 2012 sets out a range of measures, building on those already in place under the first National Climate Change Strategy (2000) to ensure Ireland reaches its target under the Kyoto Protocol. The Strategy provides a framework for action to reduce Ireland's greenhouse gas emissions

The Framework for Climate Change Bill published in December 2009 provides for a statutory obligation on the Minister to propose to the Government a National Climate Change Strategy on a 5 year cycle and to review the previous Strategy at the end of this time. The Strategy will set an overall reduction target for the 5-year period within the context of the long-term and annual reduction targets set out in the Bill (as subject to review by the Minister). It will also set the policy context for the Carbon Budget and set out requirements in terms of policy objectives for the various sectors in the economy.

4.2.28 National Landscape Strategy for Ireland (2015-2025)

The Department of Arts, Heritage and the Gaeltacht has issued a National Landscape Strategy for Ireland, which sets out objectives and principles in the context of a proposed National Landscape Strategy for Ireland. This strategy is being prepared in compliance with the European Landscape Convention.

This document sets out Ireland's aims and objectives with regard to landscape and positions it in the context of existing strategies, policies and objectives as well as the framework of the European Landscape Convention.

The main objective of the Strategy is to set out a framework which seeks the right balance between management, planning and protection of the landscape. Its primary aim is the sustainable management of change affecting landscape: it is not the preservation or "freezing" of the landscape at a particular point in its continuing evolution.

4.2.29 Environmental Noise Directive 2006

The objectives of EU and Irish noise legislation is "to avoid, prevent or reduce harmful effects on human health and the environment as a whole", and this includes noise nuisance. To this effect the Plan should ensure this requirement is complied with. The assessment and management of noise from the main infrastructural transport sources (roads, rail, and airports) are governed by the Environmental Noise Directive and associated 2006 Environmental Noise Regulations (S.I. 140 of 2006). In this context, as appropriate, the Plan should promote the implementation of Environmental Noise Directive and associated national regulations. <http://www.environ.ie/environment/noise/si-140-2006environmental-noise-regulations-2006>

Available Noise Action Plans should be taken into account also and reviewed as required, to reflect the Plan period and associated development proposals. Consideration should be given to any relevant noise maps, and action plans. Strategic noise maps are designed to assess noise exposure resulting from major roads, railways and airports. Noise action plans are designed to act as a means of managing environmental noise through land use planning, traffic management and control of noise sources. The third round of noise mapping is currently underway in Ireland and will be completed in 2018. <http://noise.eionet.europa.eu/help.html>.

4.3 Regional and Local Plans and Policies

4.3.1 Regional Planning Guidelines for the Midlands Region (2010-2022)

The Regional Planning Guidelines for the Midlands Region Area 2010-2022 give effect, at a Regional level, to the national planning framework put forward in the National Spatial Strategy (NSS). The Midland Region categorised as a NUTS III region comprises the counties of Laois, Longford, Offaly and Westmeath. It provides a Regional framework for the formulation of policies and strategies in the County Development Plan and seek to ensure the proper balance between the different settlements in the region with regard to development, population and services. A key aspect of the RPGs is about building on and enhancing the competitiveness and attractiveness of

the region within a spatial planning hierarchy. This will be achieved by focusing on building up the “critical mass” of the region in terms of its economic strength, employment, education and population, developing an Economic Development Strategy, developing and strengthening the identity of the region, providing better transport and communications connections within the region and between the region and other regions, ensuring both rural and urban areas play their full roles in driving the development of the region in a balanced and sustainable way.

4.3.2 Eastern Midlands Regional Waste Management Plan 2015-2021

Offaly is located in the midlands region of the country in terms of waste management planning. The Waste Management Plan sets out the proposed policy for integrated waste management within the region and places an emphasis on waste prevention and minimisation through source reduction, producer responsibility and public awareness and the management of recovery/recycling/disposal of regional waste.

4.3.3 Eastern River Basin District River Basin Management Plan (2009 – 2015)

The Eastern River Basin District (ERBD) covers the Edenderry area of County Offaly and is one of eight river districts within the island of Ireland formed to aid the implementation of the requirements of the EU Water Framework Directive 2000/60/EC. The Directive requires the preparation of management plans for each district.

The ERBD River Basin Management Plan (RBMP) sets out the objectives for the water bodies within the plan area and outlines actions necessary to achieve these objectives. In compliance with the WFD these are to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwaters which:

- a) Prevents further deterioration and protects and enhances the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems;
- b) Promotes sustainable water use based on a long-term protection of available water resources;
- c) Aims at enhanced protection and improvement of the aquatic environment, including through specific measures for the progressive reduction of discharges, emissions and losses of priority substances and the cessation or phasing-out of discharges, emissions and losses of the priority hazardous substances;
- d) Ensures the progressive reduction of pollution of groundwater and prevents its further pollution, and
- e) Contributes to mitigating the effects of floods and droughts.

For the second cycle of the River Basin Districts, the Eastern, South Eastern, South Western, Western and Shannon River Basin Districts will be merged to form one national River Basin District.

4.3.4 Offaly County Development Plan 2014-2020

The Offaly County Development Plan 2014-2020 is guided by the policies contained in the National Spatial Strategy and the Regional Planning Guidelines for the Midlands Region as outlined above. The Offaly County Development Plan 2011-2017 sets out in its Core Strategy the planning and spatial framework for the County until 2020.

The future growth of Edenderry will be strictly guided by the overarching policies and objectives of the Offaly County Development Plan 2014-2020 in order to ensure that any future development of Edenderry is in line with the Core Strategy.

Edenderry is regarded as a Tier Two Key Service Town in the settlement hierarchy of Offaly. In this regard, its strategic role as per the Regional planning Guidelines is as an important driver for local economies in areas that are removed from main population centres where well established economic, administrative and social functions are provided within these areas.

The location in particular of Birr, Edenderry and Portarlinton strengthen the settlement pattern across the county and also provide support to their immediate surrounding hinterland (including Local Service Towns, Villages, Sráids and the Open Countryside) as well as being self-sustaining. It is anticipated that the Key Service Towns will reinforce their role as key centres within the settlement hierarchy through the provision of employment opportunities, business, industry, education, tourism and infrastructure.

The strategy for the future development of Edenderry focuses on the principles established in the Core Strategy as contained in the Offaly CDP 2014-2020.

4.3.5 The Offaly Heritage Plan 2017-2021

The Offaly Heritage Plan 2017-2021 is a five year plan aimed at increasing awareness and appreciation of manmade, cultural and natural heritage, leading to actions which promote its protection, enhancement and vitality. The plan contains eight actions that have arisen from their consultation process.

- Offaly County Council Heritage related projects such as 1916/2016 Centenary Commemorations and the follow on programme Creative Ireland; management of key county sites such as Durrow and Clonmacnoise, public realm plans and ongoing projects as they arise.
- Partnering with local communities and societies working on heritage projects, ranging from the Tidy Towns network to Historical Societies.
- Heritage and Tourism – making sites accessible and improving signage and information including inputs to www.visitoffaly.ie
- Developing a County Archive Service in partnership with Offaly History, the Library Service and private owners.
- Medieval churches/Monastic Site conservation of the structures, management plans and access (these sites are predominantly in Offaly County Council ownership)
- Publications – commissioning of and assisting with publications, specifically Offaly Castles and demesne landscapes which are currently in preparation.
- Biodiversity – promotion of the National Pollinator Plan, submitting records to the National Biodiversity Data Centre and control of invasive species with particular focus on Japanese and Himalayan knotweed and Himalayan Balsam.
- Access to heritage - coordinating and management of events such as Heritage Week, Offaly Naturalists' Field Club, Annual Offaly Heritage Seminar and awareness of Offaly's heritage through all appropriate means.

4.3.6 Offaly Local Economic and Community Plan 2016-2023

The Offaly Local Economic and Community Plan (LECP) 2016-2021 is an integrated six year plan which is central to the role of Offaly County Council in promoting and supporting economic development and local community development.

The strategic vision of the plan is to create an attractive and distinctive place with vibrant and prosperous communities, making it a destination of choice for successful business where people have access to a wealth of opportunities while enjoying a good quality of life.

The LECP encourages a community centred approach whereby key local partners are drawn together to oversee the provision of more effective, efficient and sustainable services for communities. The plan contains a range of objectives, many of which have been identified as applicable to the town of Edenderry.

5 Baseline Environment of Edenderry LAP

5.1 Introduction

The purpose of this section is to describe the relevant aspects of the current state of the environment within the LAP area. The baseline has been compiled using available datasets and indicators suggested during scoping. It also focuses on mapping the relevant baseline information that relates to the policies and objectives contained within the Edenderry LAP.

This baseline information outlines the environmental context within which the LAP will be implemented and identifies the following parameters:

- The key environmental baseline resources and sensitivities;
- The key environmental threats and trends; and
- The likely evolution of the environment in the absence of the LAP.

The headings provided are in accordance with the legislative requirements of the SEA Directive. An emphasis is placed on the strategic elements of each aspect and where potentially relevant to the LAP. The topics addressed are:

- Biodiversity, Flora & Fauna
- Population
- Human Health
- Soil & Geology (incl. land use)
- Water
- Air Quality and Climate Change
- Material Assets
- Architectural, Archaeological and Cultural Heritage; and
- Landscape

** Human health is not considered directly in this report, but is instead dealt with through consideration of other environmental issues such as air quality, water quality etc.*

5.2 Biodiversity and Flora & Fauna

5.2.1 Designated Habitats

Biodiversity plays a significant role in the provision of clean air, water, healthy soils and food as well as visually contributing to a plan area with its natural beauty and heritage. Therefore, it is vital to protect biodiversity through buffer zones and fencing, where necessary around wetlands, rivers, ponds and trees etc. while establishing wildlife corridors and enhancing interconnectivity.

The town of Edenderry is situated close to the source of the River Boyne which runs to the west and northwest of the town and forms the county boundary between Offaly and Kildare. To the south of the town lies the Grand Canal which runs in an east to west direction. A harbour branches from this in a northeasterly direction right into the centre of town. The Grand Canal is one of Edenderry's prime amenity and environmental assets. Therefore, the maintenance and enhancement of its environmental quality and status as a proposed Natural Heritage Area is paramount to sustainability and potential of the town.

Natura 2000 Sites

The enhancement of biodiversity, preservation of natural amenities and integrity of wildlife corridors and protection of the natural environment is pivotal to the sustainable growth of Edenderry.

The integrity of a Natura 2000 site (referred to in Article 6.3 of the EU Habitats Directive) is determined based on the conservation status of the qualifying features of the cSAC/SACs as set out above. Once each site has been designated, it is required that a management plan should be put in place for the site which sets out the objectives for the site in order to maintain the favourable conservation status of these qualifying features and prevent in as far as possible threats and impacts on these habitats and species.

A full list of the SAC, SPA, NHA and pNHA sites that are deemed to be within the zone of influence (c. 15km) of the plan area is provided in Table 5.1 below. Planning Authorities are obliged by law to ensure that these sites are protected and conserved.

Special Areas of Conservation (SAC)	Site Code
<i>European Habitats Directive (92/43/EEC)</i>	
River Boyne and River Blackwater cSAC	002299
Mount Hevey Bog cSAC	002342
The Long Derries Edenderry SAC	000925

Table 5.1: Special Areas of Conservation (SAC) within 15km

The Long Derries SAC

The Long Derries SAC is located approximately 2.2km to the southeast of the LAP boundary. The southern aspect of the LAP boundary is defined by the Grand Canal. The aquifer underlying Edenderry is classified as a locally important bedrock aquifer – generally moderately productive. The aquifer underlying The Long Derries SAC is classified as locally important bedrock aquifer – moderately productive in local zones only. Given the elevation of the Long Derries SAC in the surrounding landscape relative to Edenderry, it is anticipated that the groundwater within the LAP boundary drains towards the River Boyne to the north and is not connected to the groundwater of the Long Derries SAC, which is likely to drain to the Cushaling River to the south. Any potential development in Edenderry is not likely to impact on the groundwater regime of the Long Derries esker and therefore, will not impact on the integrity of The Long Derries SAC or the habitat for which it is designated - saemi-natural dry grasslands and scrubland facies on calcareous substrates.

As of November 2016, The Long Derries cSAC has been designated as SAC in accordance with Article 4 of the European Union Habitats Directive (92/43/EEC) as amended. This area has been protected by law since it was first proposed for designation and this final step in the process does not alter the overall obligations to protect the site.

The River Boyne and River Blackwater cSAC

The boundary of the River Boyne and River Blackwater cSAC is approximately 12km downstream of the LAP boundary as seen in Figure 5.1. The River Boyne forms part of the northern boundary of the LAP lands and although that section of the River Boyne is not designated, it may contain species for which the River Boyne and River Blackwater cSAC is designated (e.g. Salmon, Lamprey or Otter). As such, any discharges to the River Boyne could impact on those Annex II species.

It is a policy of the LAP to recognise and protect the ecological value of the River Boyne, and to further protect a riparian corridor of between 30 and 50 metres along the banks of the River Boyne. Such

policies and measures would ensure that the developments within the LAP will not impact on the River Boyne or any Annex II species which it may contain.

The Mount Hevey Bog cSAC

The Mount Hevey Bog cSAC is located approximately 12.3km to the north of the LAP boundary. There are a number of major roads (e.g. M6 and M4) and towns (e.g. Kinnegad) between the LAP boundary and Mount Hevey Bog cSAC. Therefore, any potential development within the LAP lands is not likely to impact on the integrity of Mount Hevey Bog cSAC or the habitats for which it is designated.

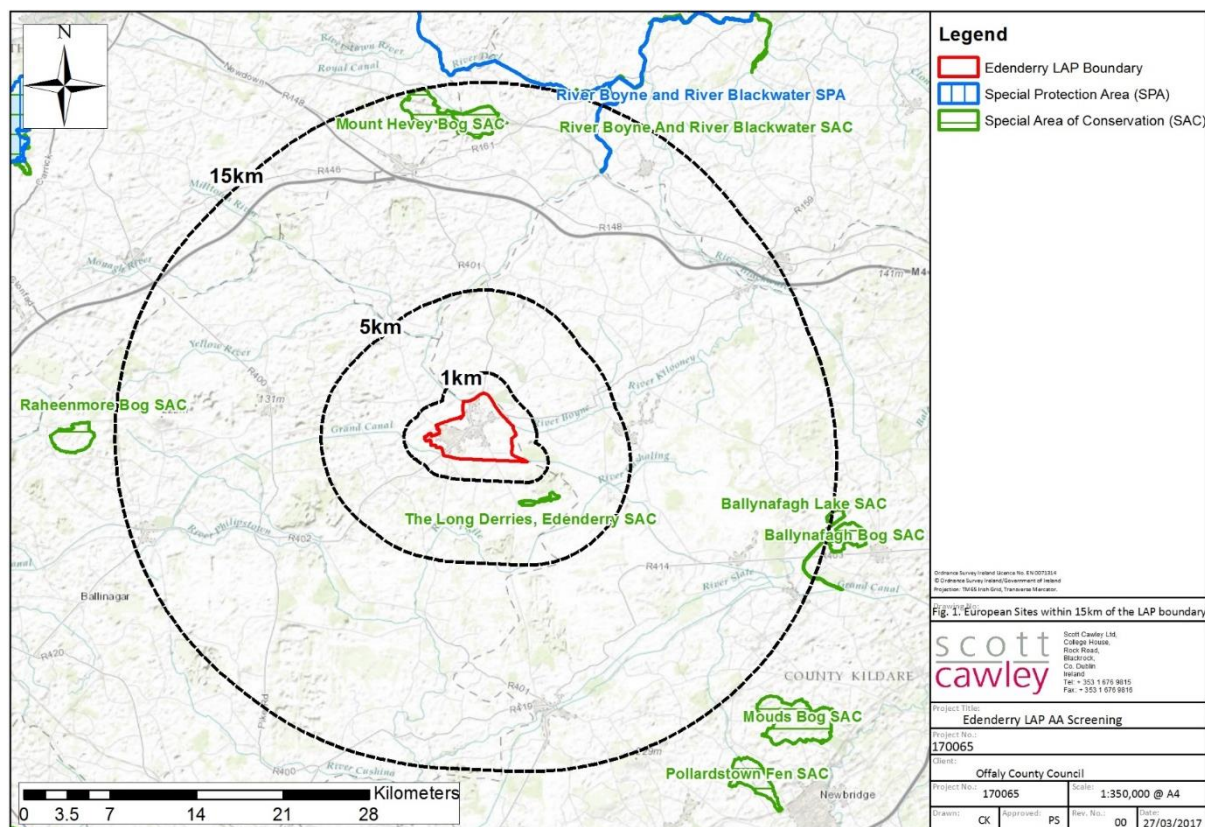


Figure 5.1: European Sites within 15km of the Edenderry Local Area Plan's Boundary

5.2.2 Other Habitats

In 2015, an ecological survey of the Grand Canal within County Offaly was carried out. This included a review of habitats, fauna and fish in Edenderry.

Section 4.41 of the Ecological Survey details habitats and flora from Rathmore Bridge to Georges bridge. The canal verge habitats include reedbed, wet grassland/marsh and calcareous grassland/grassy verges. Reedbeds are dominated by common reed and common club rush. Common species in the grassland habitats include meadowsweet, flag iris, hard rush, sharp-flowered rush, field horsetail, bird's foot trefoil, yellow rattle and eyebright. A wet ditch runs behind the hedgerow and contains common reed. Table 5.1 and Table 5.2 details the habitats and plant species recorded in this area in 2015.

Table 5.1 Rathmore Bridge to Georges Bridge Habitats

Habitat Code	Habitat Name
BL3	Buildings and artificial surfaces
FW3	Canals
FW4	Drainage Ditches
GA2	Amenity grassland (improved)
GS2	Dry meadows and grassy verges
GM1\GS4\FS1\GS1\GS2	Towpath mosaic
WL1	Hedgerow
WL2	Treelines
WN6	Wet willow-alder-ash woodland
WS1	Scrub

Table 5.2 Rathmore Bridge to Georges Bridge Flora

Common Name	Scientific Name
Vascular Plants	
Alder	<i>Alnus glutinosa</i>
Arrowhead	<i>Sagittaria sagittifolia</i>
Ash	<i>Fraxinus excelsior</i>
Bird's foot trefoil	<i>Lotus corniculatus</i>
Blackthorn	<i>Prunus spinosa</i>
Bracken	<i>Pteridium aquilinum</i>
Bramble	<i>Rubus fruticosus agg.</i>
Broad-leaved Pondweed	<i>Potamogeton natans</i>
Catsear	<i>Hypochaeris radicata</i>
Cleavers	<i>Galium aparine</i>
Cock's-foot grass	<i>Dactylis glomerata</i>
Common Bent	<i>Agrostis capillaris</i>
Common Club-rush	<i>Schoenoplectus lacustris</i>
Common Reed	<i>Phragmites australis</i>
Common Valerian	<i>Valeriana officinalis</i>
Crack Willow	<i>Salix fragilis</i>
Creeping Thistle	<i>Cirsium arvense</i>
Downy Birch	<i>Betula pubescens</i>
Eyebright	<i>Euphrasia spp.</i>
False Oat Grass	<i>Arrhenatherum elatius</i>
Fennel Pondweed	<i>Potamogeton pectinatus</i>
Field Horsetail	<i>Equisetum arvense</i>
Flag Iris	<i>Iris pseudacorus</i>
Gorse	<i>Ulex europaeus</i>
Great Willowherb	<i>Epilobium hirsutum</i>

5.2.3 Existing Biodiversity Issues

Biodiversity has become an integral part of the conservation of our wild areas. Ireland is one of 193 countries which are party to the Convention on Biological Diversity along with the other EU Member States and the EU itself. In its recent assessment, the Commission states that Europe is seeing the constant loss, degradation and fragmentation of natural habitats and entire ecosystems are also being pushed to the point of collapse.

Nationally, although significant progress has been made in the past decade, biodiversity loss has not been halted in Ireland. The status of many of our habitats and some of our species is judged to be poor or bad (Ireland's Second National Biodiversity Plan).

