ENVIRONMENTAL REPORT

FOR THE

LONGFORD COUNTY DEVELOPMENT PLAN 2009-2015

VARIATION No. 1

for: Longford County Council

Great Water Street, Longford, Co. Longford



by: CAAS Ltd.

2nd Floor, The Courtyard,25 Great Strand Street,Dublin 1



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List of Abbreviations

AA Appropriate Assessment
CSO Central Statistics Office

DAFF Department of Agriculture, Fisheries and FoodDAHG Department of Arts, Heritage and the Gaeltacht

DCENR Department of Communications, Energy and Natural Resources

DEHLG Department of the Environment, Heritage and Local Government

DECLG Department of the Environment, Community and Local Government

EPA Environmental Impact Assessment
EPA Environmental Protection Agency

EU European Union

GSI Geological Survey of Ireland

NHA Natural Heritage Area

NIAH National Inventory of Architectural Heritage

NSS National Spatial Strategy

RBD River Basin District

RMP Record of Monuments and Places
RPS Record of Protected Structures
RPGs Regional Planning Guidelines

SEA Strategic Environmental Assessment
SEO Strategic Environmental Objective

Special Protection Area

SI No. Statutory Instrument Number

SPA

WFD Water Framework Directive

Glossary

Appropriate Assessment

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

Biodiversity and Flora and Fauna

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

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

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

Biotic Index Values (Q Values)

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

Environmental Problems

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

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

Environmental Vectors

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

Mitigate

To make or become less severe or harsh.

Mitigation Measures

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing a human action, be it a plan, programme or project. Mitigation involves ameliorating significant negative effects. Where there are significant negative effects, consideration should be given in the first instance to preventing such effects or, where this is not possible, to lessening or offsetting those effects. Mitigation measures can be roughly divided into those that: avoid effects; reduce the magnitude or extent, probability and/or severity of effects; repair effects after they have occurred; and compensate for effects, balancing out negative impacts with other positive ones.

Protected Structure

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

Recorded Monument

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

Scoping

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

Strategic Actions

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

Strategic Environmental Assessment (SEA)

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

Strategic Environmental Objective (SEO)

Strategic Environmental Objectives (SEOs) are methodological measures developed from policies which generally govern environmental protection objectives established at international, Community or Member State level and are used as standards against which the provisions of the Variation and the alternatives can be evaluated in order to help identify which provisions would be likely to result in significant environmental effects and where such effects would be likely to occur, if - in the case of adverse effects - unmitigated.

Section 1 SEA Introduction and Background

1.1 Introduction and Terms of Reference

This is the Strategic Environmental Assessment (SEA) Environmental Report for the Longford County Development Plan 2009-2015 Variation No. 1. It has been undertaken by CAAS Ltd. on behalf of Longford County Council.

The purpose of this report is to provide a clear understanding of the likely environmental consequences of decisions regarding the adoption and implementation of the Variation. The SEA is carried out in order to comply with the provisions of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004) as amended. This report should be read in conjunction with the Variation.

1.2 SEA Definition

Environmental assessment is a procedure that ensures that the environmental implications of decisions are taken into account before such decisions are made.

Environmental Impact Assessment, or EIA, is generally used for describing the process of environmental assessment for individual projects. while Strateaic **Environmental** Assessment, or SEA, is the term which has been given to the environmental assessment of plans and programmes, which help determine the nature and location of individual projects taking place. SEA is a systematic process of predicting evaluating likely and the significant environmental effects of implementing a proposed plan or programme in order to insure that these effects are adequately addressed at the earliest appropriate stages of decisionmaking in tandem with economic, social and other considerations.

1.3 SEA Directive and its transposition into Irish Law

Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27 June 2001, on the Assessment of the Effects of Certain Plans and Programmes on the Environment, referred to hereafter as the SEA

Directive, introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including energy.

The SEA Directive was transposed into Irish Law through European Communities the (Environmental Assessment of Certain Plans and 2004 Programmes) Regulations (Statutory Instrument Number (SI No. 435 of 2004) and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004). Both sets of Regulations became operational on 21 July 2004. The Regulations have been amended by the European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (SI No. 200 of 2011) and the Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011 (SI No. 201 of 2011).

1.4 Implications for the Variation and the Planning Authority

Article 11 of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004) as amended requires that Strategic Environmental Assessment is undertaken for the preparation of Variations.

The findings of the SEA are expressed in this Environmental Report, an earlier version of which accompanied the Proposed Variation on display, which has been altered in order to take account of recommendations contained in submissions and in order to take account of changes which were made to the Proposed Variation on foot of submissions (these changes were minor and would not be likely to result in environmental effects). The planning authority has taken account of this Report during their consideration of the Proposed Variation and before its adoption.

On adoption of the Variation, an SEA Statement was prepared and includes information on, inter alia, how environmental considerations have been integrated into the County Development Plan as varied, highlighting the main changes to

the Variation which resulted from the SEA process.

Section 2 Context for the Variation

2.1 Background

Longford County Council intends to make a variation to the Longford County Development Plan 2009-2015 under Section 13 of the Planning and Development Act 2000-2011. The purpose of this variation which is 'Variation No. 1' is to incorporate a 'Core Strategy' into the Development Plan.

The Variation document and this SEA Environmental Report should be read in conjunction with the existing 2009-2015 County Development Plan (and accompanying SEA Environmental Report).

2.2 Structure

The Variation document is divided into three parts as follows:

- Part 1 provides an explanation regarding the requirement for the variation, what the variation consists of, what it is required to contain and outlines how the variation will impact on other planning policy documents. Part One does not form part of the variation and is for explanatory purposes only.
- Part 2 outlines the actual Core Strategy that will be inserted into the existing County Development Plan. It replaces key elements contained in Section 2.3 of the existing Plan.
- Part 3 outlines the proposed changes to the County Development Plan, in addition to changes made to Section 2.3, in order to facilitate the incorporation of the Core Strategy into the remainder of the County Development Plan document.

2.3 Content

In summary, the Core Strategy document identifies the quantum, location and phasing of development for the plan period that is consistent with the regionally defined population targets and settlement hierarchy, and, which reflects the availability of existing

services, planned investment, sequential development and environmental requirements (i.e. an evidence based approach in determining the suitability of lands for zoning purposes).

In accordance with the requirements of the Planning and Development Act 2000-2011 and the Guidance Note on Core Strategies issued in November 2010, the Core Strategy includes;

- Population targets;
- Quantification of the requirements for zoning of lands for residential purposes;
 and
- Existing and future distribution of population within a defined settlement hierarchy.

The main policy provisions of the existing Plan to which the Core Strategy relates are contained at Sections 2 and 3 of the Plan. In this regard the population projections and Settlement Strategy contained at Section 2.3 of the existing Plan, in particular, will be replaced by the Core Strategy Table and revised Settlement Strategy which will identify population projections, distributions and zoned land availability for the County over the CDP period.

In light of the population targets and housing land requirement identified for the County of Longford within the MRPGs, the Variation will involve a significant level of modification to residential zonings in particular, in addition to the amendment and addition of objectives and policies within the Development Plan.

In addition to the changes made to the Development Plan and to facilitate the revised zoning objectives, contained as part of the Core Strategy, zonings and policies contained within existing Local Area Plans in the County have to be addressed to be consistent with the Core Strategy. Core Strategy maps and objectives for the following settlements are therefore being integrated into the County Development Plan under the Core Strategy: Carriglass, Lanesboro, Newtownforbes, Drumlish, Kenagh, Ardagh, Granard, Ballinalee and Edgeworthstown (see Table 2.1).

With regard to Longford Town, a separate core strategy variation will be prepared in respect of Longford Town Development Plan, which will result in a set of actions to be implemented in relation to Longford Town Northern and Southern

Environs Local Area Plans (lands of which are substantially contained within the Longford Town administrative area). Any lands that are located within the environs of Longford Town,

outside of the Town Development boundary and that are not located within the Northern and Southern Environs Local Area Plan areas will be addressed as part of this variation.