There are five main pressures causing biodiversity loss:

- habitat change
- overexploitation
- pollution
- invasive alien species
- climate change

The existing wastewater treatment plant for Edenderry has a current capacity of 9,500 population equivalent and the River Boyne acts as receiving waters for that plant. There is a current application to upgrade the wastewater treatment plant, which is also a policy of the LAP. It is a policy of the LAP that no development shall be permitted within the development boundary without the requisite sewage treatment capacity and water supply already in place. Furthermore, it is a policy of the LAP to implement the requirements of the E.U. Water Framework Directive with regard to a sustainable approach to water services management. The Edenderry treatment plant will have sufficient capacity to meet the need of any potential employment generating development.

The primary mechanism for conserving, protecting and enhancing biodiversity in Ireland is through the Actions for Biodiversity 2011-2016, Ireland's Second National Biodiversity Plan¹, of which a key concept is that local authorities (and other agencies) share responsibility for the conservation and sustainable use of biodiversity.

The Plan states that the principal target is: *"That biodiversity loss and degradation of ecosystems are reduced by 2016 and progress is made towards substantial recovery by 2020."*

It is European and national policy to protect designated areas from development thus ensuring their long term protection. Therefore restrictions must be provided within the plan and indeed close to such areas where such development is incompatible with the site's long term protection.

As stated previously, under the Habitats Directive (Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora) an Appropriate Assessment is required for all plans or projects which may impact on sites designated as either Special Areas of Conservation or Special Protection Areas. The Local Authority will be obliged to seek such an assessment where the need arises.

¹ Actions for Biodiversity 2011-2016, Ireland's Second National Biodiversity Plan

The AA Screening Report prepared separately identifies of the types of threats to the integrity of the European sites. These can then be related to the consequences of implementing the Local Area Plan to see if there is any risk of likely significant effects.

5.3 Population & Human Health

5.3.1 Introduction

This section discusses the impact of the Local Area Plan on the population of the plan area. An overview of the current and estimated future population and the issues affecting quality of life are discussed. Human health data for the area is not readily available. However, impacts on human health and quality of life may derive from any of the environmental parameters discussed throughout this Chapter. Ultimately, all of the effects of a development on the environment impact upon human beings and their quality of life, both positively and negatively. Direct effects relate to matters such as water and air quality, noise, and landscape change. Indirect effects relate to such matters as flora and fauna.

Accordingly, the topic of human beings and their quality of life is addressed in this Environmental Report by means of an appraisal of the indirect effects, etc. of the Local Area Plan on the other environment parameters, of which human beings and their quality of life are an integral part. Where appropriate, mitigation measures to reduce/avoid adverse impacts are identified and incorporated into this Report and the Plan under the other environmental parameters.

5.3.2 Population Trends

Edenderry is an historic market town that lies within the functional area of Offaly County Council approximately 31km to the east of Tullamore. With a population of 7,480, Edenderry is placed as the second largest town in County Offaly in terms of population.

From 1996 to 2016 Edenderry has experienced a significant population growth of 95%. Edenderry is located most easterly in County Offaly and is in the zone of influence from the Greater Dublin Area. These levels of population growth have resulted in pressures on services and employment opportunities in Edenderry. As can be seen in Table 2.1 below the town has experienced significant growth in population since the census in 1996.

Table 5.1: Population Change from 1996 to 2016

Population	1996	2002	2006	2011	2016	% Change 1996-2016
Edenderry & Environs	3,825	4,559	5,888	6,977	7,480	95%

During this period, the rate of service provision did not keep pace with the population growth.

The provision of local employment opportunities, social, community and necessary infrastructure failed to materialize at an equivalent pace and while people enjoyed the benefit of more affordable homes, longer than county average commuting times to work and limited local employment has offset this benefit. Indicators of economic down turn can be seen in the high vacancy rates in town centre units and dereliction of other buildings. High vacancy rates and lessening interest in the offer of the town centre undermines the role of Edenderry as a Key Service Town.

It is anticipated that the projected population growth of Edenderry over the new plan period will be in the order of 6.7%. This will make provision for approximately 128 residential units in the lifetime of this plan.

5.3.3 Economy and Enterprise

Like so many other towns in the midlands, Edenderry struggles to gain momentum to revive and embrace the new era of recovery. The key employers in Edenderry are the Rosderra meat factory, primary and national schools, retail and commercial services and industrial employment from the smaller scale industrial units throughout the town.

In respect of economic development, Edenderry presents challenges and opportunities in equal measure:

- There are high levels of vacancy in retail and commercial units in the town yet there is a strong and active business community.
- A skilled workforce lives in the town but employment sources locally do not capitalize on these skill sets.
- The town is located at a strategic location and proximity to Dublin and should therefore benefit from inward growth but local residents use this locational advantage to commute outwards towards the GDA for work.
- The Grand Canal which is located in the centre of the town remains an untapped tourism resource.
- Energy production is a tremendous part of the story of Edenderry and access to the national grid is a competitive advantage for the area yet Edenderry lacks identity and connection to its past to hook and sell as an attribute.

5.3.4 Retail

Edenderry is a tier two town in the County settlement hierarchy of the Offaly County Development Plan and has a role to provide an appropriate level of comparison and convenient retail for its surrounding hinterland. Enhancing the vitality of the town centre in Edenderry is a key objective of this plan. In this regard a strict approach will be employed on the application of the sequential approach to development to ensure the town centre is not overlooked easily as a suitable location for retail development. Notwithstanding this, it is considered that no further large-scale out of town retail developments are required within the lifetime of this Local Area Plan. This is consistent with the 2012 Retail Planning Guidelines.

Given the nature of the buildings and the urban grain in the town centre area, developers and retailers should be flexible in their approach to the floor plate requirements and where possible adapt to develop a format suitable for the well-established central part of the town. In a town with high vacancy rates, the sequential approach should take into consideration providing for floorplate requirements by combining ground floor units.

The retail landscape has altered dramatically in Edenderry over time with the exceptional growth of online shopping, the economic downturn, and the very well promoted and marketed shopping experiences on offer by not only out of centre retail locations but often times out of county and even out of region locations. Retail units in the town centre have closed while other new retail development has never been occupied. Consequently, retail vacancy rates in the town centre are evident as units take on derelict or neglected appearances, permanently pulled shutters or boarded up windows and doorways.

This plan seeks to prioritise the re-occupancy of vacant retail and commercial units in the town centre and to encourage pro-active development initiatives to do this.

5.3.5 Radon & Human Health

Radon is a radioactive gas which is naturally produced in the ground from the uranium present in small quantities in all rocks and soils. Tiny radioactive particles are produced by the gas which when inhaled can cause lung cancer. The risk of contracting lung cancer as a result of Radon depends on how much Radon a person has been exposed to over a period of time. Radon levels in the County have been collated from the Radiological Protection Institute of Ireland. The plan area is in a low-mid risk area in regards to Radon where between 1-5% of homes in Edenderry are estimated to be above the reference level. However a high radon level can be found in any home in any part of the country.

5.4 Soil and Geology

The upper most layer of the earth's surface is generally termed "Soil". It comprises for the most part organic matter, minerals and fine to course grained weathered rocks. The variability in the constituent parts and the percentage content of each in the soil matrix results in differing characteristics. This has implications for suitable land use and the appropriateness for differing land use practices.

Geology encompasses the understanding and study of the solid and liquid matter that constitutes the earth and the processes by which they are formed, moved and changed. Its understanding is necessary to fully appreciate the geological factors that shape and influence the world and its particular structure.

Soils within Edenderry Town Centre are 'urban' in nature due to disturbance resulting from its built environment. The geological baseline of Edenderry and its environs is dominated by Lower Coniferous Limestone. To the east and southeast of the town, soils comprise primarily 'Peat' as a result of the surrounding bogland. West and north of the town Centre, soils comprise 'fine loamy drift with limestone'.

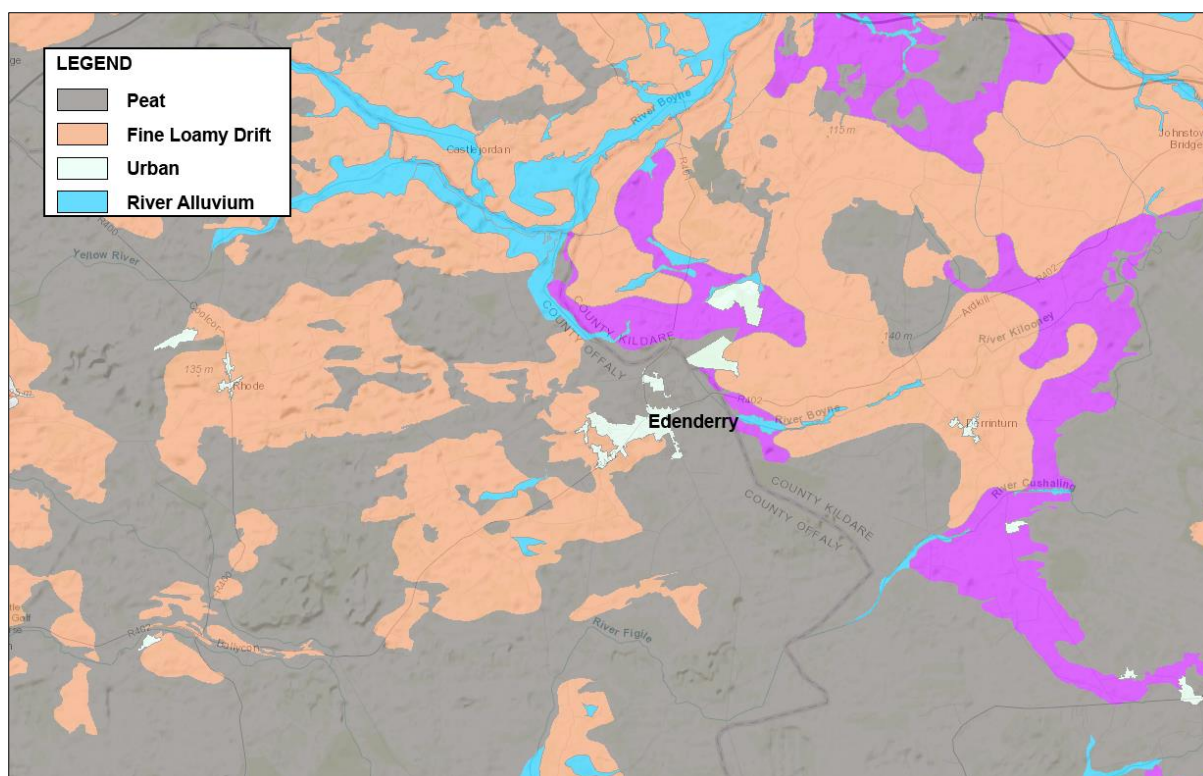


Figure 5.2: Soils Map for Edenderry LAP

5.4.1 Soils

Soil can be defined as the top layer of the earth's surface. It consists of fine to coarse grained rock and mineral particles, organic matter (the remains of plants and animals) and the living organisms that reside in the soil.

Subsoils in Edenderry vary. Cutover raised peat subsoil is overlain by Cutaway Peat soil to the south east and north-west of the town centre area. Till derived Limestone overlain by either basic deep poorly or well drained mineral is the buffer between the peat soil and the developed areas within the town core which are underlain by made ground.

The Aquifer is described as Locally Important Aquifer as bedrock is generally moderately productive.

5.4.2 Geology

The Geological Survey of Ireland (GSI) provides information available on bedrock, subsoil, aquifer classifications and vulnerability. County Offaly is not widely known for its geological heritage, yet as a 2016 audit report on Offaly's geological heritage makes clear there are many sites of high value, and diverse geologically defined landscapes. However, it has some fine but underappreciated geological sites.

Offaly holds 28 geological sites of interest within its county. Many of these are mushroom rocks which are a phenomenon of which County Offaly has arguably the biggest representation in the whole country, with about one third of the national total. Many rocks are at risk from overzealous farm practices. The bulldozing of rocky scrubland, such as limestone pavement, in order to plant more grass, can destroy mushroom rocks that have not yet been catalogued or identified, being hidden by vegetation. As such, mushroom stones are protected by a range of policies in the Offaly CDP.

There are no listed geological sites or specific rock resources located within the Edenderry LAP boundary.

5.4.3 Geological Issues

The soil environment is a much overlooked aspect of the natural environment. However soils are an intrinsic part of the environment and perform a range of uses benefitting the wider environment. Soils have an economic value in terms of agricultural production, their type and quality dictating the type and intensity of production.

In addition soils also have an ecological value, their status being a critical factor in determining botanical diversity and ultimately the range of fauna which feed upon or live within those species of plant life.

Changes in soil result from both natural processes and human activities which contribute to their dynamic and evolving nature. Such changes are matters of concern if they result in the physical, biological or chemical degradation of soils. This can result in the impairment of ecologically-essential soil processes, the reduction in productive capacity, the depletion of soil quality and biodiversity and the direct loss of soil. Many of the changes arise as a result of pressures from human activities.

Urban environments have greatly changed in Ireland with the centres of population and towns being subjected to depopulation with growth focused on the periphery of these areas. With urban expansion, agricultural land surrounding towns and settlements as well as green areas within them are subjected to increasing pressures.

The type and depth of soil has direct implications on water movement which can lead to increased pollution threats if not properly considered.

5.5 Water

5.5.1 Introduction

For the purposes of this section of the Environmental Report, the water environment is taken to include natural features such as lakes, rivers, streams and groundwater. In addition flooding is also dealt with in this section. Wastewater treatment and drinking water may be referred to in this section, but are discussed in more detail under the Material Assets section.

Water is fundamental to all life; for humans, plants and animals alike. It is also critical in economic terms in generating and sustaining wealth in a number of key areas such as agriculture, fishing, power generation, industry transport and tourism. However it is also a fragile resource requiring continued protection. In general terms Ireland's waters are of good quality, however preserving the high standard of water is essential for human health and the natural environment.

Since 2000, Water Management in the EU has been directed by the Water Framework Directive (WFD) 2000/60/EC which was transposed into Irish law under the European Communities (Water Policy) Regulations 2003 (S.I. No. 722/2003). This legislation requires governments to take a holistic approach to managing all their water resources based on natural geographic boundaries, i.e. the river catchment or basin. The WFD establishes a common framework for the sustainable and integrated management of all waters covering groundwater, inland surface waters, transitional waters and coastal waters.

For the purpose of implementing the WFD, Ireland was 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 was divided into these River Basin Districts. The plan area is located in the Eastern River Basin District (ERBD).

A River Basin Management Plan (RBMP) for the Eastern River Basin District was prepared and adopted in 2010. The RBMP provided objectives for River Basin Districts in order to implement the requirements of the WFD. The River quality status for the River Boyne in Edenderry is moderate.

For the second cycle of the River Basin Districts, the Eastern, South Eastern, South Western, Western and Shannon River Basin Districts will be merged to form one national River Basin District.

5.5.2 Surface Water & Groundwater

As the Biodiversity Section demonstrates, water quality has a clear interaction and impact with other key environmental parameters making its protection of key importance. Key challenges for the Plan include avoiding the deterioration of water quality whilst delivering physical infrastructure to meet population growth. Adequate storm water drainage and retention facilities are necessary to accommodate surface water run-off resulting from current and future developments in Edenderry. The use of Sustainable Drainage Systems (SuDS) and Green Infrastructure in new developments will contribute to surface water retention and help to reduce and prevent flooding, by mimicking the natural drainage of a site.

The Water Framework Directive (WFD) requires Member States to manage all of their waters and ensure that they achieve at least 'good status' by 2015 and beyond. The River Basin Management Plan affecting the plan area sets out the objectives and actions required to achieve at least 'good' quality status for all waters, in the period 2009-2015 and thereafter. The ultimate deadline for Member States for achievement of 'good' status is 2027 at the latest. In line with requirements of the Eastern River Basin District River Basin Management Plans (ERBD RBMP) 2009 – 2015, ecological sampling by the EPA is carried out.

Based on EPA surveys, river waters are classed into four biological quality classes.

- A - Unpolluted (Good)
- B - Slightly polluted/eutrophic (Moderate)
- C - Moderately polluted (Poor) and
- D - Seriously polluted (Bad)

Edenderry is located within the Boyne catchment and includes the area drained by the River Boyne and by all streams entering tidal water between The Haven and Mornington Point, Co. Meath. The largest urban centre in the catchment is Drogheda. The other main urban centres in this catchment are Navan, Trim, Kells, Virginia, Bailieborough, Athboy, Kinnegad, Edenderry and Enfield. The total population of the catchment is approximately 196,365 with a population density of 73 people per km².

Edenderry falls within the subcatchment of the River Boyne, known as the Boyne_SC_010. Waters within this catchment range are 'at risk'. Groundwater within the Boyne Catchment is of 'good' quality.

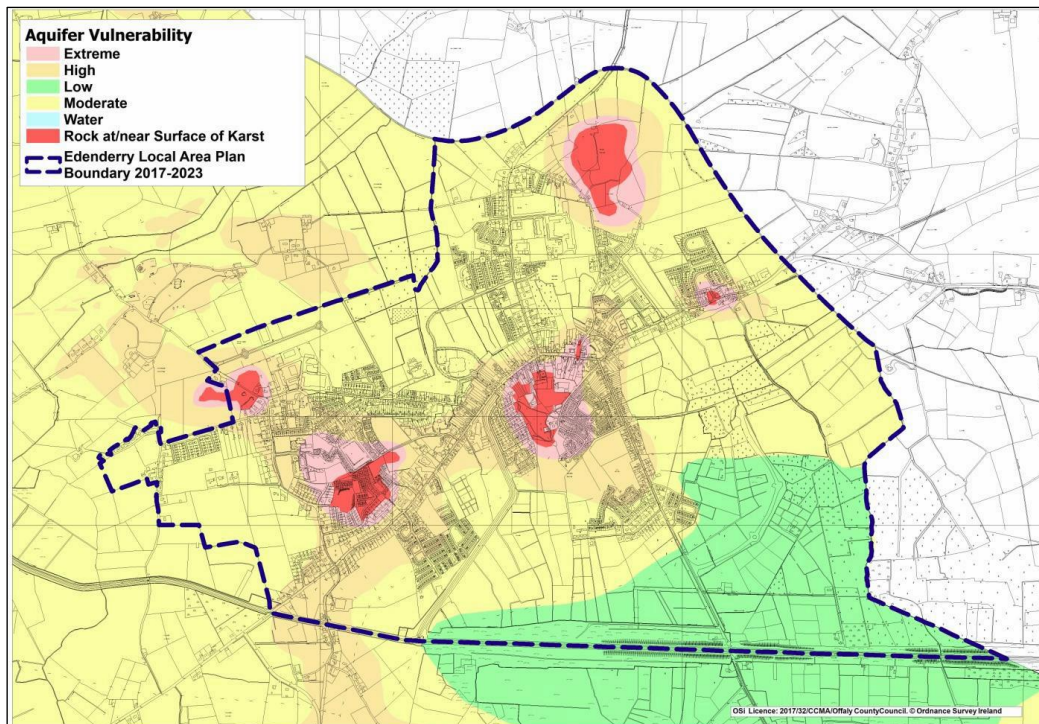


Figure 5.3: Groundwater Vulnerability in Edenderry

5.5.3 Flooding and Flood Risk

The underlying causes of flooding, heavy rain and high sea levels are, essentially uncontrollable. However, the factors affecting the extent and severity of the flood can be addressed. The most influential of these factors is development, in particular development in flood plains i.e. areas adjacent to rivers that tend to become flooded following periods of heavy rain.

The River Boyne Runs along the northeast boundary of Edenderry Town. Edenderry lies upstream of the River Boyne and is affected by the main channel of the River Boyne and a smaller watercourse that emanates from within the town itself called Weavers Drain. This drain flows northwards from the town passing through a number of culverts along the way before discharging to the Boyne to the north. To the north of the town centre lies low-lying peat covered land, much of these lands have been mapped as benefiting lands by the Office of Public Works. Both the River Boyne and Weavers Drain are included in the Arterial Drainage Scheme (ADS) and are subject to periodic dredging.