LAP	Date Adopted	Expiry Date	Proposed Action	Process Required Following Variation
Ballymahon	As per CDP	As per CDP	Addressed as part of Variation.	No action required
Carriglass	July 2004	July 2010	Incorporate Core strategy Map and Objectives into County Development Plan under Core Strategy.	Core Strategy to replace LAP
Lanesboro	Sept 2004	Sept 2010	As above	Core Strategy to replace LAP
Newtownforbes	May 2006	May 2012	As above	Core Strategy to replace LAP
Drumlish	June 2006	June 2012	As above	Core Strategy to replace LAP
Kenagh	Sept 2006	Sept 2012	As above	Core Strategy to replace LAP
Ardagh	Sept 2006	Sept 2012	As above	Core Strategy to replace LAP
Granard	Oct 2006	Oct 2012	As above	Core Strategy to replace LAP
Ballinalee	Oct 2006	Oct 2012	As above	Core Strategy to replace LAP
Edgeworthstown	Jan 2008	Jan 2014	As above	Core Strategy to replace LAP
Longford Northern Environs	Aug 2008	Aug 2014		ing the Longford County Strategy and the Longford Core Strategy
Longford Southern Environs	2010	2016	As above	

Table 2.1 Incorporation of LAPs

2.4 Relationship with other relevant Plans and Programmes

2.4.1 National Development Plan 2007-2013

The National Development Plan (NDP) is characterised by the principles of sustainable economic growth, greater social inclusion and balanced regional development. The National Development Plan sets out a Regional Development Strategy which centres on the framework provided within the National Spatial Strategy (NSS) 2002. This strategic approach to regional development intends to deliver an investment programme that is environmentally and economically sustainable.

2.4.2 National Spatial Strategy 2002-2020

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

2.4.3 Midland Regional Planning Guidelines

The Midland Regional Planning Guidelines (MRPGs) were adopted in July 2010 and document the regional spatial planning context for the region, which includes the Counties of Longford, Laois, Westmeath and Offaly. National policy contained in the NSS, is translated to a regional level in the Midland Regional Planning Guidelines, which will guide policy making decisions at a local level through the County Development Plan.

For the first time the MRPGs introduce population targets for Longford which are also indicated in terms of future housing land requirements for the County. This coupled with the requirements of the Planning and Development (amendment) Act 2010, ensures that County Development Plans are now consistent with the RPGs, whereas County Development Plans were previously only required to have regard to the RPGs. The 'Core Strategy' contained as part of this plan is therefore central to ensuring such compliance with the RPGs.

Relevant to County Longford, Longford Town is described as a 'Principal Town' in the MRPGs with the function of driving the northern part of the Midland Region. Granard is described as a 'Key Service Town'. The purpose of key service towns is to drive their own local economies within their area. Edgeworthstown is described as a 'Service Town' and the function of these towns is to perform important retail, residential, service and amenity functions for essentially local hinterlands and support nearby gateway and principle towns. Ballymahon and Lanesboro are described as 'Local Service Towns' and the regional guidelines envisage these towns performing important local level, residential, retailing, social and leisure functions and providing appropriate local services to a wider rural hinterland.

2.4.4 National Planning Guidelines

Planning Authorities are required to have regard to any guidelines issued by the Minister. Accordingly, the Variation has considered the following guidelines;

- Appropriate Assessment of Plans and Projects in Ireland - Guidance for Planning Authorities (2009)
- Architectural Heritage Protection Guidelines for Planning Authorities (2004)
- Architectural Heritage Protection for Places of Worship - Guidelines for Planning Authorities (2003)
- Architecture Policy Guidelines 2009-2015
- Best Practice Urban Design Manual (May 09) - Part 1
- Best Practice Urban Design Manual (May 09) - Part 2
- Childcare Facilities Guidelines for Planning Authorities (2001)
- Development Contribution Scheme for Planning Authorities – (Circular PD 5/2007)
- Development Contribution Scheme for Planning Authorities - Circular PD4/2003
- Development Management Guidelines-Guidelines for Planning Authorities (June 2007)
- Development Plans Guidelines -Guidelines for Planning Authorities (June 2007)
- Spatial Planning and National Roads Guidelines (January 2012)
- Funfair Guidance
- Implementation of new EPA Code of Practice on WasteWater Treatment and

- Disposal Systems Serving Single Houses - Circular PSSP1/10
- Implementing Regional Planning Guidelines- Best Practice Guidance (December 2010)
- Landscape and Landscape Assessment
- Provision of Schools and the Planning System – Code of Practice for Planning Authorities, The Department of Education and Science and the Department of the Environment, Heritage and Local Government (2008)
- Quarries and Ancillary Activities-Guidelines for Planning Authorities (2004)
- Retail Planning Guidelines
- Section 261A of the Planning and Development Act, 2000 and related provisions, Guidelines for Planning Authorities(January 2012)
- Smarter Travel, A Sustainable transport Future, A New Transport Policy for Ireland 2009 - 2020
- Strategic Environmental Assessment Guidelines
- (SEA)
- Sustainable Rural Housing Development Guidelines (2005)
- Sustainable Rural Housing Development Guidelines - Map
- Sustainable Residential Development in Urban Areas (May 09)
- Sustainable Urban Housing: Design Standards for New Apartment -Guidelines for Planning Authorities (2007)
- Taking in Charge of Housing Estates / Management Companies
- Taking in Charge of Residential Developments Circular Letter PD 1/08
- Telecommunications Antennae and Support Structures-Guidelines for Planning Authorities (1996)
- The Planning System and Flood Risk Management - Guidelines for Local Authorities (Nov 09)
- The Planning System and Flood Risk Management - Technical Appendices (Nov 09)
- Tree Preservation Guidelines
- Waste Water Discharge (Authorisation) Regulations - Circular PD 7/09
- Wind Energy Development Guidelines (2006)

2.4.5 Environmental Protection Objectives

The Variation 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 5.

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

Section 3 SEA Methodology

3.1 Introduction to the Iterative Approach

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

The Variation (prepared by Longford County Council) and the SEA Environmental Report and Appropriate Assessment (prepared by CAAS) and the various other supporting documents prepared on behalf of the Council were prepared in an iterative manner.

Figure 3.1 lays out the main stages in the Variation/SEA process.

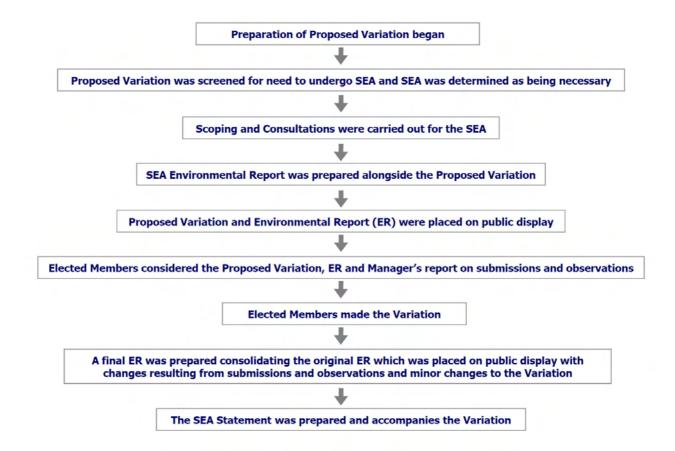


Figure 3.1 Variation and SEA Stages

3.2 Appropriate Assessment and Flood Risk Assessment

An Appropriate Assessment (AA) and Flood Risk Assessment (FRA) have both been undertaken alongside the preparation and adoption of the Variation.

The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The requirement for FRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DEHLG, 2009). The AA Screening process concluded that no Natura 2000 Sites are deemed to be at risk of likely significant effects of implementing the Variation.

Requirements in relation to FRA are provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DEHLG, 2009).

The preparation of the Variation, SEA, AA and FRA has taken place concurrently and the findings of the AA and FRA have informed both the Variation and the SEA.

3.3 Scoping

In consultation with the relevant authorities, the scope of environmental issues to be dealt with by the SEA together with the level of detail to which they are to be addressed was broadly decided on after preliminary data collection. Scoping allowed the SEA to become focused upon key issues, such as those relating to protected ecological sites, water services and flooding.

As environmental authorities identified under the SEA Regulations, the Environmental Protection Agency (EPA), Department of Communications, Energy and Natural Resources (DCENR), the Department of Agriculture, Fisheries and Food (DAFF), the Department of the Environment, Community and Local Government (DECLG) and the Department of Arts, Heritage and the Gaeltacht (DAHG) were all sent SEA scoping indicating that submissions observations in relation to the scope and level of detail of the information to be included in the environmental report could be made to the Council. Adjoining planning authorities (Leitrim County Council, Roscommon County Council,

Westmeath County Council and Cavan County Council) were also sent scoping notices.

Acknowledgement letters were received from Leitrim and Westmeath County Councils while a written submission was made by the EPA which was taken into account during the formulation of the scope of the SEA and while undertaking the assessment. The submission from the EPA dated 28 March 2012 included a 'Generic EPA Scoping Template' which included information on a variety of issues as well as an SEA Pack which included SEA Process Guidance, an SEA Scoping Checklist, and SEA Process Checklist and information on Wetlands Conservation and Protection.

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

3.4 Environmental Baseline Data

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

3.5 Alternatives

The SEA Directive requires that reasonable alternatives (taking into account the objectives and the geographical scope of the plan or programme) are identified described and evaluated for their likely significant effects on the environment. Discussion on alternatives is provided in Section 6 of this Report.

3.6 The SEA Environmental Report

In this Environmental Report, an earlier version of which was placed on public display alongside the Proposed Variation, the likely environmental effects of the Variation are predicted and their significance evaluated with regard to the environmental baseline. The earlier version of the Environmental Report provided the decision-

makers, the members of the Council, who decided whether or not to make the Variation, as well as the public, with a clear understanding of the likely environmental consequences of the Proposed Variation.

Mitigation measures to prevent or reduce significant adverse effects posed by the Variation are identified in Section 8 - these have been integrated into the Variation.

The earlier version of the Environmental Report was altered to become this report in order to take account of recommendations contained in submissions and in order to take account of changes which were made to the Proposed Variation on foot of submissions (these changes were minor and would not be likely to result in environmental effects).

The Environmental Report is required to contain the information specified in Schedule 2 of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI No. 435 of 2004) as amended (see Table 3.1).

3.7 The SEA Statement

On adoption of the Variation, an SEA Statement was prepared and includes information on, inter alia, how environmental considerations have been integrated into the County Development Plan as varied, highlighting the main changes to the Variation which resulted from the SEA process.

3.8 Difficulties Encountered

3.8.1 Centralised Data Source

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

Table 3.1 Checklist of Information included in this Environmental Report

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

Section 4 Environmental Baseline

4.1 Introduction

The SEA Directive requires that the information on the baseline environment is focused upon the relevant aspects of the environmental characteristics of areas likely to be significantly affected and the likely evolution of the current environment in the absence of the Variation. Being consistent with the strategic provisions of the Variation, this section provides a strategic description of environmental components which have the greatest potential to be affected by implementation of the Variation.

Article 5 of the SEA Directive states that the report shall include the information that may *reasonably* be required taking into account:

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

4.2 Likely Evolution of the Environment in the Absence of the Variation

In the absence of the Variation the environment would evolve under the regime of the existing County Development Plan 2009-2015 as detailed under Section 6.4 of this report and set out in Chapter 4 of the SEA Environmental Report (September 2008) of the existing Plan.

The only significant difference between the evolution of the environment under the existing County Development Plan and the evolution of the existing environment under the County Development Plan with the Variation relates to the phasing of certain residential lands. The Variation does not provide for any significant increases in land zoned for development however it does provide for the phasing of already zoned lands, with the application of both Strategic Industrial and Residential Reserve objectives. As such the Variation does not change the assessment provided in the Environmental Report of the

Longford County Development Plan 2009-2015 [March 2009] except with regard to when potential environmental effects would be likely to occur.

The phasing of land provided for by this Variation - in addition to the existing zoning applied previously - had particular regard to both the capacity of the settlements to contribute towards achieving the objectives of the new Core Strategy - these objectives are consistent with the objectives of the existing Spatial Planning Strategy - as well as opportunities for public or sustainable travel and the availability of existing and planned critical water and waste water infrastructure. Phasing also took into account environmental sensitivities including biodiversity and flora and fauna and flood risk.

By potentially delaying the development of lands within environmentally sensitive and flood risk areas, phasing could potentially improve the protection of ecology and water status and the minimisation of flood risk. This protection is already contributed towards by the various provisions of the existing development plan.

By potentially delaying the development of lands further away from the town centre, phasing could potentially further improve the provision of sustainable mobility patterns which are contributed towards by the Plan and further facilitate the accompaniment of water services infrastructure with new development.

4.3 Biodiversity and Flora and Fauna

4.3.1 Ecological Networks and Connectivity

Ecological networks are important in connecting areas of local biodiversity with each other and with nearby designated sites so as to prevent islands of habitat from being isolated entities. They are composed of linear features, such as treelines, hedgerows and rivers/streams, which provide corridors or stepping stones for wildlife species moving within their normal range. They are important for the migration, dispersal and genetic exchange of species of flora and fauna particularly for mammals, especially for bats and small birds. They facilitate linkages both between

and within designated ecological sites, the nondesignated surrounding countryside and the more urban areas of the County.

As traditional species-rich grasslands decline, grassy roadside verges and other marginal grasslands act as important habitats and ecological networks for many species of wild flowers and the invertebrates they support. Because of a management regime which is generally of low-intensity, many grassy verges growing along roads contain a great variety of wild flowers.

Manmade structures such as stone walls, bridges and buildings can also be very important for wildlife and provide feeding, hibernating and roosting sites for many species of invertebrates, birds and bats. A diversity of mosses, lichens and other plants are often found on old stone built structures.

Important stands of trees have been designated in the County. These are mapped on Figure 4.5.

0 _ 25 _ 50 Longford County Boundary

4.3.2 Land Cover

4.3.2.1 CORINE Land Cover Mapping¹

The CORINE land cover mapping² for County Longford classifies land cover under various headings. CORINE land cover mapping for County Longford for the year 2006 is shown on Figure 4.2. The main types of cover in the County are pastures with areas of peat bogs, transitional woodland scrub with coniferous forests interspersed throughout. Landcover differences between the CORINE 2000 data and the data for the year 2006³ is shown on see Figure 4.3. This illustrates that the most common land cover change was from transitional woodland scrub to coniferous forests.

4.3.3 Designations

4.3.3.1 Introduction

Figure 4.4 shows the spatial distribution of candidate Special Area of Conservation (cSAC), Special Protection Area (SPA) and Natural Heritage Area (NHA) designations across the County. As can be seen from the map, many of these sites overlap with each other.

4.3.3.2 Candidate Special Areas of Conservation

Candidate Special Areas of Conservation (cSACs) have been selected for protection under the European Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC) by the DEHLG due to their conservation value for habitats and species of importance in the European Union. The sites are

11

¹ CORINE Land Cover (CLC) is a map of the European environmental landscape based on interpretation of satellite images. Land cover is the observed physical cover, as seen from the ground or through remote sensing, including for example natural or planted vegetation, water and human constructions which cover the earth's surface. Because of the scale of the CORINE data and the method by which it was collected there are likely to be a number of inaccuracies at the local level. It is noted, however, that the land cover shown on the maps is generally accurate at the County level. The European Environment Agency, in conjunction with the European Space Agency, the European Commission and member countries is currently updating the CORINE land cover database.

² European Environment Agency Coordination of Information on the Environment (2004) *Ireland's Corine Land Cover 2000 (CLC2000)* Copenhagen: EEA

³ European Environment Agency Coordination of Information on the Environment (various) *Ireland's Corine Land Cover 2000 (CLC2000) and Ireland's Corine Land Cover 1990 (CLC1990)* Copenhagen: EEA

candidate sites because they are currently under consideration by the Commission of the European Union.

Longfords six candidate SACs are listed under Table 4.1 and mapped on Figure 4.4⁴. On designation, these cSACs together with the SPAs identified below will become part of Natura 2000 - a network of protected areas throughout the EU established under the Habitats Directive.

Table 4.1 Candidate Special Areas of Conservation

Oorise vation				
Site Code	Site Name			
000440	Lough Ree			
000448	Fortwilliam Turlough			
001818	Lough Forbes Complex			
002341	Ardagullion Bog			
002346	Brown Bog			
002348	Clooneen Bog			

4.3.3.3 Special Protection Areas

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

5 SPAs have been designated in County Longford including a bog and various lakes. These SPAs along with cSACs comprise Natura 2000 - a network of protected areas throughout the EU established under the Habitats Directive.

SPAs are listed under Table 4.2 and mapped on Figure 4.4^{5} .