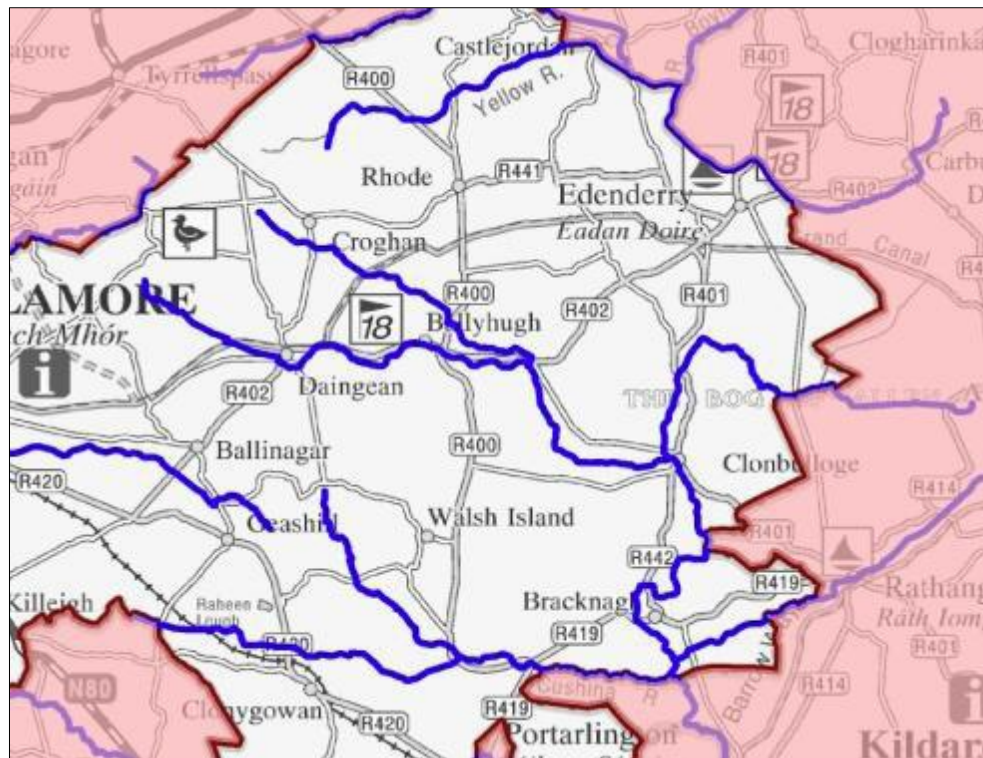


Figure 5.4: Existing Watercourses in Edenderry

Flood risk can be defined as the probability of flooding multiplied by the consequences of flooding. In the 'Planning System and Flood Risk Management', the probability of a flood event taking place is recognised through the classification of Flood Zones which indicate a high, moderate or low risk of flooding from fluvial or tidal sources.

Flooding has occurred historically in Edenderry in 2000, 2002 and 2008. Areas most affected from these flooding incidents were primarily agricultural in nature and low lying lands adjacent to the River Boyne. Edenderry Golf Club and Kishawanny Bridge was also affected on two separate occasions.

In line with The Planning System and Flood Risk Management Guidelines for Planning Authorities (2009), a Strategic Flood Risk Assessment (SFRA) was undertaken as part of this LAP preparation.

The conclusions of the report stated that despite recurring flood events evidenced at the Kishawanny Bridge, much of the developed areas of

Edenderry are not within the flood plain of the River Boyne and are not affected or impacted by flooding.

Flooding in Edenderry primarily occurs on undeveloped lands on the periphery of the town mainly as a result of flow restrictions and in an area closer to the town centre as a result of structural capacity constraints at Weavers Drain.

The Flood Risk Management Plan identified that while fluvial flooding does occur, there are no properties at risk and as such Edenderry and its Environs are considered as very low risk. This would correspond with the precautionary approach taken to the zoning and development of lands identified as being at risk of flooding in landuse plans for the area.

The Landuse zoning map for Edenderry Town has been developed taking into consideration the areas identified as being at risk of flooding as per the indicative flood risk map. Largely a precautionary

approach has been taken to landuse zoning and this provides for the avoidance or minimization of development in areas at risk of flooding.

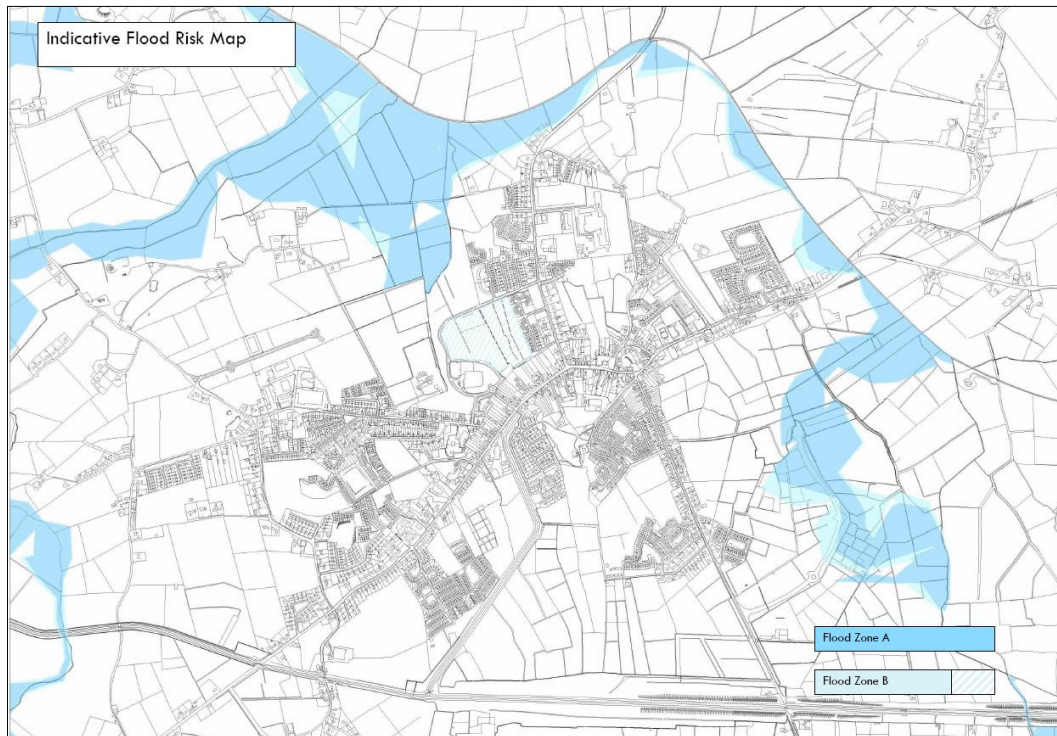


Figure 5.5: Flood Zone Areas within Edenderry

Although not considered extreme, there is a specific area of the town at risk of localized flooding as identified in stage 1 and explored further in stage 2. Flooding occurs in this area as a consequence of backwater from Weavers Drain (refer to section 5.2). This area of land also attenuates to Weavers Drain and so experiences long periods of ponding. The development of this land will impact on the capacity of Weavers Drain and may give rise to flood issues elsewhere in the area.



Figure 5.6: Flood Risk Area in Edenderry

The area, identified as being at risk of flooding is identified as FR1 on the Zoning map and sits inside, to the south and east of the Ring Road. Much of this land remains undeveloped and is bound to the east by an existing established residential area. FR1 also includes a hotel site (abandoned - partially constructed). By virtue of its location and the nature of the moderate risk of flooding identified it is considered that the assessment of the suitability of this area for development in the future requires the application of the Justification test for development plans. The area subject to the Justification Test is delineated below in red for the purposes of identification. This area is identified on the indicative flood risk map also.

5.5.4 Existing Water Issues

The principal threat to water is pollution which can adversely impact on all parts of the water cycle from groundwater to rivers, lakes estuaries and coastal waters. In simple terms pollution means the presence of a harmful substance such as a poisonous metal or pesticide, a nutrient or indeed silt.

There is an increased risk of flooding due to development, climate change and rainfall patterns. Development can exacerbate the problems of flooding by accelerating and increasing surface water runoff, altering watercourses and removing floodplain storage. It is now recognised that flood risk management must be treated as a central issue in the development of the area. Areas of floodplain and wetlands should therefore be recognised and preserved as natural defenses against flood risk.

Flooding of land from surface water runoff is usually caused by intense rainfall that may only last a few hours. PFRA Fluvial flood extents includes land adjacent to the River Boyne (flood plain) and low lying lands around Kishawanny Bridge to the south east of the town.

Area of land to the northern extremity of the town and the River Boyne are included taking in lands affected by flooding from Weavers Drain. The Flood Risk Management Plan identified that while fluvial

flooding does occur, there are no properties at risk and as such Edenderry and its Environs are considered as very low risk.

5.6 Air & Climate

5.6.1 Air Quality

Air quality monitoring in Ireland is undertaken largely to implement EC Directives. In 2008 the EC Directive 2008/50/EC on ambient air quality and cleaner air for Europe (the CAFE Directive) entered into force. This piece of legislation placed the previous air quality framework legislation into a single directive. It sets out air quality objectives and targets.

The Environmental Protection Agency is involved in air quality monitoring and has installed a number of air quality monitoring stations throughout Ireland. The EPA Report *Air Quality in Ireland 2015* provides an overview of the air quality in the country for 2015 based on data obtained from the 31 monitoring stations. There is no detailed information available for the plan area with the closest monitoring station, being located in Mullingar and Newbridge, where are both approximately 28km from Edenderry. Air Quality at both monitoring stations is 'Good'. The County of Offaly is primarily rated located within Zone D (primarily smaller settlements and rural areas outside of cities and major centres).

5.6.2 Climate Change

Climate Change is a phenomenon that has widespread economic, health and safety, food production, security, and other dimensions. It is also widely recognised that Climate Change is occurring as a result of the buildup of atmospheric Greenhouse Gases (GHG's) such as carbon dioxide. Most GHG emissions are related to the energy generation, transport, agriculture, and industry sectors.

Ireland's 2020 target is to achieve a 20% reduction of non-Emissions Trading Scheme (non-ETS) sector emissions (i.e. agriculture, transport, residential, commercial, non-energy intensive industry, and waste) on 2005 levels with annual binding limits set for each year over the period 2013-2021².

A Climate Change Unit was established in 2016 to co-ordinate this Department's policy response to the challenge of climate change. The Department of Transport, Tourism and Sport will play a significant role in the national objective to achieve a cost effective emissions reduction pathway and will be responsible for ensuring, with key stakeholders, that transport infrastructure and services can effectively withstand the likely future impacts of climate change.

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

In order for Ireland to effectively contribute to reducing carbon emissions, the Climate Action and Low Carbon Development Act (link is external) sets out proposed statutory obligations in relation to the development of a National Mitigation Plan (NMP). This Plan will incorporate input from a number of sectors namely electricity generation, built environment, agriculture and transport.

² Greenhouse Gas Emissions Projections to 2020 – An Update
http://www.epa.ie/pubs/reports/air/airemissions/2020_GHG_Projections_2016_Bulletin.pdf

5.6.3 Existing Air and Climate Issues

Road traffic has now become the greatest source of air pollution generally. In urban areas, concern has clearly shifted to a range of pollutants associated with this source which may be considered relatively new in the context of air quality control. The most important of these pollutants are NO₂, particulate matter less than 10 microns in diameter (PM₁₀), carbon monoxide (CO) and a wide variety of Volatile Organic Compounds (VOC), including carcinogens such as benzene. Advances in engine technology and fuel development will, it is predicted, offset any rise in tail pipe emissions from increased car usage due to an increased population. The context to the plan area is rural in nature where travel is an essential part of daily life. Therefore it is important that a good quality road infrastructure is provided and indeed alternatives to the private car are encouraged where possible.

The potential effects of climate change resulting in an increase in the frequency and severity of flooding events from rainfall must also be considered in the Edenderry LAP. Severe rainfall events as a result of climate change could adversely impact upon the Town's population, its biodiversity and its local economy.

5.6.4 Noise

The Environmental Noise Directive (END) (2002/49/EC) requires that action is taken by each member state, with a view to preventing and reducing environmental noise where necessary (and particularly where exposure levels can induce harmful effects on human health) and to preserving environmental acoustic quality where it is good. Relevant local authorities have been designated by the Environmental Noise Regulations, S.I. Regulations No. 140 of 2006, as the bodies charged with development and making of 'Noise Action Plans'.

Offaly County Council is responsible for Noise Action Planning relating to Major Roads carrying greater than 3 million vehicles per annum through the County. There are four areas in County Offaly including:

- M6 Transverse Section of Offaly County (8.1km)
- M7 Transverse Section of Offaly County (5.4km)
- N52 From county boundary at Ballybrought to Kilcormac (36.8km)
- N52 From Kennedy's Crossroads to Riverstown via junction with N62 (4.2km)

None of these sections of road are in the vicinity of Edenderry town.

5.7 Material Assets

Material assets can be defined as the critical infrastructure essential for the functioning of society such as: electricity generation and distribution; water supply; wastewater treatment; and transportation. Whilst this infrastructure is essential its usage can lead both directly and indirectly to adverse environmental impacts. This section will discuss the following:

1. Transportation (road and rail)
2. Waste Management
3. Water Supplies
4. Wastewater Treatment Infrastructure
5. Energy

5.7.1 Transportation

Transportation is an essential element to the functioning of the Irish economy and will continue to be promoted as a crucial component to the further sustainable development of the plan area. Nonetheless, the role of the Local Authority is somewhat limited with respect to the provision of transportation infrastructure. The National Roads Authority is directly responsible for the national

road network, Iarnród Éireann is directly responsible for the rail network and Bus Éireann and other private operators are responsible for public bus services. The Local Authority will continue to liaise with the relevant authorities in enhancing service provision to the inhabitants of the Plan area.

The R402 serves as the main artery through the town and is subject to through traffic including commercial vehicles giving rise to congestion along the retail and commercial core. It is essential in addition to alleviating congestion and associated nuisance that alternative routes are delivered to take through traffic away from the town centre to enable this area to focus on enhancing its economic development potential. In the lifetime of this plan a transportation study will be undertaken to address a range of issues relating to congestion, traffic movement, circulation, parking and smarter travel

An outer relief road circumventing the town from south west to north east remains a long term objective of this plan. This will provide a long term solution to problems of traffic congestion experienced in the central area. However in the shorter term it is considered necessary to make provision for inner relief roads that will not only alleviate congestion but will distribute traffic more evenly throughout the town and make provision for access to backland areas.

5.7.1.1 Existing Transportation Issues

Linkages and access to schools is important in consideration of the volume of traffic associated with such facilities for certain periods of the day. Issues with congestion need to be address and measures to improve circulation, including pedestrian and cyclists within the vicinity of schools must be introduced.

The greater Dublin Area is a significant zone of influence for commuters from Edenderry and the primary method for travel is by road. Long commute times are a reality for many of the working population living in Edenderry due to the lack of the lack of commensurate employment opportunities and community infrastructure in Edenderry. Growth in Edenderry's economic performance would serve to reduce numbers commuting long distances.

5.7.2 Waste Management

For the purposes of waste management planning, Ireland is now divided into three regions: Eastern-Midlands, Southern & Connacht-Ulster. The Eastern-Midlands Region includes the local authorities: Dublin City, Dún Laoghaire-Rathdown, Fingal, South Dublin, Kildare, Louth, Laois, Longford, Meath, Offaly, Westmeath and Wicklow.

The Eastern-Midlands Region (EMR) Waste Management Plan 2015-2021 provides a framework for the prevention and management of waste in a sustainable manner in Fingal and the other local authority areas. Following a public consultation stage, the final Regional Waste Management Plan was made on 12th May 2015.

The three key objectives of the Eastern-Midlands Region Waste Management Plan are:

- Prevent waste: a reduction of one per cent per annum in the amount of household waste generated over the period of the plan;
- More recycling: increase the recycle rate of domestic and commercial waste from 40 to 50 per cent by 2020;
- Further reduce landfill: eliminate all unprocessed waste going to landfill from 2016.

There is one civic amenity site in Edenderry located on the Dublin Road (refer to map 6.1). This civic amenity site is known also as the Edenderry Recycling Centre and accepts a wide variety of materials

including glass bottles, plastic bottles and packaging, cardboard and paper, aluminium and steel cans, Waste Electrical and Electronic Equipment (WEEE), waste oil, clothing and footwear.

5.7.3 Water Supply

The water supply in Edenderry is from a number of sources. Three boreholes provide water in the town. Two of these boreholes are located close to the water tower near the town park and one aquifer protection zone, located in close proximity to the Kishawanny Bridge. The remainder of the supply is via the Rhode Water Supply. The town water supply is also supplemented by a connection to the Tubberdaly Public Water Scheme. Edenderry has benefitted from rehabilitation works completed through Irish Water's Capital Investment Plan 2014-2016.

Rehabilitation works have ensured that the town is adequately meeting the demand for water.

5.7.4 Wastewater

The existing wastewater treatment plant is located in the northwest of Edenderry and has a current capacity of 9,500 population equivalent (p.e.). The River Boyne acts as receiving waters for the plant. There are eight pumping stations at various locations within the town that form part of the wastewater network. Works were undertaken to the treatment plant in 2016 to improve efficiency. The Edenderry treatment plant has sufficient capacity to deal with the current load while the expansion is required to effectively treat the wastewater generated by already permitted and future development. There is currently sufficient capacity to meet the needs of potential employment generating development.

5.7.5 Energy

Electricity is provided in Ireland through a national grid system which is made up of a network of high voltage (110,000 volts, 220,000 volts and 400,000 volts) transmission stations, power lines and cables. The system includes approximately 6,000 km of overhead lines and underground cables and over 100 transmission stations. Power is generated by power plants throughout the country, utilising a variety of fuel or energy sources – including gas, oil, coal, peat, hydro-electricity, wind turbines and other sources including biomass and landfill gas.

Enhanced development of secure and reliable natural gas infrastructure, electricity transmission infrastructure and telecommunications infrastructure is recognised as being a key factor for supporting economic development and attracting investment to any area. Various service providers provide energy and communications infrastructure and services in the town.

Edenderry town is currently served by an 110kV electricity network. Bord Gáis are considering the extension of the gas pipeline to Edenderry as part of phase 3 of the "New towns Analysis".

5.7.5.1 Renewable Energy

Renewable energy is increasingly seen as a means to address climate change challenges, reduce carbon dioxide emissions and increase national energy security. Ireland's need to support renewable energy stems from its EU commitments, namely the EU Directive 2009/29/EC on the Promotion of Renewable Energy Sources, which establishes a binding target of 20% of overall EU energy consumption coming from renewable resources by 2020, as well as a binding 10% minimum target for energy from renewable resources to account for 16% of total energy consumption by 2020. In line with these commitments, Ireland's target for electricity from renewable energy sources (RES-E) is 40% by 2020.

Low carbon technologies present an economic opportunity within the County and green technology development is emerging as a major field of innovation and growth.

A high-speed broadband network, known as a Metropolitan Area Network (M.A.N.), has been installed in Edenderry with the purpose of serving primarily commercial customers. The network runs throughout the town. The Council acknowledge that the network is an extremely important utility for existing businesses and potential investors in the town.

5.8 Cultural Heritage, Archaeological and Archaeological Heritage

Cultural Heritage is an expression of the ways of living developed by a community and passed on from generation to generation, including customs, practices, places, objects, artistic expressions and values.

The National Monuments Acts 1930 – 2004 provide for the protection of archaeological heritage. 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.

5.8.1 Architectural Heritage

The Offaly County Development Plan identifies 80 protected structures within the Edenderry Town boundary. Offaly County Council recognises the important value of the built heritage of the town and the reliance on its attractiveness as a place to entice people to visit and stay. Protected Structures make a significant contribution to the streetscapes of Edenderry Town Centre, particularly the archways and doorways along J.K.L. Street that are an intrinsic feature of the buildings and streetscape. Many of the keystones over the doorways feature unique decorative designs and these contribute positively as a point of interest along the street. Many of the original decorative fanlights are retained over the doorways also.