Table 4.2 Special Protection Areas

Table 4.2 Special Flotection Areas				
Site Code	Site Name			
004045	Glen Lough SPA			
004061	Lough Kinale and Derragh Lough SPA			
004064	Lough Ree SPA			
004101	Ballykenny-Fisherstown Bog SPA			
004045	Glen Lough SPA			

4.3.3.4 Register of Protected Areas

In response to the requirements of the Water Framework Directive a number of water bodies or parts of water bodies which must have extra controls on their quality by virtue of how their waters are used by people and by wildlife have been listed on Registers of Protected Areas (see Section 4.6 *Water* and Figure 4.13).

4.3.4 Existing Problems

New developments such as residential, commercial and/or transportation have resulted in loss of biodiversity and flora and fauna across the County.

⁴ Site synopses for cSACs are available to download from the website of the National Parks and Wildlife Service at http://www.npws.ie/en/ConservationSites/.

⁵ Site synopses for SPAs are available to download from the website of the National Parks and Wildlife Service at http://www.npws.ie/en/ConservationSites/.

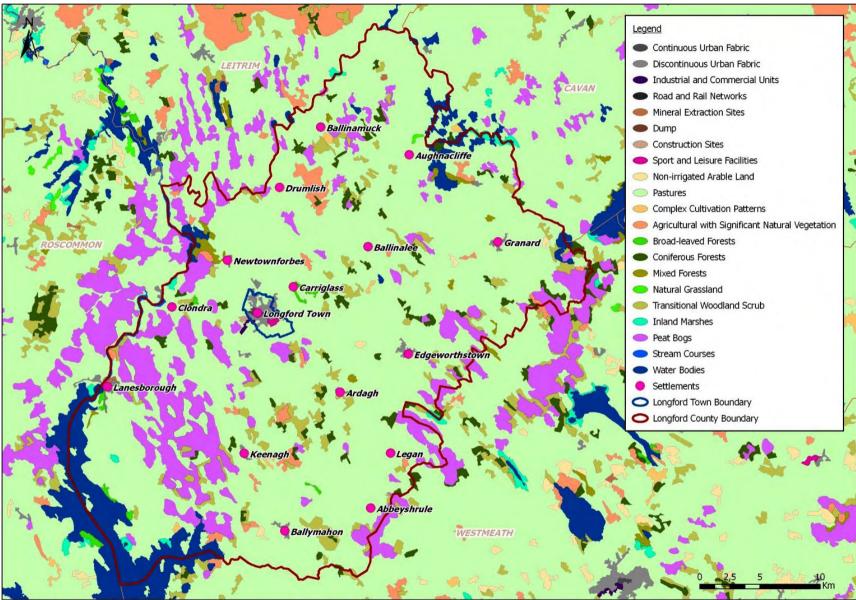


Figure 4.2 CORINE Land Cover Data 2006

Source: EPA (2009)

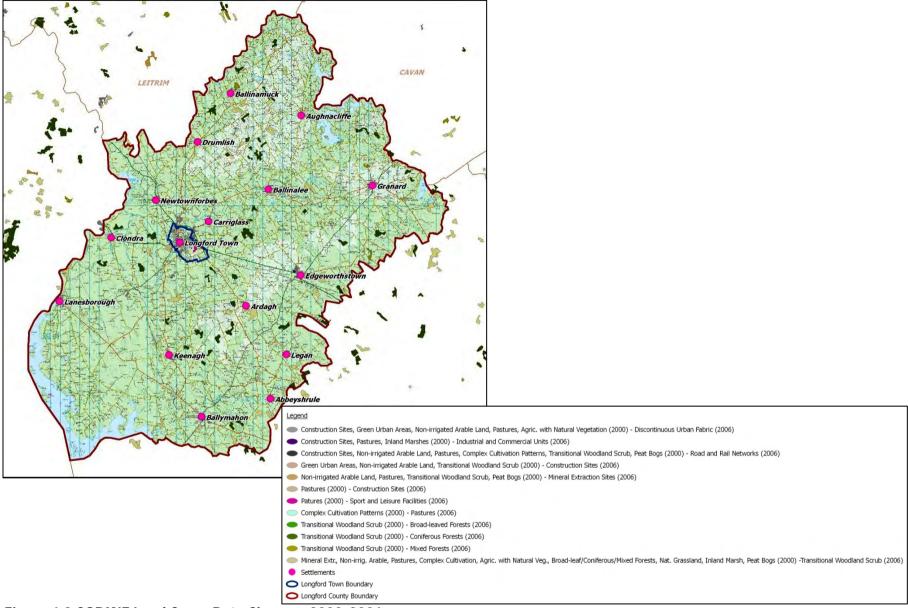


Figure 4.3 CORINE Land Cover Data Changes 2000-2006

Source: EPA (2009)

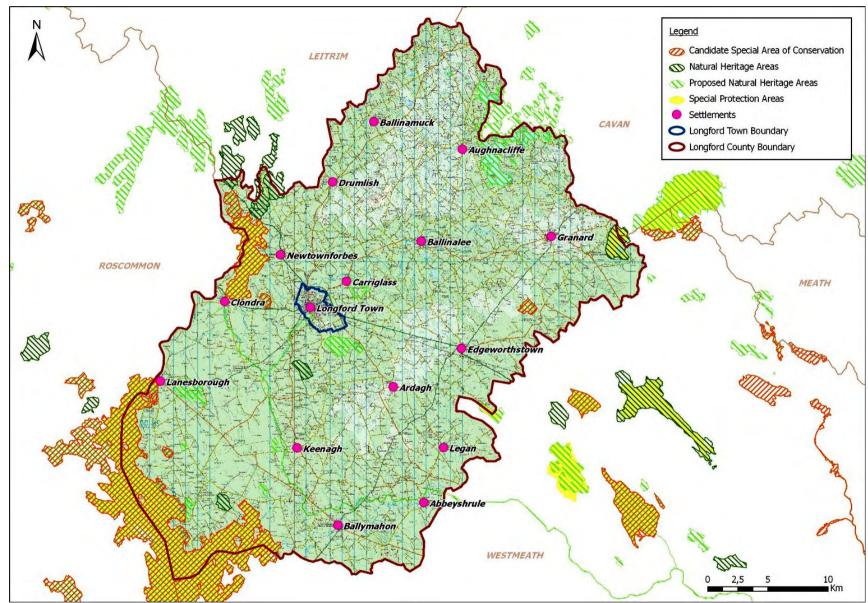


Figure 4.4 County Longford SPAs, candidate SACs and NHAs

Source: NPWS (datasets downloaded April, 2012)

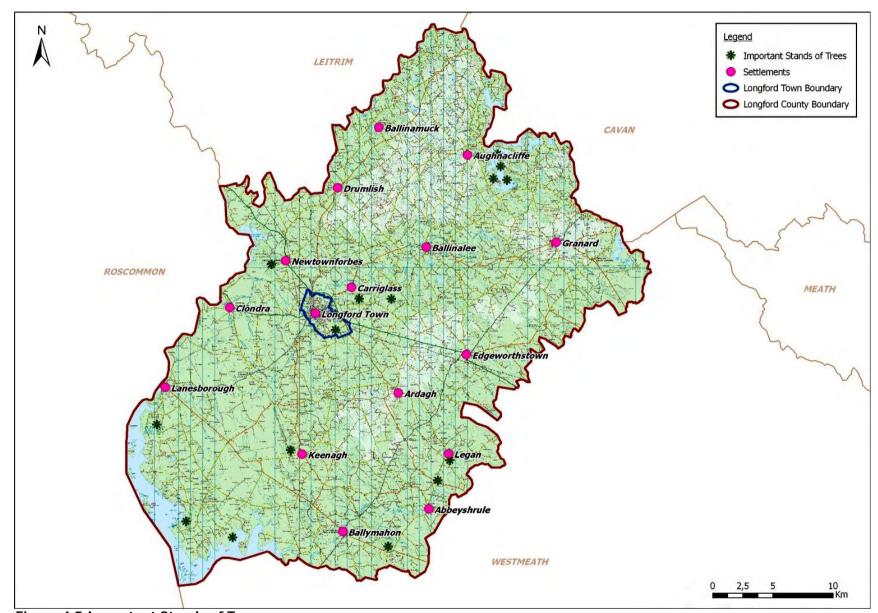


Figure 4.5 Important Stands of Trees Source: Longford County Council (unknown)

4.4 Population and Human Health

4.4.1 Population

Longford is a relatively small county of approximately 1,091 km². Population⁶ for the County currently stands at 39,000 persons. This sees an increase of 4,609 persons or 13.4% on the previous Census which was carried out in 2006.