Carriageway arches are prominent features in the central streetscape also. Their historical function is evident to provide access to the rear of properties, though it should be noted that most are not capable of accommodating an intensification of modern day vehicular traffic to and from the backland areas.

The Planning and Development Acts 2000 (as amended) affords protection to buildings and groups of buildings, including townscapes, of special architectural, historical, archaeological, artistic, scientific, social or technical interest. The protection also extends to any features specified as being in the attendant grounds. The National Inventory of Architectural Heritage (NIAH) for Offaly was completed.

Below outlines the locations of protected structures with the Edenderry plan area.

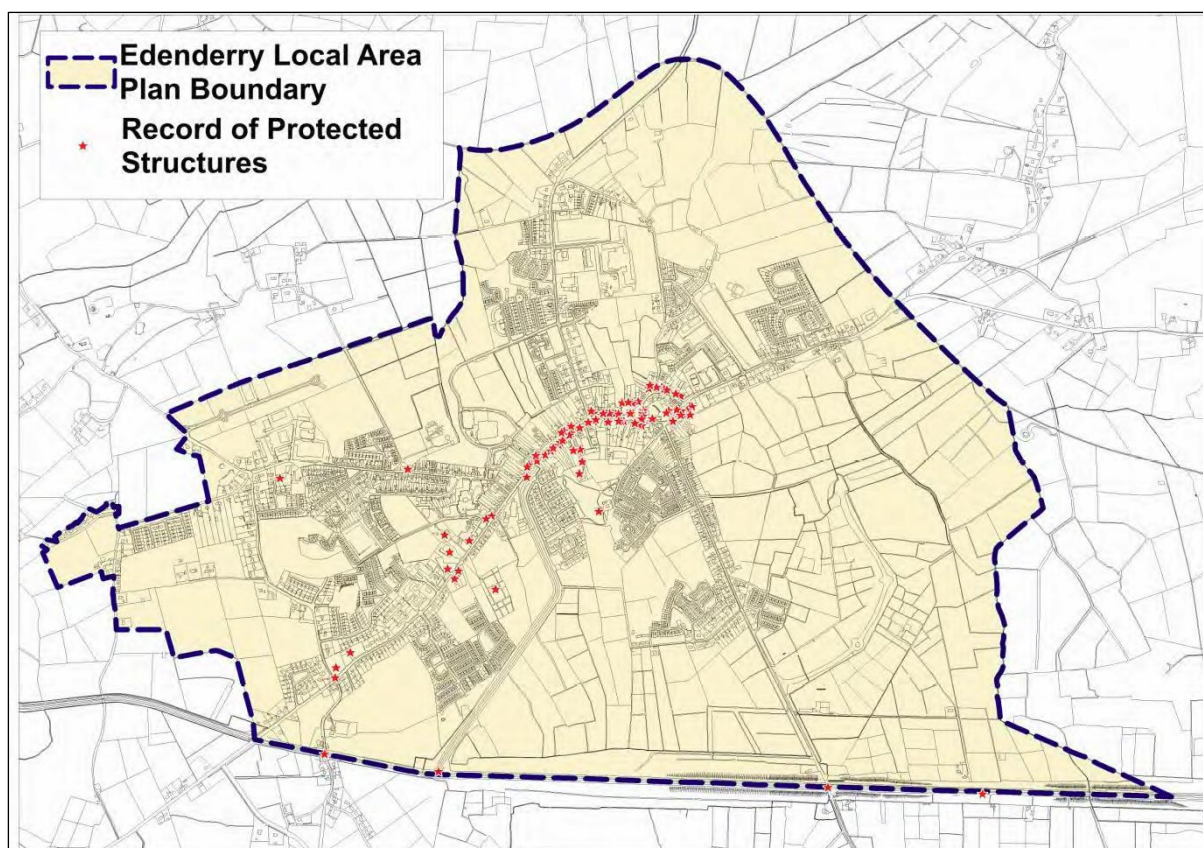


Figure: 5.7: Record of Protected Structures

5.8.2 Archaeological Heritage

The archaeological heritage of an area includes structures, constructions, groups of buildings, developed sites, moveable objects, monuments of other types as well as their context, whether situated on or under land or water.

The National Monuments Acts 1930 – 2004 provide for the protection of archaeological heritage. 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.

The need to preserve the archaeological heritage in the County is well recognised and this heritage will be protected through ensuring that archaeological considerations are taken into account during development in sensitive areas. The actual designation and legal protection of archaeological features such as National Monuments (one recorded in Edenderry – Blundell Castle) is outside the remit of the local authority, though provided for under the National Monuments Acts.

Below outlines the zones of archaeological potential within the Edenderry plan area.

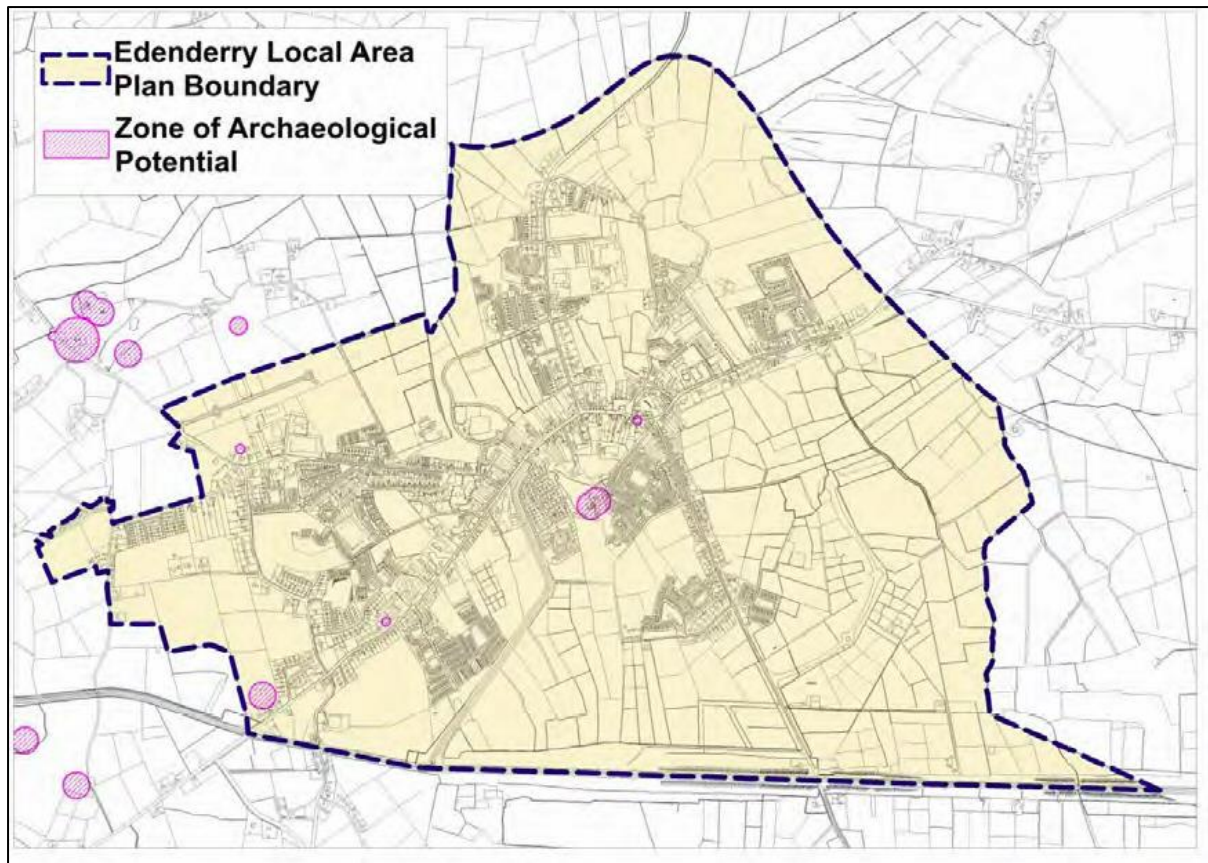


Figure 5.8: Zones of known archaeological potential within and outside the boundary of the Edenderry

5.9 Landscape

5.9.1 Introduction

The concept of landscape encompasses all that can be seen by looking across an area of land, i.e. it is the visible environment in its entirety. Landscape is the context in which all change takes place and helps to create a unique sense of place or identity within an area. The landscape supports a wide range of ecological habitats despite the rapid growth in its resident population. It is the interaction of all of these elements that influences landscape character for future generations.

Offaly is an inland county. Local landscapes, including features such as rivers, streams, ponds, lakes, turloughs, woodlands, hedgerows and field boundaries, make a considerable contribution to the amenity and local distinctiveness of both urban and rural landscapes.

Edenderry is located within an area of low sensitivity in the Landscape Sensitivity Map of Offaly CDP 2014-2020. This provides for a wide range of development subject to appropriate conditions. The closest protected viewpoint is over 5km from Edenderry Town.

The Grand Canal Corridor to the south of the town is classified as being of 'High Sensitivity'. High Sensitivity Areas have identified features of natural beauty or interest which have extremely low capacity to absorb new development. Therefore, new developments must be very limited and subject to appropriate conditions.

5.9.2 Watercourses

The River Boyne is located to the north of Edenderry and forms the boundary between County Kildare and County Offaly at that point. In addition to its significant historical legacy, it is recognised as one of Ireland's premier game fisheries offering a wide range of angling. For its protection from the impacts of human activity, a riparian buffer zone comprising a strip of vegetative land bordering the River will be maintained on lands adjoining it in County Offaly. The riparian buffer zone or set back distance sought will be between 30 and 50 metres depending on the size and nature of development proposed in proximity to the watercourse.

The Grand Canal is a proposed Natural Heritage Area identified under the Wildlife (amendment) Act 2000 in recognition of national important habitats, species and diversity of natural attributes.

Notwithstanding the legal obligation to protect the Grand Canal because of its designation, the amenity value of this key asset for Edenderry is significant and demonstrates that the natural environment can be used positively the promotion of other uses and in turn used as a distinctive attribute to promote the area.

Further to its designation as pNHA the Grand Canal has been identified as an Area of High Amenity (AHA) in the Offaly County Development Plan 2014-2020 and is afforded protection under this local designation.

5.9.3 Green Infrastructure

Trees, woodlands, rivers, fields and hedgerows make a valuable contribution to the landscape and visual amenity of Edenderry. Edenderry has a wealth of Green Infrastructure potential, with the presence of the Grand Canal, a large Town Park, sports fields, the River Boyne, the surrounding farmland and bogland, and associated hedgerows and vegetation. Edenderry has a wealth of Green Infrastructure potential, with the presence of the Grand Canal, a large Town Park, sports fields, the River Boyne, the surrounding farmland and bogland, and associated hedgerows and vegetation.

Connectivity and multi-functionality are key concepts in Green Infrastructure Planning. Connected Green space provides greater benefits to both people and wildlife, than isolated patches and multi-functionality recognises that multiple benefits can be provided on the same site. It is through the conservation of ecological infrastructure such as hedgerows and riparian corridors that a 'network of sites' can be developed as part of Edenderry's green infrastructure. This allows for the migration and the exchange of species between conservation areas.

5.9.4 Existing Landscape Issues

Local landscapes, including features such as rivers, streams, bogs, lakes, woodlands, hedgerows and field boundaries, make a considerable contribution to the amenity and local distinctiveness of both urban and rural landscapes. It is these landscapes that are most in danger from permanent alteration due to development. Hedgerows, shelter belts and stone walls make a significant contribution to the appearance and character of the local environment while also being important wildlife habitats. Changing agricultural practices can also see loss or lack of maintenance of key features such as hedgerows; whilst urban generated housing if poorly designed and sited can cumulatively result in negative impacts on the landscape.

5.10 Interactions

The environment is both complex and dynamic and the various elements of the environment interact in an equally complex and dynamic manner. The permutations can be numerous; however at a simplistic level the principal interactions can be either qualified or quantified in most instances.

These interactions can be either benign or unfavourable; can be either proportionate or synergistic; can be short lived or permanent. In addition an event, an individual action or an ongoing activity can have an effect on one or more aspects of the environment. This effect may differ in magnitude, type and duration across several different aspects of the environment.

For example the potential exists for discharges of treated effluent from wastewater plants to surface water systems to impact negatively on water quality. Similarly the use of septic tanks can impact negatively on the quality of ground water resources if working inefficiently or inappropriately sited. This report has attempted to deal with the issues at a 'root' level thereby diminishing the necessity to discuss further the possible and numerous interactions between the various environmental receptors.

This environmental report has approached each of the environmental receptors on an individual basis though it is fully cognisant of the relationship between the various elements. The report has therefore attempted to present the data in such a way as to indicate fully the potential for impacts on other aspects of the environment where they may occur or indeed are likely to occur.

To highlight the extent of the relationship between the various elements of the environment the matrix presented in Table 5.8 provides an indication of the interactions present between environmental receptors.

To highlight the extent of the relationship between the various elements of the environment the matrix presented in Table 5.8 provides an indication of the interactions present between environmental receptors. Categories highlighted in **blue** identify where interactions between environmental receptors occur.

The significant aspect of the matrix (is the relationship between human beings and all aspects of the environment. There are three simple conclusions to be drawn from the matrix; people benefit most from a high quality environment; people are collectively responsible for the adverse impacts that can occur; and people are most seriously affected by deterioration in environmental quality.

Table 5.8 Interrelationship between Environmental Receptors

		Biodiversity - Flora and Fauna	Human Beings - Population	Human Beings - Health	Soil and Geology	Water	Landscape and Visual Issues	Material Assets - Transportation	Material Assets - Other	Cultural Heritage	Air Quality	Noise
Is this aspect of the environment likely to interact with other aspects of the environment?	Biodiversity - Flora and Fauna											
	Human Beings - Population											
	Human Beings - Health											
	Soils and Geology											
	Water											
	Landscape and Visual Issues											
	Material Assets - Transportation											
	Material Assets - Other											
	Cultural Heritage											
	Air Quality											
	Noise											

6 Strategic Environmental Objectives

6.1 Introduction

The primary objective of the SEA is to provide for a high level of environmental protection and to contribute to the integration of environmental considerations into the preparation and adoption of the Edenderry Local Area Plan 2017-2023

Article 5 of the SEA Directive requires the identification of environmental protection objectives. These Strategic Environmental Objectives (SEOs) assist in the prediction, description and monitoring of impacts on the environment as a result of the Local Area Plan. Indicators allow impacts to be assessed and highlighted in a simple and effective manner. Indicators can also be used to form the basis of a monitoring programme for the Plan, (outlined in Chapter 10 of this Environmental Report) the results of which will inform the next Plan Review and other studies.

Thus to achieve the aim of assessing and improving the environmental performance of the Local Area Plan, a number of Environmental Objectives, specific to each environmental topic have been formulated, see Table 15. These SEOs are a fundamental part of the SEA process. The Objectives are derived through consultation between the Planning Authority, the report authors (guided by SEA guidelines, incorporating where relevant international, national and regional policies which govern environmental protection/conservation) and are based on the overall strategy of the Planning Authority to safeguard the environmental integrity of the Local Area Plan area and to develop its functional area in a sustainable manner.

SEOs are distinct from the objectives and policies contained in the plan, though the process of preparing the Local Area Plan in conjunction with the SEA allows for the incorporation of environmental themes at an early stage of the process. The Environmental Objectives are used to assess the proposed development strategies of the Local Area Plan, its policies and objectives, in order to evaluate and identify where conflicts may occur. The assessment is contained in Chapter 8.

Allied to the development of the Strategic Environmental Objectives are Environmental Indicators and targets. Indicators facilitate the monitoring aspect of the SEA, while targets provide a realistic and achievable target to which the Local Authority can work towards. The indicators are discussed in more detail in Chapter 10.

Table 6.1: Strategic Environmental Objectives for the Edenderry LAP 2017-2023

Environmental Component	Strategic Environmental Objectives
BIODIVERSITY, FLORA & FAUNA	B1: Conserve and protect the diversity of habitats and species by limiting adverse impacts on habitats and species of conservation concern.
POPULATION	P1: Improve people's quality of life based on high quality residential, working and recreational environments and on sustainable travel pattern
SOILS & GEOLOGY	S1: Protect quality and quantity of existing soil and geology.
WATER	W1: Improve/maintain and protect water quality and the management of watercourses to comply with the standards of the Water Framework Directive and incorporate the objectives of the Floods Directive into sustainable planning and development.
AIR CLIMATE & NOISE	A1: Maintain and promote continuing environmental improvement where possible of emissions to air (including noise emissions).
MATERIAL ASSETS	M1: Make best use of existing infrastructure, promote the sustainable development of new infrastructure and promote the sustainable efficient use of resources.
CULTURAL HERITAGE	C1: Promote the protection and conservation of the archaeological, architectural and cultural heritage.
LANDSCAPE	L1: Conserve and enhance valued natural and historic landscapes and features within them.

7 Description of Alternatives

7.1 Introduction

The issue of alternatives is a critical function of the SEA process and is necessary to evaluate the likely environmental consequences of a range of alternative development strategies for the area within the constraints imposed by environmental conditions. The alternatives were considered at an early stage of the process and through an iterative process with the Local Area Plan, SEA and AA teams the most appropriate scenario was selected.

7.2 Legislative Context

Article 5 of the SEA Directive requires the consideration of reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme and the significant environmental effects of the alternatives proposed. It states under Article 5(1) that;

Where an environmental assessment is required under Article 3(1), an environmental report shall be prepared in which the likely significant effects on the environment of implementing the plan or programme, and reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme, are identified, described and evaluated. The information to be given for this purpose is referred to in Annex I.

In accordance with SEA guidelines, the alternatives put forward should be reasonable, realistic and capable of implementation. They should also be in line with the appropriate strategic level at which the Plan will be implemented within the national and county planning hierarchy. The Edenderry Local Area Plan 2017-2023 will be framed within a policy context set by a hierarchy of National, Regional and County level strategic plans as well as the Irish and European legislative framework. Therefore the options for alternatives are limited, and a scenario such as the 'do-nothing' situation has not been included as it is neither reasonable nor realistic.

The alternatives proposed have been assessed against the relevant Strategic Environmental Objectives (SEOs) established for the key aspects of the environment likely to be affected by the Plan's implementation. The evaluation process resulted in the identification of potential impacts and informed the selection of the preferred development scenario for the Edenderry LAP 2017-2023. This determination sought to understand whether each alternative was likely to improve, conflict with, or have a neutral interaction with the environment of the plan area.

7.3 Methodology for the Selection of Alternatives

The plan is based on the principles of sustainable development which means that development will be promoted in accordance with the appropriate international, national, regional and county guidelines.

Particular reference is drawn to the Core Strategy of the Offaly County Development Plan which must be complied with. The following factors have been used to determine the suitability of specific lands for residential development, employment and Open Space which constitute the proper planning and sustainable development of the town:

- Proximity to the Edenderry town centre;
- Proximity to the schools;

- Regeneration/Renewal of residential areas or other brownfield sites;
- Environmental Constraints – proximity to and potential impact on the qualifying interests of the adjoining designated sites;
- The need to provide new roads infrastructure to facilitate development
- Consideration as to whether a site could be considered an infill opportunity as opposed to extending the urban footprint further from the town centre
- Leapfrogging beyond other available sites will not be considered favourably.

7.4 Description of Proposed Alternatives

Six alternatives were considered in the drafting of the SEA and the preparation of the Edenderry LAP. Options developed are not predictions or preferences; instead they offer a range of outcomes arising from different planning and development strategies. These six scenarios form the basis for comparative evaluation of the likely environmental effects of each as part of this study.