4.4.2 Human Health

With regard to human health, impacts relevant to the SEA are those which arise as a result of interactions with environmental vectors (i.e. environmental components such as air, water or soil through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings).

Hazards or nuisances to human health can arise as a result of exposure to these vectors arising from incompatible adjacent landuses, for example. These factors have been considered with regard to the description of: the baseline of each environmental component; and the identification and evaluation of the likely significant environmental effects of implementing the plan and the alternatives.

4.4.3 Existing Problems

Certain environmental vectors within the County area - such as air, water or soil - have the potential to transport and deposit contaminants or pollutants, which have the potential to cause harm and adversely impact upon the health of the County's population. Issues relevant to this potential in County Longford are expanded upon in the section above.

4.5 Soil and Geology

4.5.1 Introduction

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

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

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

4.5.2 Soil Types

Soil types, as classified by Teagasc in cooperation with the Forest Service, EPA and GSI are mapped on Figure 4.7^7 .

This map indicates that deep well drained mineral soil and cutaway peat are the most prevalent soil types in the County. Areas of blanket bog occur in the south west and north of the County.

4.5.3 Sites of Geological Interest

Sites of Geological Interest in County Longford are mapped on Figure 4.6. There are 13 listed in the current CDP.

⁶ CSO (2011), *Census 2011*: Dublin: CSO

⁷ Teagasc, GSI, Forest Service & EPA (2006) Soils and Subsoils Class Dublin: DEHLG

4.5.4 Existing Problems relating to Soil

Development that takes place without sufficient surveying and assessment of the potential for the presence of karsified limestone under or adjacent to the site has the potential to give rise to problems both for the structures and for the receiving environment - particularly if storage or piping infrastructure is caused to leak by a geological collapse.

Ireland contains some of the best examples of intact blanket bog in Europe. Loss of quality rare bog habitats has resulted in the decline in numbers of vulnerable birds which live and breed on the bogs.

Soil can be polluted and contaminated by development which is not serviced by appropriate waste water infrastructure and by agricultural activities.

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

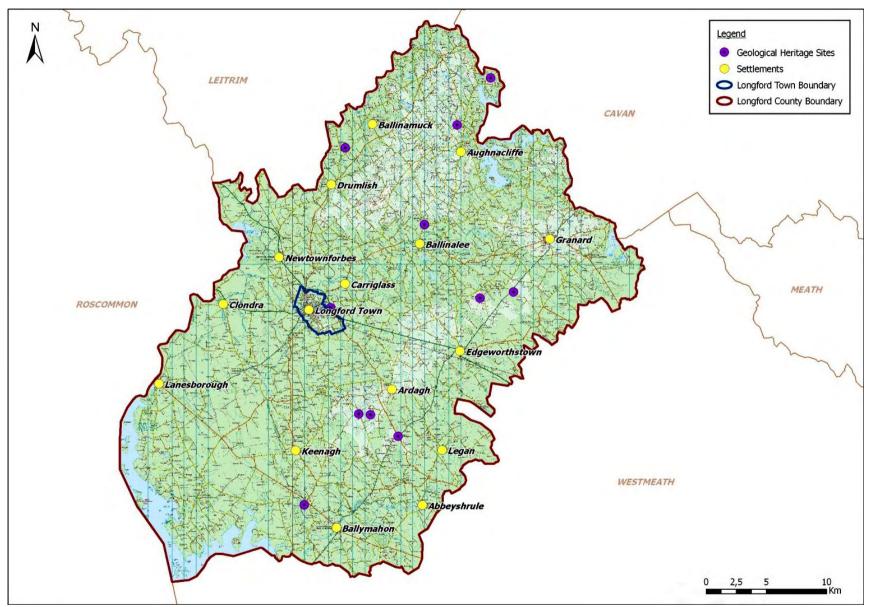


Figure 4.6 Geological Heritage Sites
Source: Longford County Council (Unknown)

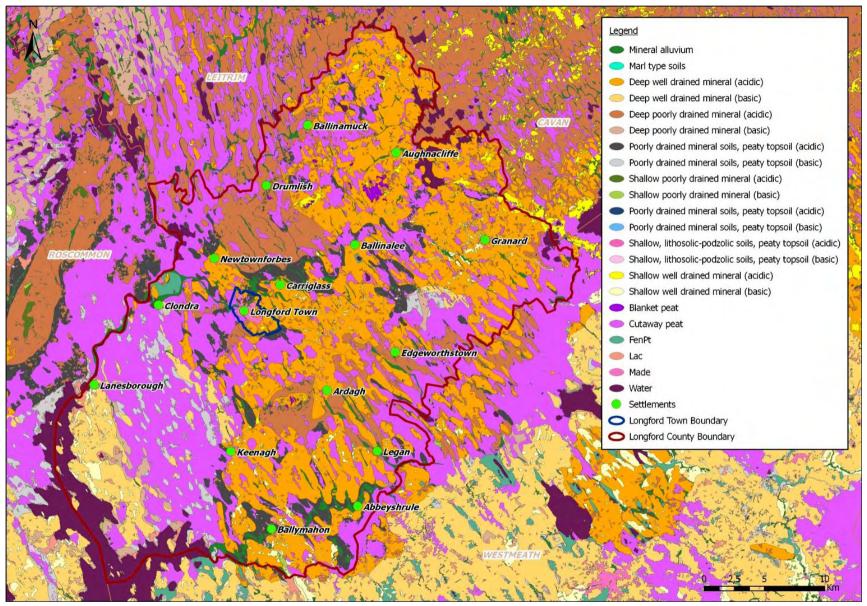


Figure 4.7 Soils

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

4.6 Water

4.6.1 Potential Pressures on Water Quality

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

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

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

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

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

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

4.6.2 The Water Framework Directive

4.6.2.1 Introduction and Requirements

Since 2000, Water Management in the EU has been directed by the Water Framework Directive

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

Article 4.7 of the WFD Directive states that Member States will not be in breach of the Directive when:

- failure to achieve good groundwater status, good ecological status or, where relevant, good ecological potential or to prevent deterioration in the status of a body of surface water or groundwater is the result of new modifications to the physical characteristics of a surface water body or alterations to the level of bodies of groundwater, or
- failure to prevent deterioration from high status to good status of a body of surface water is the result of new sustainable human development activities

and all the following conditions are met:

- (a) all practicable steps are taken to mitigate the adverse impact on the status of the body of water;
- (b) the reasons for those modifications or alterations are specifically set out and explained in the river basin management plan required under Article 13 and the objectives are reviewed every six years;
- (c) the reasons for those modifications or alterations are of overriding public interest and/or the benefits to the environment and to society of achieving the objectives set out in paragraph 1 are outweighed by the benefits of the new modifications or alterations to human health, to the maintenance of human safety or to sustainable development, and
- (d) the beneficial objectives served by those modifications or alterations of the water body cannot for reasons of technical feasibility or disproportionate cost be achieved by other means, which are a significantly better environmental option.

4.6.2.2 River Basin Districts and Water Bodies

For the purpose of implementing the WFD, Ireland has been divided into eight river basin

districts or areas of land that are drained by a large river or number of rivers and the adjacent estuarine / coastal areas. The management of water resources will be on these river basin districts. County Longford falls within the North Western and Shannon RBDs.

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

4.6.2.3 River Basin Management Plans

Local Authorities including Longford County Council, have prepared the Shannon International and Northwest River Basin Management Plans which are implemented in order to help protect and improve waters in the county and wider RBDs. The Management Plans provide specific policies for individual river basins in order to implement the requirements of the WFD.

4.6.3 Surface Water⁸

The County lies within two major river catchments, the Shannon and the Erne. It falls within the secondary catchment of the River Inny, which flows into Lough Ree and forms part of the wider Shannon catchment and the Camlin river which flows from Granard through Longford Town to the Shannon at Clondra.

4.6.3.1 River Water Quality

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

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

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

8 It is noted that some of the data on the surface water maps differ from that on EPAs Envision MapViewer. This conflict is in the process of being resolved. Figure 4.8 maps the WFD Surface Water Status for the County. Rivers in the south of the County are of moderate status while in the centre of the County, they are generally of moderate or good status. WFD status for rivers is good in the north west, moderate in the north and poor in the north east.

Water quality within the County is monitored by the EPA at a number of locations along rivers as mapped on Figure 4.9. This shows that most of the monitored rivers in the county are or good or moderate status. Some areas of poor status are identified in the east of the County.

4.6.3.2 Lake Water Quality

There are four lakes in the County, all positioned along the County boundary, whose quality is monitored by the EPA. These are Lough Kinale and Lough Gowna in the north east, Lough Forbes in the west and Lough Ree in the south west. As mapped on Figure 4.8, each of the lakes is classified as being of moderate status.

Figure 4.9 includes the quality of the four lakes mentioned above. Lough Kinale, Lough Forbes and Lough Ree are classified as being oligotrophic/mesotrophic. Mesotrophic lakes are lakes with an intermediate level of productivity, greater than oligotrophic lakes, but less than eutrophic lakes. Eutrophication has long been the principal pressure on lake water quality in Ireland. It is caused by enrichment of water by nutrients phosphorous and/or (especially compounds) causing an accelerated growth in algae and other plant forms, which causes an undesirable disturbance to the balance of organisms present in the water, and the quality of the water. Mesotrophic lakes are commonly clear water lakes and ponds with beds of submerged aquatic plants and medium levels of nutrients9. Lough Gowna is classified as being moderately eutrophic.

4.6.4 Groundwater

4.6.4.1 Introduction

Groundwater is stored in the void spaces in underground layers of rock, or aquifers. These aquifers are permeable, allowing both the infiltration of water from the soils above them and the yielding of water to surface and coastal

⁹ EPA (2008) *State of lake water quality in Ireland including trends, legislation and actions required* Wexford: EPA.

waters. Groundwater is the part of the subsurface water that is in the saturated zone - the zone below the water table, the uppermost level of saturation in an aquifer at which the pressure is atmospheric, in which all pores and fissures are full of water. Groundwater bodies within County Longford follow the pattern of the underlying geology, the empty spaces of which they are contained in. Ground water is important for drinking water supply together as well as the source of some surface waters across County Longford.

4.6.4.2 WFD Groundwater Status

For groundwater bodies, the approach to classification is different from that for surface water. For each body of groundwater, both the chemical status and the quantitative must be determined. Both have to be classed as either "good" or "poor". The WFD sets out a series of criteria that must be met for a body to be classed as good chemical and quantitative status. As displayed on Figure 4.10, most of the County's aquifers are of good status. An area in the west of the County is of poor status.

4.6.4.3 Aquifer Buffer Zones

Aquifer Buffer Zones are mapped on Figure 4.11. Buffers have been given to the known water supply sources in the County in an effort to protect them from pollution.

4.6.4.4 Aquifer Vulnerability

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

Figure 4.12 shows aquifer vulnerability data for the County.

Aquifer vulnerability in County Longford is variable. Areas of low vulnerability occur along the Counties boundary. A large area of high vulnerability can be found at the centre of the County, with some other areas of high vulnerability scattered throughout the County. Some areas of extreme vulnerability occur in the upland areas of Longford. Smaller areas where the rock is near the surface, or "karst" can be found within these areas of extreme vulnerability.

4.6.5 Register of Protected Areas

The WFD requires that Registers of Protected Areas (RPAs) are compiled for a number water

bodies or part of water bodies which must have extra controls on their quality by virtue of how their waters are used by people and by wildlife.

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

A number of water bodies within and surrounding the County Longford area have been listed on the WFD Register of Protected Areas (RPAs) - these are mapped on Figure 4.13. There are six different types RPAs in Longford, namely Nutrient Sensitive Rivers and Lakes, Lakes and Groundwater listed for drinking water and water dependent habitats – SPAs and cSACs.

4.6.6 Flooding

4.6.6.1 Introduction

Flooding is an environmental phenomenon which, as well have causing economic and social impacts, could in certain circumstances pose a risk to human health.

4.6.6.2 EU Floods Directive

European Directive 2007/60/EC on the assessment and management of flood risks requires Member States to carry out a preliminary assessment by 2011 in order to identify the river basins and associated coastal areas at risk of flooding. For such zones, flood risk maps are required to be drawn up by 2013. Flood risk management plans focused on prevention, protection and preparedness must be established by 2015. The Office of Public Works has prepared Preliminary Flood Risk Assessment (PFRA) maps which identify areas where the risks associated with flooding might be significant. These areas, Areas for Further Assessment (AFAs), are where more detailed assessment is required to more accurately assess the extent and degree of flood risk.

4.6.6.3 DEHLG Flood Risk Management Guidelines

In 2009 the DEHLG published *The Planning System and Flood Risk Management* Guidelines for Planning Authorities. These are aimed at

ensuring a more consistent, rigorous and systematic approach which will fully incorporate flood risk assessment and management into the planning system. Planning authorities are required to undertake flood risk identification, assessment and management processes as appropriate when preparing or varying Development Plans and other plans and in the consideration of applications for planning permission.

4.6.6.4 Flood Risk Assessment

A Flood Risk Assessment (FRA) was carried out alongside the preparation of the Core Strategy Variation (see Appendix II). This assessment considered the OPW's PFRA and flood extent and event mapping and focused on the provisions contained within the County Development Plan and the Variation. Recommendations which came out of the assessment were integrated into the Variation thereby further contributing towards the Council's compliance with the DEHLG Flood Guidelines.

4.6.6.5 Flood Extents and Events

Recorded flood event and extent information from the OPW is shown on Figure 4.14. A flood event is the occurrence of recorded flooding at a given location on a given date. The Flood event is derived from different types of information (reports, photographs etc.). A flood event that has occurred more than once at a certain area is named a recurring flood event.

Recorded flood extent information provides historic evidence of flooding adjacent to the River Shannon and Lough Ree in the west of the County - including within the towns of Clondra and Lanesborough - as well as within Ballimahon and Longford Town and Environs, while flood event data provides historic evidence of flooding in settlements including Ballimahon, Ballinalee, Clondra, Lanesborough, Longford Town, Newtownforbes.

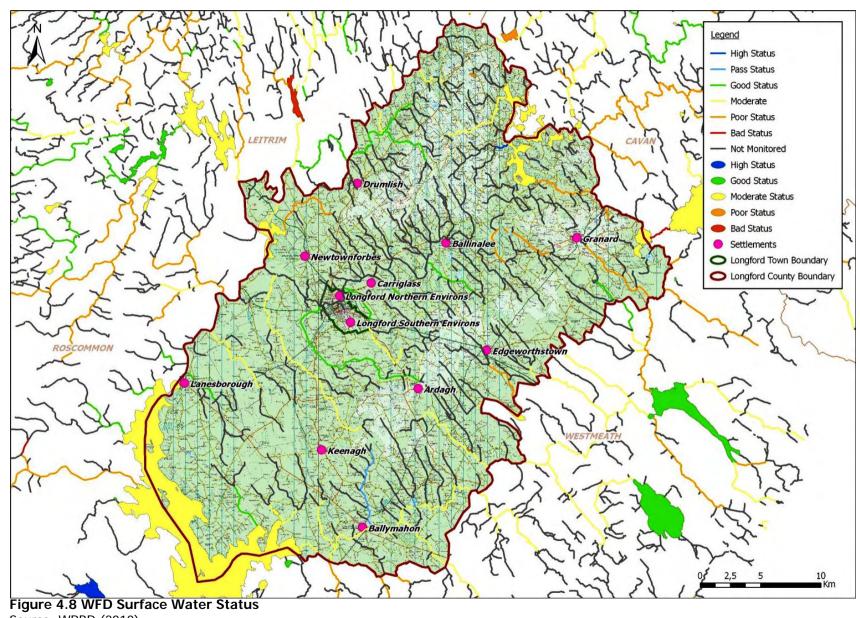
4.6.7 Existing Problems

Some areas of poor water quality exist in the east of the County. Lough Gowna is moderately eutrophic. Groundwater in the west of the County is of poor status. Based on available water data, some of the Counties water bodies will need improvement in order to comply with the objectives of the WFD.

The ShIRBD and NWRBD Management Plans and associated Programmes of Measures include provisions to help ensure that these water bodies

meet the objectives of the WFD. The Longford County Development Plan and its Variation contribute towards the achievement of the objectives of the WFD and the ShIRBD and NWRBD Management Plans.

Recorded flood extent and event information from the OPW (Figure 4.14) provides historic evidence of flooding in various locations across the County.