- **Alternative 1:** To retain the land use zonings as per the existing Edenderry 2011-2017 LAP
- **Alternative 2:** Design and development of green field area to the north of Edenderry Town Hall, west of Clonmullen Lane, as a masterplan area.
- **Alternative 3:** Development of Greenfield area to south east of the town on Tunnel Road/Rathangan Road.
- **Alternative 4:** Development of lands off Dublin Road for residential purposes.
- **Alternative 5:** Development of all lands proposing/requesting residential landuses across the town and environs area at pre-draft stage.
- **Alternative 6:** Planned approach towards consolidated and coherent growth of Edenderry

7.4.1 Alternatives Options Considered

<ul style="list-style-type: none"> • <i>Alternative 1</i> • <i>To retain the land use zonings as per the existing Edenderry 2011-2017 LAP</i> 	
Overview	Effects on Planning
<p>To allow completion of unfinished residential areas</p> <p>To consolidate and encourage infill and brownfield site developments in the town core</p> <p>To focus on the provision of services, community facilities and amenities responding to the rapid growth of the existing population.</p>	<p>Doesn't meet core strategy requirements for population target.</p> <p>Doesn't factor economic trends in housing market and needs for housing in the area.</p> <p>Works against the rural housing policy of the Offaly County Development Plan 2014-2020 by failing to offer a reasonable housing alternative.</p> <p>Fails to capitalize on new services, community facilities and amenities that may come about from new residential development.</p>
Conclusion	
No	

Alternative 2	
<i>Design and development of Greenfield area to the north of Edenderry Town Hall, west of Clonmullen Lane, as a masterplan area.</i>	
Overview	Effects on Planning
<ul style="list-style-type: none"> • Attractive proximity to Edenderry Town Centre • Focusing on the delivery of large scale development, • Provision of new distributor road (to north) • Widening of existing road to east and access road to backlands of town centre area to south. 	<ul style="list-style-type: none"> • Land in area despite its attractive proximity to Edenderry Town Centre, by reason of its underlying topography (peat), is greatly unsuitable for large scale residential development. • Located in a Flood risk area
Conclusion	
No	

Alternative 3	
<i>Development of Greenfield area to south east of the town on Tunnel Road/Rathangan Road for large scale residential development</i>	
Overview	Effects on Planning
<ul style="list-style-type: none"> • Focus of large scale residential development. 	<ul style="list-style-type: none"> • Land in area at risk of flooding from River Boyne. • Sequentially - at considerable remove from Core of the town.
Conclusion	
No	

Alternative 4	
<i>Development of lands off Dublin Road for residential purposes.</i>	
Overview	Effects on Planning
<ul style="list-style-type: none"> • Development of lands off Dublin Road for residential purposes. 	<ul style="list-style-type: none"> • Land/area suitable for landuses related to business/employment. • Exceed core strategy quantum of residential land and population targets.
Conclusion	
No	

Alternative 5

<i>Development of all lands proposing/requesting residential landuses across the town and environs area at pre-draft stage.</i>	
Overview	Effects on Planning
<ul style="list-style-type: none"> Development of all lands proposing /requesting residential landuses across the town and environs area at pre-draft stage. 	<ul style="list-style-type: none"> Exceed core strategy quantum of residential land and population targets.
Conclusion	
No	

<i>Alternative 6</i>	
Working towards consolidated and coherent growth of Edenderry	
Overview	Effects on Planning
<ul style="list-style-type: none"> Facilitation of appropriate employment and enterprise for the town, Provision of quality residential environments to accommodate the targeted population growth in line with the core strategy of the Offaly CDP 2014-2020 Town Centre revitalization, encouraging for the most economic and beneficial use of brownfield and infill sites and promoting regeneration. 	<ul style="list-style-type: none"> Facilitation of appropriate employment and enterprise for the town and the wider hinterland in accordance with the role of the town as Key Service Town (MRPGs) and its strategic location with the GDA. The provision of quality residential environments to accommodate the targeted population growth in line with the core strategy of the Offaly County Development Plan 2014-2020. Town Centre revitalization, encouraging for the most economic and beneficial use of brownfield and infill sites and promoting regeneration. Nurturing community development, promoting culture and a strong identity. Promoting the harmonization of the natural and built environment to ensure sustainable development. Making provision for key infrastructure in accordance with the social, economic and environmental needs of the town and its environs.
Conclusion	
Yes	

7.5 Evaluation of Alternatives

This section provides a comparative evaluation of the environmental effect of implementing the two main alternatives and determines which alternative is likely to have a beneficial, neutral or negative relationship with the Strategic Environmental Objectives (SEO's) outlined in Chapter 6. Using the above SEOs, the four alternatives are evaluated against these environmental objectives, the results of the assessment are presented in Table 7.1. The Assessment is categorized as follows:

Positive	
Neutral	
Uncertain	
Negative	

7.6 Outcome of Alternatives Assessment

Table 7.1 highlights that a comparative assessment of the proposed alternatives shows Alternative 6; which provides for the consolidation of the Edenderry through town Centre revitalization, in conjunction with the provision of key infrastructure and quality residential environments as most appropriate and environmentally protective to the future development of Edenderry.

This approach would meet a large number of objectives of the LAP as it supports the consolidation of the town centre by encouraging the development of vacant and underutilised sites whilst including infrastructural improvements.

The provision of appropriate employment and enterprise for the town and the wider hinterland in accordance with the role of the town as Key Service Town would reduce the commuting distances carried out by Edenderry inhabitants, improve quality of life and reduce negative impacts on air quality arising from car usage. Alternative 1 would support the intensification of the town centre of Edenderry and reinforce its urban core.

Table 7.1 SEA Assessment of Alternative Scenarios

Assessment against SEA Objectives and Alternative Scenarios	Alternative 1: To retain the land use zonings as per the existing Edenderry 2011-2017 LAP	Alternative 2: Design and development of Greenfield area to the north of Edenderry Town Hall, west of Clonmullen Lane, as a masterplan area.	Alternative 3: Development of Greenfield area to south east of the town on Tunnel Road/Rathangan Road for large scale residential development	Alternative 4: Development of lands off Dublin Road for residential purposes.	Alternative 5: Development of all lands proposing/requesting residential landuses across the town and environs area at pre-draft stage.	Alternative 6: Working towards consolidated and coherent growth of Edenderry
SEA Objective						
BIODIVERSITY						
B1: Conserve and protect the diversity of habitats and species by limiting adverse impacts on habitats and species of conservation concern.	Neutral	Uncertain	Uncertain	Neutral	Uncertain	Neutral
POPULATION						
P1: Improve people's quality of life based on high quality residential, working and recreational environments and on sustainable travel pattern	Negative	Negative	Negative	Negative	Negative	Positive
SOILS AND GEOLOGY						
S1: Protect quality and quantity of existing soil and geology.	Neutral	Uncertain	Negative	Neutral	Uncertain	Positive

WATER						
W1: Improve/maintain and protect water quality and the management of watercourses to comply with the standards of the Water Framework Directive and incorporate the objectives of the Floods Directive into sustainable planning and development.	Neutral	Negative	Negative	Neutral	Uncertain	Neutral
AIR QUALITY & CLIMATE						
A1: Maintain and promote continuing environmental improvement where possible of emissions to air (including noise emissions).	Negative	Positive	Negative	Negative	Neutral	Neutral /Positive
MATERIAL ASSETS						
M1: Make best use of existing infrastructure, promote the sustainable development of new infrastructure and promote the sustainable efficient use of resources.	Neutral	Negative	Neutral	Neutral	Negative	Positive
CULTURAL HERITAGE						
C1: Promote the protection and conservation of the archaeological, architectural and cultural heritage.	Neutral	Neutral	Neutral	Neutral	Neutral	Positive
LANDSCAPE						
L1: Conserve and enhance valued natural and historic landscapes and features within them.	Neutral	Neutral	Neutral	Neutral	Uncertain	Neutral

8 Strategic Environmental Assessment of Edenderry LAP

8.1 Introduction

The SEA process ensures that the environment is central to all decisions on the future development of the plan area.

The purpose of this section of the Environmental Report is to highlight the potential conflicts, if they are present, between the stated policies and objectives contained in the Plan with the Strategic Environmental Objectives. Furthermore the assessment examines the potential impact arising from the Plan's implementation of its policies and objectives on sensitive environmental receptors.

The process of SEA and Local Area Plan formulation is an iterative one and as such environmental considerations have informed all stages of plan preparation carried out to date in order for the potential for significant adverse effects arising from implementation of the plan to be minimised. Nonetheless, it is possible that some individual plan objectives or policies will create such effects. Where the environmental assessment identifies significant adverse effects, consideration is given in the first instance to preventing such impacts; where this is not possible for stated reasons, to lessening or offsetting those effects through mitigation measures outlined in Chapter 9 of this report.

In some instances, there is little or no relationship between the various Plan Policies/Objectives and the respective environmental receptor. Where this occurs, the potential impact is regarded as neutral and no further discussion is deemed necessary.

This section provides a comparative evaluation of the environmental effect of implementing the stated policies and objectives of the Edenderry LAP and determines whether each measure is likely to have a positive, neutral, uncertain or negative relationship with the Strategic Environmental Objectives (SEO's) outlined in Chapter 6. Using the above SEOs, the policies and objectives of the LAP are evaluated in the context of their impact on these environmental objectives, the results of the assessment are presented in a table format below. The potential effects are categorised as follows:

- Potential Positive Impact
- Uncertain Impact
- Neutral or No relationship
- Potential Negative impact

Where the evaluation identifies a potential uncertain or negative impact with the status of an SEO, the relevant SEO code and provision is entered into a Mitigation Table (Table 9.1) to assess what mitigation is available to offset uncertain or potentially negative impacts arising from the provision.

Table 8.2 Environmental Assessment Of Proposed LAP Policies and Objectives

Specific Elements/Components Of Proposed Amendment	Potential Negative Impact	Potentially Uncertain Impact	Potentially Neutral or No relationship	Potential Positive Impact	Comments
Proposed Policies & Objectives Development Strategy					
Policy DSP1: Actively implement the development strategy to ensure a sustainable, consolidated and coherent approach to development. There will be a presumption in favour of positive and sustainable development that focuses specifically on: <ul style="list-style-type: none"> • employment generation, • providing quality residential environments, • town centre revitalisation, • supporting and enhancing community, culture and identity, • protecting and enhancing the built and natural environment • providing key infrastructural provision. 		W1, S1, B1	A1, M1	P1, L1, C1	
Policy DSP2: Implement the development strategy to be consistent with spatial planning policy at national, regional and county level that places emphasis on the role of Edenderry as a Key Service Town.			B1, W1, P1, S1, A1, M1, L1, C1		
Policy DSP3: Implement the development strategy in providing quality residential environments to facilitate appropriate population growth according to the core strategy of the Offaly County Development Plan.			S1, A1, M1, C1, B1, L1	P1	

Policy DSP 4: Implement the development strategy to prioritise the completion of unfinished developments the reuse of derelict buildings and dangerous structures for the benefit of the town and community. Offaly County Council will engage with developers, landowners and agencies where necessary to resolve outstanding issues.			S1, A1, M1, C1, B1, I1	P1	
Objective DSO1 Monitor the delivery of the development strategy and ensure that it stays focused on the mission of guiding development that works towards the sustainable, consolidated and coherent growth of the town.			S1, A1, M1, C1, B1	P1	
Proposed Policies & Objectives					
Employment & Enterprise					
Policy EEP1 To support sustainable employment and enterprise in Edenderry through the identification of appropriately located and adequately serviced lands for business/employment, industrial and commercial developments, the promotion of investment in transportation and other support infrastructure and the creation of a high quality environment to encourage economic investment.			M1, L1, B1, C1, S1, W1, A1	P1	
Policy EEP2 There is a positive presumption towards employment and enterprise opportunities and development in appropriately zoned locations in Edenderry to create sustainable jobs and a strong and diversified local economy.			B1, P1, M1, L1, C1, S1, W1, A1		
Policy EEP3 To protect employment zoned land from inappropriate development that would undermine future economic activity or			B1, P1, M1, L1, C1, S1, W1, A1	P1	

the sustainable economic development and growth of the town.					
Policy EEP4 Employment and Enterprise development will be facilitated in the context of the role of Edenderry as a Key Service Town consistent with objectives of the core strategy set out in the Offaly County Development Plan 2014-2020.			B1, P1, M1, L1, C1, S1, W1, A1	P1	
Objective EEO1 Support the work of the Local Enterprise Office in performing its functions of facilitating enterprise and economic development, delivering local and regional initiatives through the Offaly Local Economic and Community Plan 2016-2021 and the Midland Action Plan for Jobs and working with key national, regional, local, public and private stakeholders to support employment opportunities in Edenderry.			B1, P1, M1, L1, C1, S1, W1, A1	P1	
Objective EEO2 Identify infrastructural and service deficits experienced by existing business and work towards addressing these deficits.			B1, W1, S1, A1, C1, L1	P1, M1	
Objective EEO3 Market existing space available in the town for the establishment of incubator units and start-ups.			B1, W1, S1, A1, C1, L1, M1	P1	
Objective EEO4 Facilitate the development of employment generating enterprises within existing employment areas such as the town centre, the Edenderry Business Campus and vacant commercial premises.			B1, W1, S1, A1, C1, L1, M1	P1	
Objective EEO5 Promote and encourage cultural development and creative industries.			B1, W1, S1, A1, L1, M1	P1, C1	
Objective EEO6 Promote and market Edenderry as a strong and competitive alternative location for business by			B1, W1, S1, A1, C1, L1, M1	P1	

highlighting distinctive attributes and characteristics.					
Objective EEP5: Encourage appropriate development, works and supporting infrastructure that would contribute to a high quality and attractive built and social environment in Edenderry to attract and sustain new business, residents and visitors.			1, W1, S1, A1, C1, M1	P1, L1	
Objective EEP6 Encourage and facilitate the sustainable development of the tourism potential of Edenderry in a manner that respects, builds on, protects and enhances the cultural, built and natural heritage of the town.			B1, M1, L1, C1, W1, A1, S1	C1, P1	
Objective EEP7 Secure connectivity between Edenderry with county, regional and national cycle networks via the Grand Canal Greenway and to capture positive economic, social and cultural benefits associated with this connection.		B1, W1	M1,L1,A1,S1	C1, P1	
Objective EEP8 Encourage the establishment and expansion of services and facilities in the town at appropriate locations to facilitate the business needs of employment and enterprise developments and potential tourism needs like conference facilities, hotel, accommodation, eateries and other similar services.		B1, W1, S1, M1	A1,L1	P1,C1	
Objective EEP9 Work collaboratively and in partnership with other stakeholders in the pursuit of development that would contribute positively to the economic development of the town.		B1, S1, W1, L1	A1,C1	P1, M1	

Proposed Policies & Objectives**Town Centre Revitalisation**

Policy TCP 1: In acknowledgement of its role for employment, economic development and social activity it is policy, to encourage appropriate development within the town centre of a high standard and design and to make provision for suitable end uses that contribute positively to the vitality and viability of the town centre.

A1, B1, W1, S1, C1, M1

L1, P1

Objective TCO1: Facilitate the creation of a high level operational management team (Town Team) for Edenderry town centre drawing together key stakeholders with a defined purpose to recognise the distinctive attributes of the town and to develop a collaborative and coherent approach to the sustainable future of Edenderry town centre.

P1, C1, B1, A1, S1, W1,
M1, L1

Objective TCO2: Acquire buildings or properties by way of legal instruments available to the Local Authority to provide facilities in town centre locations that seek to support the economic and social role of the town centre and to benefit the wider community in Edenderry. Such facilities include uses of a Civic, Arts and Cultural and Community dimension.

B1, S1, W1, A1, M1, L1

C1, P1,

Proposed Policies & Objectives**Culture and the Arts**

Policy TCP2 The sequential approach to retail development will be applied stringently in favour of town centre locations. Developers/retailers must demonstrate a high degree of flexibility in their design and floor

B1, S1, W1, M1, C1

L1, P1, A1

plate requirements to adapt to town centre buildings.					
Policy TCP3 To encourage retail development including new forms of shopping, which relates to the revitalisation of the existing town centre. Proposals, which would undermine the vitality and viability of the town centre because of their location at remove from the town centre area will not be permitted.			B1, S1, W1, M1, C1, A1	P1, L1	
Policy TCP4 In respect of shopfronts: a) To promote a high standard in design, quality and materials of new shopfronts and to preserve, retain traditional shopfronts of townscape importance and to prohibit facsimile replacement of existing historic shopfronts with mock traditional shopfronts. b) There will be a presumption against shopfronts where by their design, materials, quality or lighting scheme detract from the amenities of the area and do not make a positive contribution to the streetscape. c) Refer to 'Guide to Shops and signs' leaflet, Offaly County Council.			B1, S1, W1, P1, C1, A1, M1	L1	
Policy TCP5 To prohibit the proliferation of any individual use within the town centre which would by way of increased presence and use, detract from the amenities of the area and work against the policy of encouraging appropriate development to contribute positively to the vitality and viability of the town centre.			B1, S1, W1, P1, C1,A1,M1	L1	
Policy TCP6 There is a positive presumption for uses that make a positive contribution to daytime and night time activities in the town			B1, S1, W1, L1, C1, A1, M1	P1	

centre including residential uses and cultural activities.					
Policy TCP7 Ensure that all works carried out to protected structures shall be in accordance with best conservation practice and the Guidelines for Planning Authorities on Architectural Heritage Protection, 2004.			M1, S1, W1, A1, B1, L1, P1	C1	
Policy TCP8 Ensure that all applications pertaining to the redevelopment of buildings that include features such as vernacular doorways and archways include a detailed methodology, prepared by a suitably qualified person, for the repair and maintenance of these features.			M1, S1, W1, A1, B1, L1, P1	C1	
Policy TCP9 Ensure that all new development respects, contributes to and enhances the public realm.			M1, S1, W1, A1, B1	C1, P1, L1	
Objective TCO3 To undertake a Public Realm Study for Edenderry Town Centre. The public realm strategy will be undertaken in co-operation with key stakeholders, business interests and local communities in the town. The objective of the strategy is to design a scheme for the town that would continue to promote the attractiveness of the central area, promote a strong sense of place, and a distinct and positive identity which respects the historic environment and character of Edenderry by creating a clearly defined public realm which co-ordinates existing and new development and connects to the Grand Canal Harbour area.			M1, S1, W1, A1, B1	C1, p1, l1	
Objective TCO4 Continue public realm improvement works on O'Connell Square.			M1, S1, W1, A1, B1	C1, p1, l1	

Objective TCO5 Explore the provision of Civic Art pieces as part of or to integrate into the public realm.			M1, S1, W1, A1, B1, P1	L1, C1	
Objective TCO6 Maintain unique vernacular features such as archways and doorways and ensure that they are sensitively incorporated into any new development.			M1, S1, W1, A1, B1		
Objective TCO7 Underground the overhead cables visible along JKL Street.			M1, S1, W1, A1, B1, P1, c1	L1	
Objective TCO8 Improve accessibility to and within the town centre by: <ul style="list-style-type: none"> • Reviewing existing car parking provision (on street and off street). • Examining opportunities for additional on street and off street car parking at JKL Street and at suitable locations to serve the needs of business centremost on JKL Street. • Examining opportunities for provision of cycle linkages • Examining pedestrian access points and linkages from peripheral areas. 			M1, S1, W1, A1, B1, L1, C1	P1	
Objective TCO9 Undertake a comprehensive traffic/transportation study for the town with an objective of addressing the problem of vehicular congestion in the town and its environs and to make provision for alternative access and linkage routes through the town.		B1, S1	W1, C1, L1, L1, A1	M1	
Objective TCO10 Provide loading bays of adequate capacity where they are needed most in order to ensure that traffic flows are not restricted.			B1, S1, W1, C1, L1, A1, P1	M1	
Objective TCO11 View favourably, applications seeking to provide off-street car parking in central areas of the town to			B1, W1, S1, A1, C1, M1, L1	P1,	

facilitate the needs of businesses and visitors to the town.					
Proposed Policies & Objectives Renewal Areas in need of Regeneration					
Policy TCP9 Monitor the levels of dereliction in the town centre and take action when necessary in accordance with the Derelict Sites Act 1990, as amended			W1, C1, A1, M1	P1, B1, S1, L1	
Policy TCP10 Facilitate the occupation of vacant retail/commercial units in the town centre, the development of brownfield sites and the redevelopment of existing derelict buildings and dangerous structures to provide for a broader range of end uses and services that contribute positively to the vitality of the town centre.			S1, W1, A1, C1	B1, P1, L1, M1	
Policy TCP11 Facilitate the comprehensive consolidation of the town's retail and commercial core and, where appropriate, expansion to the backland areas of J.K.L. Street.		S1, B1	W1, C1, M1	A1, L1, P1	
Policy TCP12 Employ, where considered necessary, the provisions of the Urban Regeneration and Housing Act 2015 (Vacant Site Levy) to encourage and facilitate the appropriate development of areas/sites in the town centre identified specifically where their renewal or regeneration would prevent: (i) adverse effects on existing amenities in such areas, in particular as a result of the ruinous or neglected condition of any land, (ii) urban blight and decay, (iii) anti-social behaviour, or			B1, W1, S1, A1, C1	P1, C1, L1	

(iv) a shortage of habitable houses or of land suitable for residential use or a mixture of residential and other uses.					
For clarity, all lands located within the defined town centre boundary in the Edenderry LAP are subject to the provisions of the Urban Regeneration and Housing Act 2015 (Vacant Site Levy).					
Objective TC012 Encourage and implement pre-active initiatives for the occupancy /re-occupancy of vacant retail/commercial units for appropriate end uses that benefit the wider community and contribute to vitality and vibrancy of the town centre.			B1, W1, S1, A1, C1, M1	P1, L1	
Objective TC013 Identify vacant sites within the town centre (regeneration area) in accordance with the criteria set out in the Urban Regeneration and Housing Act 2015 for the application of the vacant site levy where necessary to encourage development.			B1, W1, S1, A1, C1	P1,C1,L1	
Proposed Policies & Objectives Masterplans					
Policy TCP13: Facilitate, promote and encourage the appropriate redevelopment of the opportunity sites identified in this Plan.			B1,W1,S1,A1	P1,C1,L1	
Policy TCP14: Require a masterplan to be undertaken and included as part of any development proposals on Opportunity Sites one, two and three to show how the proposal can develop in a coherent manner in respect of adjoining lands and objectives as set out in the LAP.			B1, W1, S1, A1, C1, M1	P1, L1	
Policy CS01: Make provision for an adequate amount of appropriately located lands to accommodate the projected population		B1 S1 C1	W1, A1, L1	P1, M1	

growth of Edenderry over the lifetime of this plan.				
Policy CS02: Monitor and manage the delivery of residential development in Edenderry during the plan period in the development management process.		B1, S1, C1	W1, A1, L1, P1, M1	
<p>Policy CS03 Support the implementation of the core strategy for the appropriate development of residential zoned lands in Edenderry and its Environs by employing, where considered necessary, the provisions of the Urban Regeneration and Housing Act 2015 (Vacant Site Levy) to facilitate the appropriate development of areas/sites that are in need of renewal or regeneration and whereby the redevelopment of such areas/sites would prevent:</p> <ul style="list-style-type: none"> i. adverse effects on existing amenities in such areas, in particular as a result of the ruinous or neglected condition of any land, ii. urban blight and decay, iii. anti-social behaviour, or iv. a shortage of habitable houses or of land suitable for residential use or a mixture of residential and other uses. <p>For clarity, all lands zoned residential in the Edenderry LAP are subject to the provisions of the Urban Regeneration and Housing Act 2015 (Vacant Site Levy).</p>			B1, W1, S1, A1, C1, M1	L1, P1
Proposed Policies & Objectives Residential Environments				

<p>Policy QREP 1: Support the creation of sustainable residential communities and high quality residential areas at appropriate locations with a range of housing options and adequate support services, facilities and amenities, having regard to the guidance contained in the following policy documents or any updated/amended versions:</p> <ul style="list-style-type: none"> • Sustainable Residential Developments in Urban Areas: Guidelines for Planning Authorities, 2009 and the accompanying guidance document Urban Design Manual: A Best Practice Guide – A Companion Document to the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas, 2009 (or any updated/superseding document) • Architectural Heritage Protection Guidelines for Planning Authorities 2011 • Design Manual for Urban Roads and Streets (DMURS) 2013 • Planning System and Flood Risk Management, Guidelines to Planning Authorities 2009 • Sustainable Urban Housing: Design Standards for new apartments, Guidelines for Planning Authorities, 2015. 			B1, S1, C1,W1,L1, P1, M1	P1, L1	
<p>QREP 2: Encourage the orderly and sequential residential development in accordance with the Development Strategy <i>‘to work towards the sustainable, consolidated and coherent growth’</i> of the town. This shall include a positive presumption in favour of the sequential development of suitably serviced</p>			B1, S1,W1,C1,A1	P1,M1, A1	

residentially zoned lands subject to consideration of environmental conservation and visual requirements.					
QREP 3 Require all new residential developments to be consistent with the Core Strategy of the County Development Plan 2014-2020, and the development strategy of this local area plan in acknowledgement of the defined role of Edenderry as a Key Service Town.			B1, S1, W1, C1, A1, P1, M1, A1		
QREP 4 Encourage and promote an excellent standard in the quality of house design and layout of residential areas to support the development of sustainable and vibrant communities.			B1, S1, W1, C1, A1, M1	L1,P1	
QREP 5 Encourage and foster the creation of attractive, sustainable neighbourhoods making provision for a variety of housing types, sizes and tenures with supporting residential amenities and community facilities.			B1, S1, W1, C1, A1, M1	L1,P1	
QREP 6 Prohibit large homogenous residential schemes that are designed devoid of consideration of the creation of unique places, creating a sense of place, safety and the encouragement of community spirit through design.			B1, S1, W1, C1, A1, M1	L1,P1	
QREP 7 Promote the reuse, development or redevelopment of underutilised infill town centre sites and to facilitate high quality development respecting the design, context and setting of the surrounding development and the character of the area.			B1, S1, W1, C1, A1	M1, P1, L1	
QREP 8 Encourage strong frontages along main thoroughfares creating definite building lines and continuity of the structure of the town centre.			B1, S1, W1, C1, A1, M1, P1	L1	

<p>QREP 9 To require applications for residential development where appropriate to demonstrate the provision of an appropriate mix of dwelling types having regard to the following;</p> <ul style="list-style-type: none"> • The nature of the existing housing stock and existing social mix in the area • The desirability of providing mixed communities • The provision of a range of housing types and tenures • The need to provide a choice of housing, suitable for all ages, groups and persons at different stages of the life cycle. 			B1, S1, W1, C1, A1, M1, L1	P1	
<p>Objective QREO1 Secure the reservation of 10% of all land zoned for residential development to be made available for the provision of social housing in agreement with Offaly County Council for preferred options.</p>			B1, S1, W1, C1, A1, M1, L1	P1	
<p>Objective QREO2 Encourage the development of sustainable residential communities through the promotion of innovative, high quality building design and appropriate layouts, that prioritise walking, cycling and public transport options and provide for a high level of permeability, accessibility and connectivity to the existing built environment, services and facilities. In this regard, future residential development proposals will be in accordance with the principles set out in the DEHLG document 'Sustainable Residential Development in Urban Areas 2009' and its companion document 'Urban Design Manual: A Best Practice Guide for Planning Authorities 2009' and the 'Design Manual for Urban Roads and Streets 2013' (or as updated).</p>			S1, B1, W1, C1, A1	L1, P1, M1	

Objective QREO3 Continue to address the completion of developments that are ongoing, having regard to the DoECLG's Stakeholders Code of Practice between the Representative Bodies dealing with Unfinished Housing Developments (2011).			S1, B1, W1, C1, A1	L1, M1, P1	
Objective QREO4 Facilitate the development of apartments at appropriate locations, such as in the town centre, and have regard to the Sustainable Urban Housing: Design Standards for New Apartments Guidelines for Planning Authorities (2015) (as updated), the Sustainable Residential Developments in Urban Areas: Guidelines for Planning Authorities (2009) and Urban Design Manual: A Best Practice Guide – A Companion Document to the Guidelines for Planning Authorities on Sustainable Residential Development in Urban Areas (2009) in the assessment of this type of development.			S1, B1,W1, C1, A1	L1, P1, M1	
Objective QREO5: Encourage and promote the development of age friendly homes in the town centre or central areas of the town in close proximity to necessary services and facilities to maintain and ensure proper social integration and interaction.			S1, B1,W1, C1, A1, L1, M1	P1	
Objective QREO6: Consider applications for single houses on unzoned lands in the plan area where: 1. Such development does not constitute urban generated housing, 2. The applicant complies with the eligibility criteria of the rural housing policy of the Offaly County Development Plan 2014-2020 or subsequent development plan and			S1, B1,W1, C1, A1, L1, M1, P1		

3. The development is consistent with the objectives of core strategy for Edenderry.					
Objective QRE07: Consider the integrated and coherent development of garden areas/backlands or infill sites of established residential properties that provides for a logical approach to development, subject to the following: <ul style="list-style-type: none">•Quality design and layout (allowing for contemporary designs),•Adherence to all quantitative and qualitative standards for residential amenity (both of the development and of adjoining properties),•Respect the established character and prevailing density of the area and• Traffic safety. Proposals representing ad hoc development will not be considered.			S1, B1,W1, C1	P1, L1, M1, A1	
Proposed Policies & Objectives Car Parking					
Policy CCIP1: Promote and support a strong focus on local community development to address the specific needs of communities in Edenderry.			B1, S1, W1, A1, C1, L1	P1	
Policy CCIP2: Support the work of the Offaly Local Development Committee in performing its functions of developing, co-ordinating and implementing a coherent and integrated approach to local and community development, delivering actions and initiatives through the Offaly Local Economic and Community Plan 2016-2021 and working with other stakeholders to support local community development in Edenderry.			B1, S1, W1, A1, C1, L1	P1	

Policy CCIP3: Encourage appropriate development, works and supporting infrastructure that would contribute to building strong local communities in Edenderry. Community development considerations will be embedded into considerations for new developments in Edenderry.			B1, S1, W1, A1, C1, L1	P1, M1	
Objective CCIP4: Support the work of stakeholders, community organisations and agencies that work in community capacity building encouraging local communities in Edenderry to have a greater influence over local decisions, to drive forward community initiatives or represent community interest.			B1, S1, W1, A1, C1, L1	P1	
Policy CCIP5: Assist, encourage and facilitate the provision and extension of community facilities to serve the individual community needs of all individuals in Edenderry in liaison with community based groups, public bodies, government departments, state agencies and other interested parties.			B1, S1, W1, A1, C1, L1	P1	
Policy CCIP6: Encourage the provision of necessary community services and facilities, within the boundary of Edenderry town.			B1, S1, W1, A1, C1, L1	P1	
Policy CCIP7: Encourage and promote cultural developments and initiatives that contribute positively to the economic and community development of the town.			B1, S1, W1, A1, L1	P1, C1	
Policy CCIP8: To support and promote the provision of a new Swimming Pool in Edenderry.			B1, S1, W1, A1, C1, L1	P1,	
Objective CCIO1: Have regard to the guidance and recommendations of The Provision of Schools and the Planning System - A Code of			B1, S1, W1, A1, C1, L1	P1	

Practice for Planning Authorities, the Department of Education and Skills (DoES) and DoECLG, July 2008, as well as other national guidance, as appropriate for the provision of schools by ensuring that suitable lands are zoned for educational uses within the boundary of Edenderry.					
Objective CC102: Continue to work with the DoES, LOETB, and other training providers in assisting in the delivery of educational requirements in Edenderry.			B1, S1, W1, A1, C1, L1	P1	
Objective CC103: Encourage the provision of childcare facilities as an essential part of residential schemes and places of employment such as industrial / business parks within the development boundary of Edenderry.			B1, S1, W1, A1, C1, L1	P1	
Objective CC104: Progress the development of a new modern Community Library in Edenderry in line with the National Library Capital Programme and provide enhanced access to services for the public, including, flexible spaces for meeting and learning, expanded digital services and access during unstaffed times using smart technology.			B1, S1, W1, A1, C1, L1	P1	
Objective CC105: Support the redevelopment of the Edenderry Town Park.		B1, S1	M1, C1, W1, A1	P1, L1	
Objective CC106: Seek the provision of additional parkland spaces within the boundary of the town as part of development applications in order to improve recreational and amenity facilities in the town.		B1, S1	M1, C1, W1, A1	P1, L1	
Objective CC107: Encourage the provision of communal garden areas and sensory gardens in the town.		B1, S1	M1, C1, W1, A1	P1, L1	

Objective CCI08: Facilitate the development of a cultural strategy that seeks to capitalize of cultural opportunities in the town that can be developed and promoted for the local economic benefit of the town and to contribute positively to the local community.			B1,S1,W1, A1, L1, M1	C1 P1
Objective CCI09: Promote and support the Arts in Edenderry and support the provision of permanent civic art at suitable locations within the town.			B1,S1,W1, A1, L1, M1, C1	P1
Objective CCI010: Support the development of a dedicated, multi-purpose Arts Centre/Theatre Facility in the town as resources allow.			B1,S1,W1, A1, L1, M1, C1	P1
Objective CCI011: Support the suitable location for and development of a community skatepark in Edenderry.			B1,S1,W1, A1, L1, M1, C1	P1
Proposed Policies & Objectives Built & Natural Environment				
Policy BNEP1: Protect, conserve and enhance structures (in consideration of maintaining the character and interest of the structure as well as its setting) which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest including those listed on the County Offaly Record of Protected Structures in Edenderry and to promote the rehabilitation, renovation and re-use of these structures.			B1, S1, M1, W1, A1	C1, L1

Policy BNEP2: Encourage and apply best conservation principles to all development applications relating to all historic buildings and structures, in Edenderry as listed in the Offaly County Council Record of Protected Structures as well as buildings and structures which may not be listed as Protected Structures but have an intrinsic heritage value.			B1, S1, W1, A1, M1, L1	C1, P1	
Policy BNEP3: Promote best conservation practice and the importance of informed decision making with regard to historic buildings through advice to owners / occupiers and by encouraging the engagement of a suitably qualified conservation specialist(s) with regard to material specification and application for protected structures.			B1, S1, W1, A1, M1, P1	C1, L1	
Policy BNEP4: Promote appropriate use / re-use and repair of protected structures and to encourage owner/ occupiers to avail of grants available through the Conservation Grants Schemes made.			B1, S1, W1, A1, M1, P1	C1, L1	
Policy BNEP5: Protect and preserve all archaeological sites and their setting including those recorded on the Record of Monuments and Places (RMP) and those not yet discovered.			B1, S1, W1, A1, M1, P1, L1	C1	
Policy BNEP6: Recognise and protect the ecological value of the River Boyne and the proposed Natural Heritage Area of the Grand Canal in Edenderry.			S1,A1, M1, P1, L1, C1	B1, W1	
Policy BNEP7: Protect a riparian corridor of between 30 and 50 metres along the bank of the River Boyne for its ecological value and potential and to maintain it free from inappropriate development.			S1, A1, M1, P1, L1, C1	B1, W1	

Policy BNEP8: Ensure the conservation of the natural habitats along the Grand Canal which are identified as being of ecological and botanical value.			W1, S1, C1, L1, P1, M1, A1	B1, S1	
Policy BNEP9: Make tree preservation orders as deemed necessary.			W1, S1, C1, L1, P1, M1, A1	L1, B1, S1	
Policy BNEP10: Promote the use and value of the Edenderry Branch of the Grand Canal to the town as a boating corridor, tourism route and amenity area for the residents of Edenderry Town.		B1, W1	S1, C1, L1, M1, A1	P1	
Policy BNEP11: Prohibit any development that would be harmful to or that would result in a significant deterioration of habitats and/or disturbance of species in a Special Protection Area (SPA), Special Area of Conservation (SAC) and candidate Special Area of Conservation (cSAC), Natural Heritage Area (NHA) and Proposed Natural Heritage Area (pNHA).			S1, C1, L1, M1, A1	B1, W1	
Policy BNEP12: Ensure an Appropriate Assessment in accordance with Article 6(3) and Article 6(4) of the Habitats Directive, and in accordance with the Department of Environment, Heritage and Local Government Appropriate Assessment of Plans and Projects in Ireland – Guidance for Planning Authorities, 2009 and relevant EPA and European Commission guidance documents, is carried out in respect of any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect on a European site(s), either individually or in combination with other plans or projects, in view of the site's conservation objectives.			S1, C1, L1, M1, A1, P1	B1, W1	

Policy BNEP13: Support and co-operate with statutory authorities and others in support of measures taken to manage proposed or designated sites in order to achieve their conservation objectives.			S1, C1, L1, M1, A1, P1	B1	
Policy BNEP14: Ensure that development proposals are screened to determine whether they are likely to have a significant direct, indirect or cumulative effect on the integrity or conservation objectives of any European Site and, where significant effects are likely or uncertain, there will be a requirement for consultation with the relevant environmental authorities as part of any Habitats Directive Assessment that may be required.			S1, C1, L1, M1, A1, P1	B1	
Policy BNEP15: Protect existing green infrastructure within the Local Area Plan and to provide additional green infrastructure, where possible.			S1, C1, L1, M1, A1, P1	B1	
Policy BNEP16: Integrate Green Infrastructure into future developments in Edenderry and ensure developments are cohesive with Green Infrastructure corridors linking adjoining lands.			S1, C1, L1, M1, A1, P1	B1, P1	
Policy BNEP17: To work with relevant stakeholders to support the promotion of Edenderry as an 'Ireland's Ancient East' destination.			B1, S1, L1, M1, A1	C1, P1	
Policy BNEP18: Protect environmental quality in Edenderry through the implementation of European, National and Regional policy and legislation relating to air quality, greenhouse gases, climate change, light pollution, noise pollution and waste management.			B1, C1, L1, S1	A1, P1, M1, W1	
Objective BNEO1: Issue declarations on types of works that would or would not materially			B1, S1, L1, M1, A1, C1,	P1	

affect the character of a protected structure, where requested.					
Objective BNEO2: Examine the feasibility of designating Architectural Conservation Area(s) (ACA) within Edenderry in the aim of identifying areas of special character and architectural interest and to preserve that special character.			B1, S1, L1, M1, A1, P1, W1	C1	
Objective BNEO3: Seek archaeological excavation and testing, or preservation wherever archaeological material is likely to be affected by a proposed development.			B1, S1, L1, M1, A1, P1, W1	C1	
Objective BNEO4: Implement a tree planting programme in Edenderry.			S1, L1, M1, A1, W1, P1	L1, B1	
Objective BNEO5: To conserve, protect and enhance important landscape features, such as rivers, wetlands, stonewalls, hedgerows etc, which form wildlife corridors and link habitats and to promote and encourage bio-diversity within all new developments in Edenderry.			S1, M1, A1, C1, W1, P1	L1, B1	
Objective BNEO6: Protect and conserve the integrity of soils that support the rich bio-diversity and ecological networks in Edenderry.			M1, A1, C1, P1, L1	S1, B1, W1	
Proposed Policies & Objectives					
Infrastructure					
Objective INFRA1: Require the early and/or timely provision (in tandem with development), of road and other infrastructure needed to be delivered as part of the coherent development of lands or the future development of the area in accordance with the infrastructural objectives of the landuse zoning plan.			B1, A1, M1, L1, C1, P1, S1, W1		

Policy WDO1: Support and work closely with Irish Water in the provision and maintenance of adequate water supply, wastewater disposal, and surface water drainage infrastructure, required to realize the development objectives of this plan.			B1, S1, A1, L1, C1	M1, W1, P1	
Objective WDO2: Permit new developments only where it can be clearly demonstrated that they can be serviced and that there is adequate capacity in the wastewater disposal infrastructure.			B1, S1, A1, L1, C1	M1, W1, P1	
Objective WDO3: Maintain and enhance, as appropriate, the existing surface water drainage system throughout the plan area and ensure that new developments are adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems in new developments.			B1, A1, M1, L1, C1, P1	S1, W1	
Objective WDO4: Maintain a development free buffer around the existing Edenderry wastewater treatment plan of a minimum of 100 metres.			B1, A1, M1, L1, C1, W1, S1	P1	
Objective WDO5: Ensure that planning applications have regard to any existing groundwater protection schemes and /or the likely impacts that development may have on groundwater.			A1, M1, L1, C1, W1	P1, S1, W1	
Policy SWDP1 Require all development proposals in Edenderry to incorporate SUDs and to show clearly how the incorporation of SUDs can benefit the overall scheme or contribute to the area by an end use that is (a) functional to the scheme (b) has an amenity value or, (c) has a habitat creation value.			B1,A1,M1, L1, C1, W1, S1	P1	