Source: WRBD (2010)

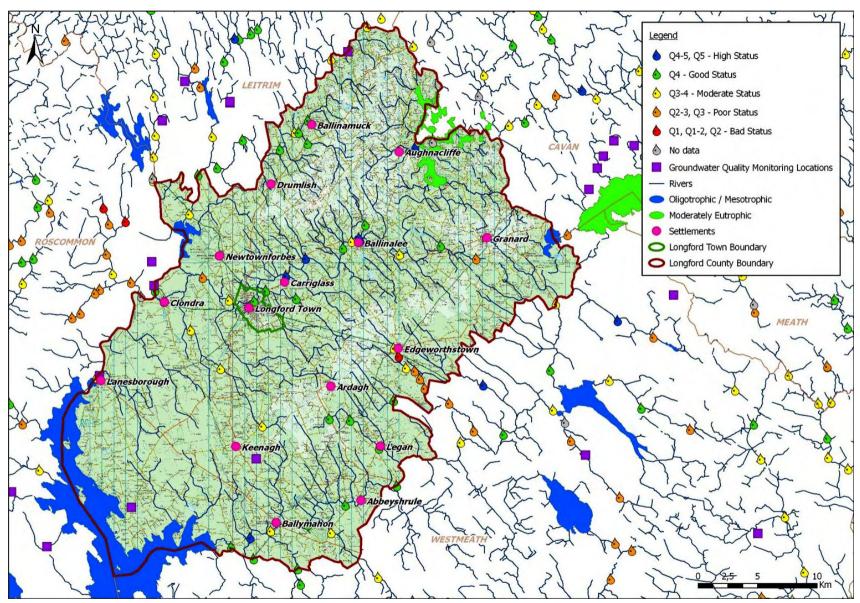


Figure 4.9 Q-Values (Biotic Index Ratings) at Points on Rivers and Lake Water Quality

Source: EPA (Various)

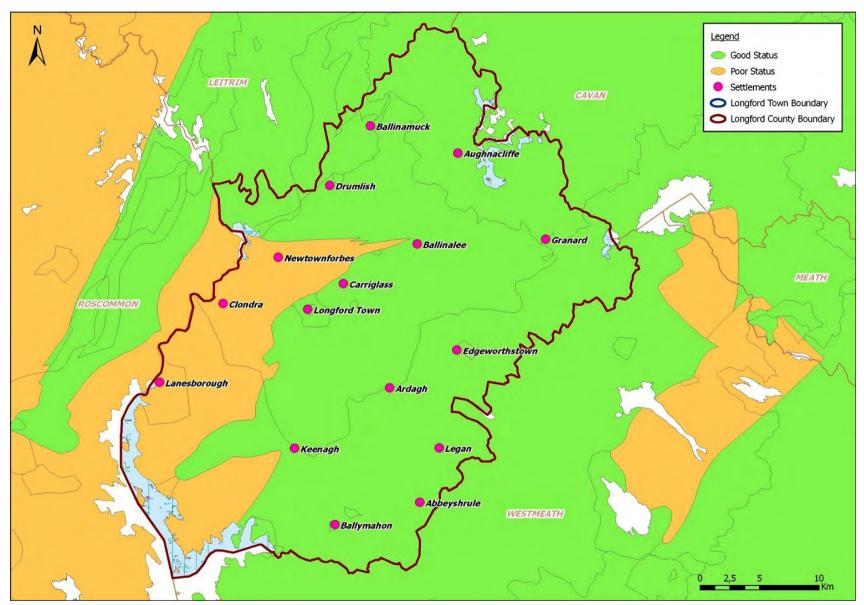


Figure 4.10 WFD Groundwater Status

Source: ShIRBD and NWRBD (2011)

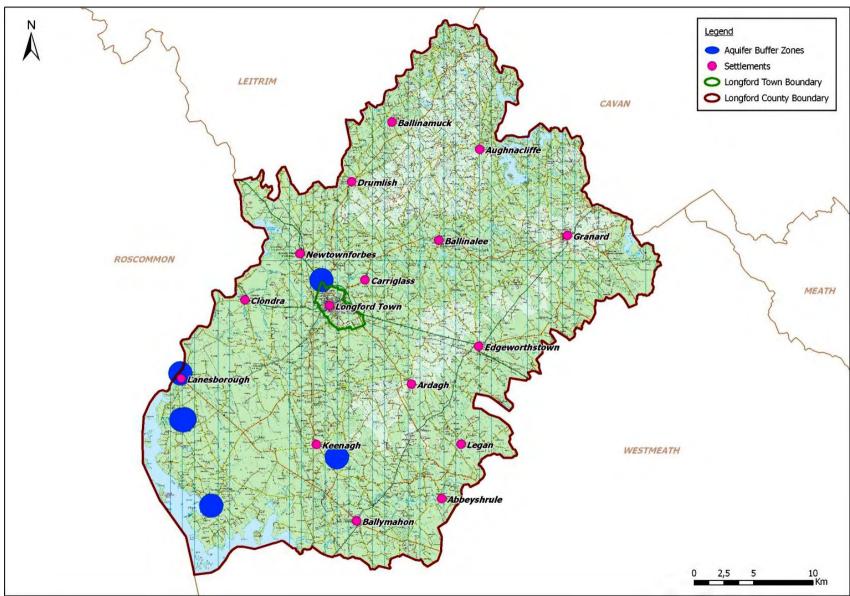


Figure 4.11 Aquifer Buffer Zones

Source: Unknown

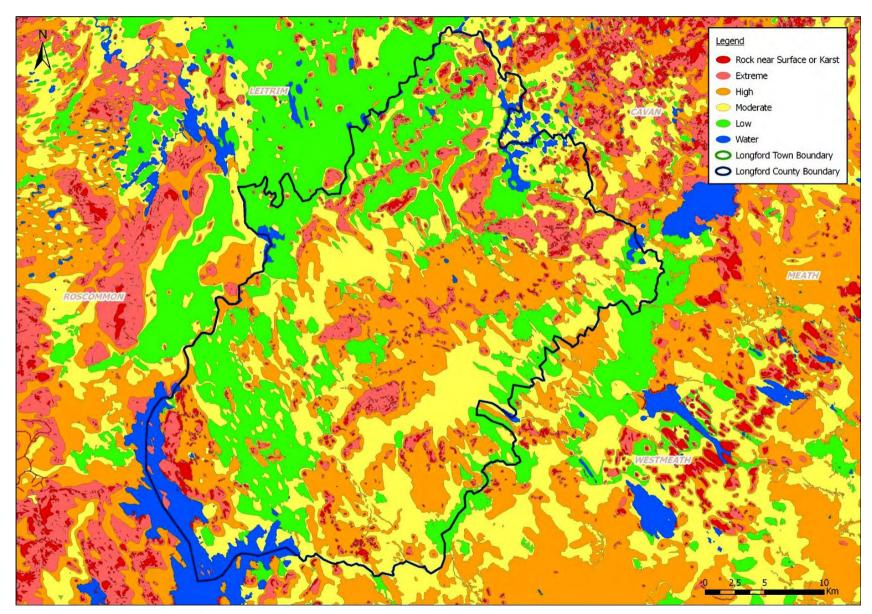


Figure 4.12 Aquifer Vulnerability Source: GSI (2009)

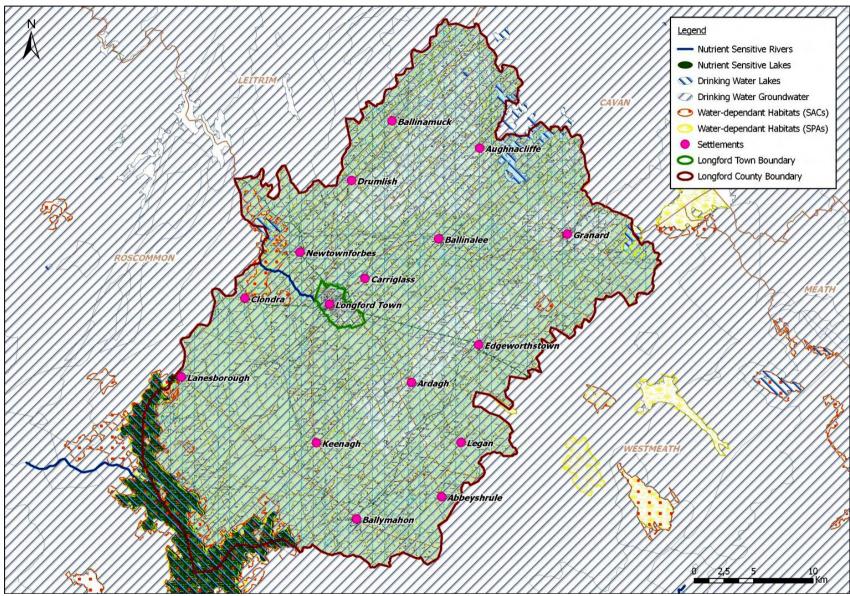


Figure 4.13 WFD Registers of Protected Areas

Source: EPA (2009)