Objective SWDO1 To upgrade and extend the surface water collection system for the town.			B1, A1, M1, L1, C1, P1, S1	W1	
Proposed Policies & Objectives Flood Risk & Protection					
Policy FRP1: Have regard to The Planning System and Flood Risk Management – Guidelines for Planning Authorities, November 2009 (as amended), and any future reports in relation to flood risk for Edenderry.			B1, A1, M1, L1, C1, P1, S1	W1	
Policy FRP2: Require a detailed Flood Risk Assessment for the entire area delineated as FR1 in the plan to: <ul style="list-style-type: none"> • assess flood risk issues in sufficient detail against the specific type(s) of development proposed • examine the potential impact on flood risk elsewhere by displacement or from works outside FR1 that may be necessary to facilitate development. • examine the effectiveness of any proposed mitigation measures. Any proposals for development in this area shall be accompanied by a site specific flood risk assessment appropriate to the nature and scale of the development being proposed. Mitigation measures for site development and building design in this area shall incorporate: <ol style="list-style-type: none"> i. Permeability measures such as permeable paving to break up expanses of hard surfacing in area such as car parks. ii. Appropriate Finished Floor Levels. 			B1, A1, M1, L1, C1	W1, P1, S1	

<p>iii. Proposals to deal with rain and surface water employing Sustainable drainage techniques including rainwater harvesting, attenuation and Sustainable Urban Drainage Systems (SuDS).</p> <p>iv. Development proposals incorporating SuDS shall demonstrate how SuDS will benefit the overall scheme or contribute to the site/area by an end use that is (a) functional to the scheme, (b) has an amenity value, or (c) has a habitat creation value.</p>					
Policy FRP3: Co-operate with the OPW in relation to the development of the Catchment Flood Risk Assessment (CFRAM) Eastern River Basin and for the River Boyne in particular and to comply with any guidance and recommendations of this flood risk management plan.			B1, S1, L1, M1, C1, A1	W1, P1	
Policy FRP4 All development on lands identified as being at risk of flooding must demonstrate, through the carrying out of a Site Specific Flood Risk Assessment flood impact assessment and the use of Sustainable Urban Drainage Systems, that any flood risk be adequately managed and the use or development of the lands will not cause unacceptable adverse impacts elsewhere.			A1, C1, L1, M1	W1, S1, P1, B1	
Objective FRO1 For a flood study to be undertaken to examine in detail the causes and extent of flooding from Weavers Drain, the impacts of the potential development of land naturally attenuating to this water course and measures that can be employed to lessen			S1, C1, M1, A1, B1, L1	W1, P1	

or reduce the impacts of flooding on established developments in the town.					
Policies & Objectives Access & Connectivity					
Policy MTP1 Improve and upgrade as necessary the road link (R402) between Edenderry and Tullamore and other large towns in the region.		B1, W1, S1, A1	C1, L1	M1, P1	
Policy MTP2: Support the principles and objectives as set out within the Connecting People, Connecting Places Offaly County Walking and Cycling Strategy 2015, (including any updated/superseding document), in particular the attainment of a cycling/ walking connection for Edenderry to Tullamore, Lough Boora and the River Shannon via the Grand Canal Towpath, and also to the National Cycle Network via Kilbeggan Branch of the Grand Canal.		B1, W1, S1	M1, C1	P1,A1, L1	
Policy MTP3: Promote and facilitate the following where feasible and to co-operate with the Department of Transport, Irish Rail and adjoining local authorities in developing a link in the network which could involve the provision of a new line from Enfield to Edenderry with a continuation to Portarlinton (possible junction at Garryhinch). This line will be of great strategic importance in the context of the midlands. Bord Na Móna already owns many of the wayleaves between Portarlinton and Enfield.			C1, W1, B1, A1, S1	P1,M1, L1	
Policy MTP4: Make provision where possible for alternative access and linkages routes through the town to alleviate congestion pressure from the main thoroughfare of the			C1, W1, B1, A1, S1, L1	M1, P1	

town. These will be encouraged to be developed in a logical manner in tandem with development or as a need arises for their provision.					
Policy MTP5: To promote, develop and upgrade a series of cycle lanes throughout the town for amenity and transport purposes in accordance with the routes set out in the landuse zoning map.			C1, W1, B1, S1, L1	A1, P1, M1	
Objective MTO1: Undertake a transportation Study for Edenderry addressing issues relating to traffic congestion, car parking, movement and circulation and smarter travel including how best to support the National Mitigation Plan and National Policy Framework for Alternative Fuels Infrastructure for Transport.			C1, W1, B1, A1, S1, L1	P1, M1	
Objective MTO2: (a) Reserve land for a future relief road to the south and east of the town. Development of any road proposal shall be subject to requirements of the EIA, Habitat, Water Framework and Flood Directives where relevant and appropriate. (b) Examine the feasibility for a new relief road to the north, north east of the town as part of the Transportation Study for Edenderry to be completed under objective MT01.		B1, S1, L1	W1, C1,	M1, P1	
Objective MTO3: Deliver inner relief roads/streets in and around the town providing for an alternative route away from the town centre area and to open backland developments for further development potential as indicated on the landuse zoning map. The delivery of these inner relief roads/streets will be subject to appropriate environmental assessments including traffic related noise and air quality. The protection		B1, S1,	W1, C1, L1	M1, P1	

and safety of existing residential areas is important and therefore the need for remedial works and strong safety measures to safeguard existing residential areas adjoining inner relief roads/streets will be examined and provided where necessary for public safety in the context of the Design Manual for Urban Roads and Streets (DMURS).					
Objective MTO4: Provide where new development is proposed, new or additional access/linkages as indicated on the landuse zoning map into adequately zoned and serviced land to provide for the opening up the full development potential of backland, and developable areas in the town.		B1, S1,	W1, C1, L1	M1, P1	
Objective MTO5: Improve and upgrade all approach roads to the town as a method of enhancing the first impression of the town.			A1, B1, C1, W1, S1	L1, P1, M1	
Objective MTO6: Facilitate and implement measures to reduce or manage traffic associated with schools to regularize movement patterns and ease congestion.			A1, B1, C1, W1, S1, L1	M1, P1	
Objective MTO7: Support the progressive improvement of the amenity/ walking/cycling network, to include existing and enhanced public footpaths along the main streets, and approach roads, including indicative internal distributor roads, providing linkages to existing and new developments, existing and future schools, cycling routes/lanes where possible and amenity corridors linking town centre, residential, community facilities, public amenities, commercial and transport nodes.			B1, C1, W1, S1	P1, M1, A1	
Policy CPP1: Provide adequate car parking in the town commensurate with new			A1, B1, C1, W1, S1	M1, P1	

developments at locations that are in proximity to the town centre.					
Policy CPP2: Promote and encourage off street car parking at suitable locations.			P1, A1, B1, C1, W1, S1, M1	L1	
Objective CPO1: Review the future location and provision of controlled car parking in areas other than the town centre.			P1, A1, B1, C1, W1, S1, M1	L1	
Objective CPO2: In co-operation with local businesses, encourage delivery times at time's and locations to avoid congestion.			A1, B1, C1, W1, S1, M1, L1	P1, M1	
Policies & Objectives Specific Road Upgrade, improvement, Re-alignment					
SRIO1: Surfacing and/or footpath replacement works at: <ul style="list-style-type: none"> • Fairgreen • Fr. Paul Murphy Street. • Rathangan Road • Carrick Road, • Killane (back road) • Church View Heights • Gilroy Ave • Castlevue Park. • Blundell/Greenwood (Footpath). 			A1, B1, C1, W1, S1, M1, L1	P1, M1	
SRIO2: Provide traffic calming measures at: <ul style="list-style-type: none"> • On Dublin Road Fairgreen • Carrick Road on approach from north. • Rathangan Road • St. Mary's Road. 			A1, B1, C1, W1, S1, M1, L1	P1, M1	
SRIO3: Improve junctions at: <ul style="list-style-type: none"> • St. Francis Street / St. Mary's Road • School Lane / St. Mary's Road • Dublin Road / Rathangan Road • Dublin Road / Tesco & Lidl entrance. 			A1, B1, C1, W1, S1, M1, L1	P1, M1	

SRIO4: Road Widening/realignment at: • Monasterosis • Clonmullen Lane			A1, B1, C1, W1, S1, M1, L1	P1, M1	
SRIO5: Improve public lighting where necessary and provide for public lighting energy efficiency retrofit.			A1, B1, C1, W1, S1, M1, L1	P1, M1	
SRIO6: Upgrade streetscape/public realm in particular at JKL street and O'Connell Square			A1, B1, C1, W1, S1, M1, L1	P1, M1	
Policy ECP1: Co-operate with natural gas, electricity and telecommunications providers for the provision and expansion of energy and communications in Edenderry subject to consideration of environmental, conservation and visual requirements.		L1, B1, S1	W1, C1, A1	M1, P1	
Policies & Objectives Design Guidance					
Policy DG1 Encourage and promote development within Edenderry that contributes positively to the image of the town by means of scale, layout and design quality and the overall enhancement of the built environment.		B1, W1, S1	A1, C1, M1	L1, P1	
Policy DG2 That any new developments within the Town Centre will be required to respect the existing established heritage and architectural character and in particular should: • Respect the character of the streetscape in terms of design detail, including proposed materials. • Conform with scale, massing, layout, height and urban grain of the streetscape insofar as possible to ensure continuity of street frontage and definition of public and private space.		B1, W1, S1	A1, C1, M1	L1, P1	

<ul style="list-style-type: none"> • Observe historic building lines, avoiding unnecessary setbacks or protrusions. • Enhance pedestrian and cyclist movement within the Town Centre. • Be of a particular high standard of design. 					
Policy DG3 Conserve the townscape of JKL Street, Market Square, Fr. Kearns Street and St. Mary's Road recognising the value of these locations in the creation and promotion of positive visual impressions of the town.			B1, W1, S1, C1, P1, A1, M1	L1	
Policy DG4 Encourage and facilitate backland development, where this development strengthens the commercial or residential functions of the town centre or areas close to the centre, provided that such development is done in a coordinated fashion and does not adversely affect the intrinsic character of the town centre or it's natural heritage.		B1, S1,	W1, C1, L1	M1, P1	
Policy DG5: All applications for new development in the Town Centre, new developments comprising residential developments of ten houses or more, or large scale commercial development located outside the town centre should be accompanied by a design statement prepared by a suitably qualified person demonstrating the design input and concepts that went into formulating the scheme.			W1, C1, L1, B1, S1, A1, M1	L1	
Policy DG6: All new developments that adjoin the Grand Canal should address the Canal to ensure appropriate integration, in so far as possible, into their layout.		S1, W1, B1	A1,C1, L1,	L1, P1	
Policy DG7 Require that any proposal brought forward for Opportunity sites will include a comprehensive masterplan showing the			W1, C1, L1, B1, S1, A1, M1	L1, P1	

rationale behind the proposal and how it will interact within its context.					
Policy DG8 Encourage the retention of quality traditional shopfronts and to ensure that all new shop fronts are designed to a high standard and in character with the streetscape that they are proposed to be located. Good quality contemporary design will also be encouraged			B1, W1, S1, C1, P1, A1, M1	L1	
Policy DG9 Encourage externally lit or illuminated signs on shop fronts and to resist internally illuminated or neon type signs.			B1, W1, S1, C1, P1, A1, M1	L1	
Policy DG10 Seek applicants/developers to deliver all necessary infrastructure and services required for an individual development or in accordance with an objective in this plan, in tandem with the development on site to ensure an orderly approach to development and to avoid unnecessary deficiencies and delays or such infrastructure and services.			L1, A1, B1, C1, S1	M1, W1, P1	
Policy DG11 Seek applicants/developers to deliver the principles and elements of walking and cycling infrastructure as identified in the Landuse Zoning Plan.			B1, W1, S1, C1, A1, M1	P1, L1	
Policies & Objectives Land Use Zoning					
Policy LUP1 Promote and adopt a sequential approach in the development of Edenderry (i.e. development from the town centre outwards), where feasible.			A1, B1, C1, S1, W1, L1	P1	
Policy LUP2 It is Council policy to prohibit a proliferation of any individual use within the Edenderry town centre which in the opinion of			A1, B1, C1, S1, W1, L1, P1, L1		

the Planning Authority, does not contribute to the vitality and viability of the town centre.					
Policy LUP3 (a) Conserve and protect unzoned lands from development pressure. (b) Preserve unzoned lands against premature ad hoc development that may prejudice the future development of the lands and planned expansion of the urban area.			A1, B1, C1, S1, W1, L1, P1, L1		
Objective LUO1 To ensure that development progresses in accordance with the landuse zoning objectives set out within this chapter.			A1, B1, C1, S1, W1, L1, P1, L1		

9 Mitigation Measures

9.1 Introduction

The quality of the environment within plan area is an important issue for consideration by Offaly County Council. A green town is a healthy town. Protecting and enhancing open spaces for both biodiversity and recreational use has benefits for the town's sustainability and attractiveness as a place to live, work and visit. While it is a key priority of the Local Area Plan to consolidate Edenderry, this must be achieved by balancing the need for intensification of development with the need to protect and enhance vulnerable natural areas. This has been recognised throughout the SEA and Local Area Plan process and the Plan is framed within ideals of sustainability throughout its vibrant communities, tourism economy and unique cultural and natural heritage.

Article 5 of the SEA Directive requires that mitigation measures be proposed for all significant adverse effects on the environment as a result of the implementation of the Local Area Plan. The SEA is an iterative process prepared in tandem with the formulation of the policies and objectives of the Local Area Plan. While not always possible to achieve, it is the aim of the process to ensure that sensitive environmental receptors are given adequate and appropriate consideration throughout.

9.2 Mitigation Measures

As environmental considerations have informed all stages of the preparation of the Edenderry LAP, the policies and objectives of the Plan have been framed to ensure that potential adverse impacts are avoided, eliminated or lessened to an acceptable level.

As a result of this informed iterative process, it is the finding of the assessment of the Local Area Plan as presented in Chapter 8 of this SEA Report, that the full implementation of the Plan, will have a neutral to positive impact on the environment as a whole.

An initial review of the LAP highlighted that the following changes should be considered in the drafting of the plan:

Recommendation to create a new policy in relation to Air Quality and Climate:

- *It is the policy of the Council to protect environmental quality in Edenderry through the implementation of European, national and regional policy and legislation relating to air quality, greenhouse gases, climate change, light pollution, noise pollution and waste management.*

Recommend the amendment of Policy ECP1 as follows:

- **Policy ECP1:** *Co-operate with natural gas, electricity and telecommunications providers for the provision and expansion of energy and communications in Edenderry subject to consideration of environmental, conservation and visual requirements.*

Recommendation to create a new policy in relation to Groundwater:

- *To ensure that planning applications have regard to any existing groundwater protection schemes and/or the likely impacts that the development may have on groundwater*

Recommend creation of new policy in relation to Soils:

- *To protect and conserve the integrity of soils that support the rich biodiversity and ecological networks in Edenderry.*

Recommend strengthening of the wording around policies around the backland areas and their proximity to the Grand Canal pNHA such as:

- **TCP13:** *Facilitate the appropriate redevelopment of the opportunity sites identified in this LAP and ensure that the sensitivities of the Grand Canal pNHA are considered in any proposals put forward for the development of such sites.*
- **DG4:** Encourage and facilitate backland development, where this development strengthens the commercial or residential functions of the town centre or areas close to the centre, provided that such development is done in a coordinated fashion and does not adversely affect the intrinsic character of the town centre *or its natural heritage.*

These recommendations were reviewed by Offaly County who further refined and incorporated the comments into the LAP.

This section outlines the mitigation measures identified, as necessary, to address the potential negative or uncertain impacts arising from the implementation of the LAP. While every effort will be taken to ensure that the impact of the LAP on the environment is neutral to positive, particular unavoidable negative impacts may occur as a result of its implementation. The Environmental Report details mitigation measures to reduce or eliminate identified negative impacts.

Similarly, monitoring of the LAP, in accordance with the Planning and Development Act, 2000, as amended, will incorporate proposals to monitor various environmental receptors. A schedule of monitoring and reporting is set out in Table 9.1 in order to ensure that any unforeseen negative impact is identified at the earliest opportunity and subsequently appropriate mitigation measures are put in place to eliminate or at a minimum limit the level of impact to an acceptable degree.

In general terms, all proposals for development will be required to have due regard to the environmental considerations outlined the Offaly County Development Plan 2014-2020.

At the project-level, Environmental Impact Assessment and Habitat Directive Assessment stage, detailed mitigation measures for all projects will be developed. For example, the proposed provision of a Relief road to the south and east of the town will identify a suite of measures aimed at reducing the adverse impacts of the scheme on environmental topics such as Noise, Archaeology and Cultural Heritage, Architectural Heritage and Landscape & Visual etc.

Table 9.1: Mitigation Table

Specific Elements/Components Of Proposed Amendment	Potential Negative Impact	Potentially Uncertain Impact	Mitigation
Proposed Policies & Objectives Development Strategy			
<p>Policy DSP1: Actively implement the development strategy to ensure a sustainable, consolidated and coherent approach to development. There will be a presumption in favour of positive and sustainable development that focuses specifically on:</p> <ul style="list-style-type: none"> • employment generation, • providing quality residential environments, • town centre revitalisation, • supporting and enhancing community, culture and identity, • protecting and enhancing the built and natural environment • providing key infrastructural provision. 		W1, S1, B1	<p>Potential uncertain impacts on Biodiversity will be mitigated by Objective BNEO5 of the LAP to conserve, protect and enhance important landscape features, such as rivers, wetlands, stonewalls, hedgerows etc.' Further mitigation will occur through the application of Policy BNEP14 of the LAP.</p> <p>Potential uncertain impacts on soils will be mitigated by BNEO6 of the LAP on the protection of soils</p> <p>Potential uncertain impacts on water will be mitigated Objective WD05 on the protection of groundwater from new development. Further mitigation will occur through the application of Policy SWDP1 of the LAP on the incorporation of SUDs as part of a development.</p>
<p>Objective EEP7 Secure connectivity between Edenderry with county, regional and national cycle networks via the Grand Canal Greenway and to capture positive economic, social and cultural benefits associated with this connection.</p>		B1, W1	<p>Potential uncertain impacts on water will be mitigated by Policy FRP1 and FRP2, FRP3 and FRP 4 of the LAP on flood risk.</p> <p>Potential uncertain impacts on Biodiversity will be mitigated by Objective BNEO5 of the LAP to conserve, protect and enhance important landscape features, such as rivers, wetlands, stonewalls, hedgerows etc., which form wildlife corridors and link habitats and to promote and encourage bio-diversity within all new developments in Edenderry.</p>
<p>Objective EEP8 Encourage the establishment and expansion of services and facilities in the town at appropriate locations to facilitate the business needs of employment and enterprise developments and potential tourism needs like conference facilities, hotel, accommodation, eateries and other similar services.</p>		W1, S1	<p>Potential uncertain impacts on soils will be mitigated by Objective BNEO6 on the protection of soils.</p> <p>Potential uncertain impacts on groundwater be mitigated by Objective WD05 on the protection of groundwater from new development</p>

Objective EEP9 Work collaboratively and in partnership with other stakeholders in the pursuit of development that would contribute positively to the economic development of the town.		B1, S1, W1, C1	Potential uncertain impacts on soils will be mitigated by Objective BNEO6 on the protection of soils Objective WD05 on the protection of groundwater from new development and Policy SWDP1 on the incorporation of SUDs as part of a development will mitigate impacts on surface water.
Policy TCP11 Facilitate the comprehensive consolidation of the town's retail and commercial core and, where appropriate, expansion to the back lands areas of J.K.L. Street.		S1, B1	Potential uncertain impacts on soils will be mitigated by Objective BNEO6 on the protection of soils. Potential uncertain impacts on biodiversity will be mitigated by Policy DG5 which protects against inappropriate backland development
Proposed Policies & Objectives Masterplans			
Policy CS01: Make provision for an adequate amount of appropriately located lands to accommodate the projected population growth of Edenderry over the lifetime of this plan.		B1, S1, C1	Potential uncertain impacts on Archaeological heritage will be mitigated by Objective BNEO3 of the LAP Potential uncertain impacts on biodiversity will be mitigated by Objective BNEO5 of the LAP to conserve, protect and enhance important landscape features, such as rivers, wetlands, stonewalls, hedgerows etc...' Potential uncertain impacts on soils will be mitigated by Objective BNEO6 on the protection of soils
Policy CS02: Monitor and manage the delivery of residential development in Edenderry during the plan period in the development management process.		B1, S1, C1	Potential uncertain impacts on Archaeological heritage will be mitigated by Objective BNEO3 of the LAP Potential uncertain impacts on biodiversity will be mitigated by Objective BNEO5 of the LAP to conserve, protect and enhance important landscape features, such as rivers, wetlands, stonewalls, hedgerows etc...' Potential uncertain impacts on soils will be mitigated by Objective BNEO6 on the protection of soils
Objective CC105: Support the redevelopment of the Edenderry Town Park.		B1, S1	Potential uncertain impacts on soils will be mitigated by Objective BNEO6 on the protection of soils Potential uncertain impacts on biodiversity will be mitigated by Objective BNEO5 of the LAP to conserve, protect and enhance

			important landscape features, such as rivers, wetlands, stonewalls, hedgerows etc...'
Objective CCI06: Seek the provision of additional parkland spaces within the boundary of the town as part of development applications in order to improve recreational and amenity facilities in the town.		B1, S1	Potential uncertain impacts on biodiversity will be mitigated by Objective BNE05 of the LAP to conserve, protect and enhance important landscape features, such as rivers, wetlands, stonewalls, hedgerows etc...' Potential uncertain impacts on soils will be mitigated by Objective BNE06 on the protection of soils
Objective CCI07: Encourage the provision of communal garden areas and sensory gardens in the town.		B1, S1	Potential uncertain impacts on soils will be mitigated by Objective BNE06 on the protection of soils Potential uncertain impacts on biodiversity will be mitigated by Objective BNE05 of the LAP to conserve, protect and enhance important landscape features, such as rivers, wetlands, stonewalls, hedgerows etc...'
Policy BNEP10: Promote the use and value of the Edenderry Branch of the Grand Canal to the town as a boating corridor, tourism route and amenity area for the residents of Edenderry Town.		B1, W1	Potential uncertain impacts on biodiversity and water will be mitigated by Objective BNE05 of the LAP to conserve, protect and enhance important landscape features, such as rivers, wetlands, stonewalls, hedgerows etc...'
Policies & Objectives Access & Connectivity			
Policy MTP1 Improve and upgrade as necessary the road link (R402) between Edenderry and Tullamore and other large towns in the region.		L1, B1, S1,	Potential uncertain impacts on landscape can be mitigated by Objective BNE05 of the LAP on landscape features. Potential uncertain impacts on biodiversity will be mitigated by Objective BNE05 of the LAP to conserve, protect and enhance important landscape features, such as rivers, wetlands, stonewalls, hedgerows etc...'
Policy MTP2: Support the principles and objectives as set out within the Connecting People, Connecting Places Offaly County Walking and Cycling Strategy 2015, (including any updated/superseding document), in particular the attainment of a cycling/ walking connection for Edenderry to Tullamore, Lough Boora and the River Shannon via the Grand Canal Towpath,		B1, W1, S1	Potential uncertain impacts on soils will be mitigated by Objective BNE06 on the protection of soils Potential uncertain impacts on biodiversity will be mitigated by Objective BNE05 of the LAP to conserve, protect and enhance important landscape features, such as rivers, wetlands, stonewalls, hedgerows etc...'

and also to the National Cycle Network via Kilbeggan Branch of the Grand Canal.			Potential uncertain impacts on water will be mitigated by Policy FRP4 and Objective FR01 of the LAP.
<p>Objective MTO2: (a) Reserve land for a future relief road to the south and east of the town. Development of any road proposal shall be subject to requirements of the EIA, Habitat, Water Framework and Flood Directives where relevant and appropriate.</p> <p>(b) Examine the feasibility for a new relief road to the north, north east of the town as part of the Transportation Study for Edenderry to be completed under objective MT01.</p>		B1, S1, L1, A1	<p>Potential uncertain impacts on soils will be mitigated by Objective BNEO6 on the protection of soils</p> <p>Potential uncertain impacts on noise will be mitigated by Policy BNEP18 of the LAP.</p> <p>Potential uncertain impacts on landscape will be mitigated by Objective BNEO5 of the LAP.</p> <p>Potential uncertain impacts on biodiversity will be mitigated by Objective BNEO5 of the LAP to conserve, protect and enhance important landscape features, such as rivers, wetlands, stonewalls, hedgerows etc...'</p>
Objective MTO3: Deliver inner relief roads/streets in and around the town providing for an alternative route away from the town centre area and to open backland developments for further development potential as indicated on the landuse zoning map. The delivery of these inner relief roads/streets will be subject to appropriate environmental assessments including traffic related noise and air quality. The protection and safety of existing residential areas is important and therefore the need for remedial works to safeguard existing residential areas adjoining inner relief roads/streets will be examined and provided where necessary for public safety in the context of the Design Manual for Urban Roads and Streets (DMURS).		B1, S1, A1, L1	<p>Potential uncertain impacts on soils will be mitigated by Objective BNEO6 on the protection of soils.</p> <p>Potential uncertain impacts on noise will be mitigated by Policy BNEP18 of the LAP.</p> <p>Policy DG6 will screen for visual impacts through the preparation of a Design Statement.</p> <p>Policy DG5 mitigates against inappropriate backland development</p>
Objective MTO4: Provide where new development is proposed, new or additional access/linkages as indicated on the landuse zoning map into adequately zoned and serviced land to provide for the opening up the full development potential of backland, and developable areas in the town.		B1, S1,	<p>Potential uncertain impacts on soils will be mitigated by Objective BNEO6 on the protection of soils.</p> <p>Potential uncertain impacts on biodiversity will be mitigated by Policy DG5 which protects against inappropriate backland development</p>

Policy ECP1: Co-operate with natural gas, electricity and telecommunications providers for the provision and expansion of energy and communications in Edenderry subject to consideration of environmental, conservation and visual requirements.		L1, B1, S1	<p>Potential uncertain impacts on soils will be mitigated by Objective BNEO6 on the protection of soils.</p> <p>Potential uncertain impacts on landscape and biodiversity will be mitigated by Objective BNEO5 of the LAP.</p>
Policies & Objectives Design Guidance			
Policy DG2 That any new developments within the Town Centre will be required to respect the existing established heritage and architectural character and in particular should: <ul style="list-style-type: none"> • Respect the character of the streetscape in terms of design detail, including proposed materials. • Conform with scale, massing, layout, height and urban grain of the streetscape insofar as possible to ensure continuity of street frontage and definition of public and private space. • Observe historic building lines, avoiding unnecessary set backs or protrusions. • Enhance pedestrian and cyclist movement within the Town Centre. • Be of a particular high standard of design. 		B1, W1, S1	<p>Potential uncertain impacts on soils will be mitigated by Objective BNEO6 on the protection of soils.</p> <p>Potential uncertain impacts on groundwater be mitigated by Objective WD05 on the protection of groundwater from new development</p> <p>Potential uncertain impacts on biodiversity will be mitigated by Objective BNEO5 of the LAP to conserve, protect and enhance important landscape features, such as rivers, wetlands, stonewalls, hedgerows etc...'</p>
Policy DG4 Encourage and facilitate backland development, where this development strengthens the commercial or residential functions of the town centre or areas close to the centre, provided that such development is done in a coordinated fashion and does not adversely affect the intrinsic character of the town centre or its natural heritage.		B1, S1,	<p>Potential uncertain impacts on soils will be mitigated by Objective BNEO6 on the protection of soils.</p> <p>Policy DG5 mitigates against inappropriate backland development and consequent impacts on biodiversity</p>
Policy DG7: All new developments that adjoin the Grand Canal should address the Canal to ensure appropriate integration, in so far as possible, into their layout.		S1, W1, B1	<p>Potential uncertain impacts on soils will be mitigated by Objective BNEO6 on the protection of soils.</p> <p>Potential uncertain impacts on water will be mitigated by Policy FRP3 and FRP 4 of the LAP on flood risk.</p>

			Potential uncertain impacts on biodiversity will be mitigated by Objective BNE05 of the LAP to conserve, protect and enhance important landscape features, such as rivers, wetlands, stonewalls, hedgerows etc...'
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10 Monitoring Programme

10.1 Introduction

Monitoring of the Edenderry LAP and its implications on the environment is paramount to ensure that the environment is not adversely affected through its implementation. Under Article 10 of the SEA Directive, monitoring must be carried out of the significant environmental effects directly related to the implementation of the Plan *“in order to, inter alia, identify at an early stage unforeseen adverse effects and to be able to undertake appropriate remedial action.”* The SEA Guidelines state that monitoring should concentrate on likely significant environmental effects, which have been identified in the Environmental Report, and measures identified as necessary to avoid, reduce and offset any significant adverse effects.

10.2 Monitoring Indicators

Baseline monitoring is proposed on a series of indicators which measure changes in the environment, especially changes which are critical in terms of environmental quality, for example water or air pollution levels. These indicators aim to simplify complex interrelationships and provide information about environmental issues which is easy to understand. A list of environmental indicators is provided in Table 10.1. The indicators are based on the Strategic Environmental Objectives presented in Chapter 6 and have been derived from knowledge of the existing environmental issues within the plan area and also from legislation, guidelines and higher level plans.

It is considered that a monitoring report on the implementation of the policies and objectives within the LAP is important for the on-going and future implementation of the Plan. It is also considered appropriate that the monitoring programme for the implementation of the policies and objectives within the LAP is integrated with the monitoring programme for the statutory development plans for Offaly County.

Environmental indicator assessment during monitoring can show positive/neutral impacts or negative impacts on the environment. Where an indicator value highlights a positive/neutral impact on the environment, it is likely that the policies of the LAP are well defined with regard to the environment. Conversely, where the policies of the LAP have a negative impact on the environment, it may be necessary to review the policies or objectives of the plan or to take some other form of intervention. For example, if an objective or policy is having a significant adverse impact, a change may be considered during the lifetime of the Plan.

10.3 Sources

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

The output of lower-tier environmental assessment and decision making – including a review of project approvals granted and associated documents – will also be utilised as part of the Monitoring Programme.

Where significant effects - including positive, negative, cumulative and indirect - have the potential to occur 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.

Table 10.1 Monitoring Environmental Indicators

Environmental Component	Indicators	Targets	Responsibility	Frequency / Timing
BIODIVERSITY, FLORA & FAUNA	<ul style="list-style-type: none"> Number and extent of Protected Sites. Areas actively managed for conservation. Population and range of Protected Species. Achievement of the Objectives of Biodiversity Plans. 	<ul style="list-style-type: none"> Consider siting of new development on non-sensitive sites. Improve/conservate and protect all designated sites and species within and adjacent to the Plan area. Deliver the requirement of the Habitats Directive (Article 4, Paragraph 4) for the maintenance or restoration of annexed habitats and species within SACs at a favourable conservation status. Promote the maintenance and, as appropriate, achievement of favourable conservation status of habitats and species, in association with the NPWS and other stakeholders. Improve the ecological coherence of Natura 2000 by encouraging the management of, maintaining, and where appropriate developing, features of the landscape which are of major importance for wild fauna and flora. Such features are those which, by virtue of their linear and continuous structure (such as rivers with their banks or the traditional systems for marking field boundaries) or their function as stepping stones (such as ponds or small woods), are essential for the migration, dispersal and genetic exchange of wild species. 	Offaly County Council, National Parks & Wildlife, Dept. of Housing, Planning, Community and Local Government.	<p>Monitoring of environmental likely significant effects on a project by project basis as particular elements of the plan are developed and advanced.</p> <p>National Monitoring Report under Article 12 of the Birds Directive. (c. every 6 years).</p> <p>Monitoring of environmental likely significant effects on measure by measure basis as particular elements of the plan are developed and advanced.</p>

Environmental Component	Indicators	Targets	Responsibility	Frequency / Timing
		<ul style="list-style-type: none"> Protect NHAs, National Parks, Nature Reserves, Wildfowl Sanctuaries, Refuges for Fauna or Flora and sites proposed for designation. Improve/maintain protection for important wildlife sites, particularly urban wildlife corridors and linear and stepping stone features for migration, dispersal and exchange of wildlife. Improve access for the appreciation and promotion of wildlife. 		
POPULATION	<ul style="list-style-type: none"> Census population data Rates of Unemployment per area % increase in housing (number and type) 	<ul style="list-style-type: none"> Minimise population exposure to high levels of noise, vibration and air pollution. Increase modal shift to public transport. Co-ordinate land use and transportation policies. Improve access to recreation opportunities. 	Offaly County Council	On-going regular monitoring supplemented by data arising from the development and delivery of the plan (every c.2 years).
SOILS INCLUDING GEOLOGY	<ul style="list-style-type: none"> Rates of re-use / recycling of construction waste. ☐ Rates of cement / concrete production. Rates of brownfield site and contaminated land reuse and development. Rates of Greenfield development. 	<ul style="list-style-type: none"> Prevent pollution of soil through adoption of appropriate environmental protection procedures during construction and maintenance works on site. Ensure polluting substances are appropriately stored and banded. Ensure appropriate management of existing contaminated soil in accordance with the requirements of current waste legislation. 	Offaly County Council, EPA	Internal monitoring of likely significant environmental effects on a project by project basis where potential for interaction with historical landfill sites occur.

Environmental Component	Indicators	Targets	Responsibility	Frequency / Timing
		<ul style="list-style-type: none"> Re-use of brownfield lands, rather than developing Greenfield lands, where possible. Minimise the consumption of non-renewable sand, gravel and rock deposits. Re-use of brownfield lands, rather than developing Greenfield lands, where possible. Minimise the consumption of non-renewable sand, gravel and rock deposits. 		<p>Review of CORINE mapping (every c.5 years).</p> <p>Monitoring of environmental likely significant effects on a project by project basis as particular elements of the plan are developed and advanced.</p>
WATER	<ul style="list-style-type: none"> Support the achievement of “good” ecological and chemical status/potential of waterbodies in accordance with the Water Framework Directive. Minimise flood risk through appropriate management of flood vulnerable zones. Promote sustainable drainage practices to improve water quality and flow. 	<ul style="list-style-type: none"> Compliance of potable water sources with water quality regulations. Compliance of surface waters with national and international standards. Potable and wastewater treatment capacities versus population. % of wastewater receiving tertiary treatment. Achievement of the Objectives of the River Basin Management Plans. Amount of new developments within flood plains. Annual costs of damage related to flood events. 	Offaly Council, EPA	<p>On-going regular monitoring supplemented by data arising from development and delivery of measures within the Plan.</p> <p>On-going regular monitoring on a project by project basis.</p>

Environmental Component	Indicators	Targets	Responsibility	Frequency / Timing
AIR QUALITY, CLIMATE & NOISE	<ul style="list-style-type: none"> Traffic, Transport and Vehicular survey data. National and region specific emission data. Compliance with national standards. Reduction in greenhouse gas emissions. Number and extent of emission licensed facilities. Number of energy / renewable energy production facilities. Rates of energy / renewable energy consumption 	<ul style="list-style-type: none"> Minimise air and noise emissions during construction and operation of new developments. Promote minimisation of greenhouse gas emissions to the atmosphere. Limiting climate change and adapting to climate change. 	Offaly County Council, EPA	On-going regular monitoring supplemented by data arising from development and delivery of the measures within the plan (every c.2 years).
MATERIAL ASSETS	<ul style="list-style-type: none"> Location / level of Infrastructure. Achievement of development plan objectives. Rates of deprivation. Rate of waste disposal to landfill statistics. Range and extent of recycling facilities and services. Rates of recycling. 	<ul style="list-style-type: none"> Improve availability and accessibility of commercially provided facilities and public services. Increase local employment opportunities. Improve efficiencies of transport, energy and communication infrastructure. Promotion of sustainable transport infrastructure i.e. increased public transport. Reduce the generation of waste and adopt a sustainable approach to waste management. 	Offaly County Council, EPA.	On-going regular monitoring supplemented by data arising from development.

Environmental Component	Indicators	Targets	Responsibility	Frequency / Timing
CULTURAL HERITAGE	<ul style="list-style-type: none"> Updating of inventories to include new sites / features. Achieving the objectives of development plans regarding heritage protection. Range and extent of areas of heritage potential. Range and extent of areas of special planning controls 	<ul style="list-style-type: none"> Regeneration of derelict and underutilised heritage sites. Improve appearance of areas with particular townscape character. Improve protection for protected archaeological sites and monuments and their settings, protected structures and conservation areas and areas of archaeological potential. Enhance access to sites of heritage interest. 	Offaly County Council, Dept of Arts Heritage, Regional and Rural Affairs	Monitoring of Statutory Consultee inputs on environmental effects as particular elements of the LAP are developed and advanced.
LANDSCAPE	<ul style="list-style-type: none"> Range and extent of Amenity Landscapes. Rates of development within designated landscapes. Rates of urban expansion. Rates of deforestation. Rates of agricultural land re-development. % change of land use from rural to urban. 	<ul style="list-style-type: none"> Improve protection for landscapes of recognised quality. Maintain clear urban/rural distinctions. Enhance provision of, and access to, green space in urban areas. Ensure development is sensitive to its surroundings. 	Offaly County Council, private Developers /landowners	Monitoring of Statutory Consultee inputs on environmental effects as particular elements of the LAP are developed and advanced.

EPA: Environmental Protection Agency
 NPWS: National Parks and Wildlife Service

DAHRRGA: Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs
 DHPCLG: Department of Housing, Planning, Community and Local Government

11 CONCLUSION

The Edenderry LAP 2017-2023, its policies and objectives are key to development of a sustainable development and growth of Edenderry and its environs. The LAP sets out an overall strategy for the proper planning and sustainable development of Edenderry in the context of the Offaly County Development Plan 2014-2020.

The Strategic Environmental Assessment process has been carried out in conjunction with the Appropriate Assessment Screening, a Strategic Flood Risk Assessment (SFRA) and the preparation of the LAP itself. This allows for an early indication of the potential environmental effects likely to occur as a result of the implementation of the policies and objectives within the Plan. As a result, changes or alterations to the Edenderry LAP are made throughout the course of its preparation. The benefit of preparing the Edenderry LAP, the AA Screening, the SFRA and the Environment Report simultaneously ensures that these issues are highlighted at an early stage in the process. This allows the potential negative impacts of the plan to be predicted early on, evaluated and effectively prevented or mitigated.

The objectives of the Plan were assessed against the Strategic Environmental Objectives and indicate that the full implementation of the Plan will not result in a significant negative or adverse impact on the environmental resources within the plan area boundary. As a result the LAP will have a neutral to positive impact on the environment as a whole.

Where the SEA has found potential for negative impacts on the environment as a result of the implementation of the Edenderry LAP, mitigation as well as enhancement measures have been proposed. The implementation of these measures, coupled with the monitoring procedures will ensure the Edenderry LAP is acceptable from an environmental perspective.

In summary, the assessment of the Edenderry LAP has concluded that its policies and objectives are acceptable and represent a balanced and fair approach to the proper planning and sustainable development of Edenderry. Monitoring of the Edenderry LAP throughout its lifetime will ensure that any potential adverse environmental impacts, unforeseen at this stage will be identified early, so as to prevent any deterioration of the environment. This Edenderry LAP 2017-2023, as currently presented, can contribute to sustainable growth and development of Edenderry as a Key Service Town.

Appendix I: Scoping Submissions