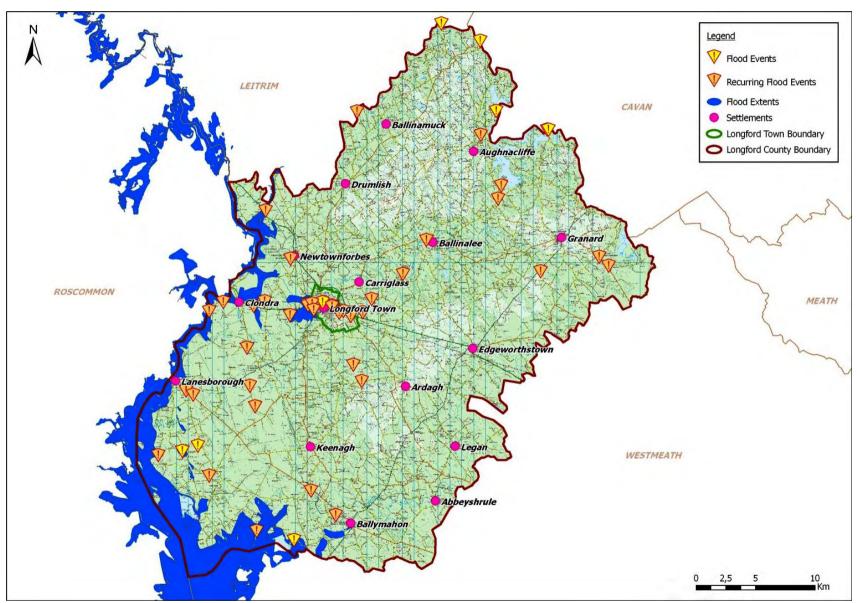


Figure 4.14 Flood Events (OPW)

Source: OPW (Various)

4.7 Air and Noise

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

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

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

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

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

The administrative area of Longford County Council is located in Zone D. Air quality in Zone D is currently "good".

4.7.1 Noise

4.7.1.1 The Environmental Noise Directive

Noise is unwanted sound. The Environmental Noise Regulations (SI No. 140 of 2006) transpose into Irish law the EU Directive 2002/49/EC relating to the assessment and management of environmental noise, which is commonly referred to as the Environmental Noise Directive or END. The END defines a common approach intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise.

It is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing existing EU policy on noise reduction from source. The Directive requires competent authorities in Member States to:

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

The END does not set any limit value, nor does it prescribe the measures to be used in the action plans, which remain at the discretion of the competent authorities. Limit values are left to each member state. At this point in time, Ireland does not have any statutory limit values.

4.7.2 Existing Problems

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

4.8 Material Assets

4.8.1 Waste Water

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

Existing waste water capacity, existing utilisation, available capacity and planned infrastructure for the county is shown on Table 4.3. Each plant identified is operating within capacity and has spare capacity.

The most recent Focus on Urban Wastewater Discharges in Ireland (EPA, 2012) identifies, under Table 2.4 'Summary of the overall compliance of water services authorities in 2009', that, within the administrative area of Longford County Council, there are no agglomerations where nutrient reduction is required but not provided and that there are no agglomerations with secondary treatment that did not meet Urban Waste Water Treatment Directive standards (BOD, COD and TSS). Infrastructure that is planned and under construction in combination with the provisions of the County Development Plan as varied will contribute towards Longford County Council's compliance with the Urban Waste Water Treatment Directive and other related legislative requirements.

4.8.2 Drinking Water

4.8.2.1 Drinking Water Supply

Public drinking water within the County is abstracted from the Shannon in the north and west of the County and from groundwater aquifers in the west and south of the County.

Longford County Council produces over 14.5 million litres of water each day which is collected at source, treated and distributed to over 25,000 people.

County Longford has six main Regional Water Supply Schemes (RWSSs), the capacity and demand of which are shown on Table 4.4 below. Two of the schemes are operating at capacity - Longford RWSS and Lanesborough RWSS - and four of the schemes are operating under capacity - Granard RWSS, Gowna RWSS, Ballymahon RWSS and Newtowncashel RWSS.

4.8.2.2 Drinking Water Quality

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

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

Under Section 58 of the Environmental Protection Agency Act 1992 the EPA is required to collect and verify monitoring results for all water supplies in Ireland covered by the European Communities (Drinking Water) Regulations, 2000. The EPA publishes their results in annual reports which are supported by Remedial Action Lists (RALs). The RAL identifies water supplies which are not in compliance with the Regulations mentioned above.

The most recently published EPA RAL (EPA, Q1 of 2012) includes Granard (Excessive levels of aluminium in the treated water) Longford Central (Excessive levels of aluminium in the treated water) and Newtowncashel (Inadequate treatment for Cryptosporidium) supplies. Actions are being undertaken in order to solve the issues at these plants.

4.8.3 Waste

At present, there are a number of private companies providing a waste collection service to both householders and businesses within the County. There are no active landfill sites in the County.

4.8.4 Transport

The central position of County Longford is important in terms of the road network within it. Two national primary routes traverse the County from east to west, the N4 from Dublin to Sligo and N5 from Longford to Castlebar. Longford Town is strategically positioned where the two national roads divide. The national secondary route, N63 leaves Longford Town for Roscommon/Galway and the N55 from Cavan to Athlone takes a north-south route through the east of the County, passing through Granard, Edgeworthstown and Ballymahon.

Nine regional routes connect these, serviced by a network of county roads. The Dublin-Sligo rail line traverses the County from east to west, generally following the line of the N4 and serves Longford and Edgeworthstown stations.

4.8.5 Existing Problems

The most recently published EPA RAL (EPA, Q1 of 2012) includes Granard (Excessive levels of aluminium in the treated water) Longford Central (Excessive levels of aluminium in the treated water) and Newtowncashel (Inadequate treatment for Cryptosporidium) supplies. Actions are being undertaken in order to solve the issues at these plants.

The construction and operation of new water services infrastructure will contribute towards the protection of the environment but has the potential to result in adverse environmental effects, if unmitigated.

Table 4.3 Waste Water Treatment Infrastructure Information

	Existing Capacity ¹⁰ PE	Existing Utilisation PE	Available capacity PE	Planned Infrastructure
Longford Town	20,000	17000 ¹¹	3000	Study being undertaken by Water Services Department in the Council examining the future needs of the town over the next 20 years.
Granard	3200 (2700)	2000	700	None identified
Edgeworthstown	2750	1650	0	None identified
Ballymahon	2125	1900	200	None identified
Lanesborough	1600	800	800	None identified
Abbeyshrule	300	265	35	None identified
Ardagh	300	100 (estimate)	200 (estimate)	New plant to be constructed (completion end 2013)
Aughnacliffe	400	225	175	New plant to be constructed (completion end 2013)
Ballinamuck	500	200 (estimate)	300 (estimate)	New plant recently completed
Ballinalee	600	413	187	New plant to be constructed (completion end 2013)
Clondra	600	200	400	None identified
Drumlish	1200	882	308	New plant to be constructed (completion end 2013)
Keenagh	1000	384	616	New plant constructed (completion 2012)
Legan	1000	262	738	New plant constructed (completion 2012)
Newtownforbes	1800	1269	531	New plant to be constructed (completion end 2013)

Table 4.4 Drinking Water Supply Information

Regional Water Supply Scheme	Daily Capacity m ³	Daily Demand m ³
Longford RWSS	7200	7200 ¹²
Granard RWSS	2500	1200
Gowna RWSS	2000	1900
Ballymahon RWSS	5000	4400
Lanesborough RWSS	3500	3500
Newtowncashel RWSS ¹³	460	360

Operational design limit

11 This includes 3250 booked capacity that is currently not being used. Figure will drop to c. 14000 once the schemes under construction become operational.

12 An additional 2100m³ is imported from Ballymahon RWSS (1000m³) and Lanesboro (1100m³)

13 It is expected that this source will cease to be used before 2016

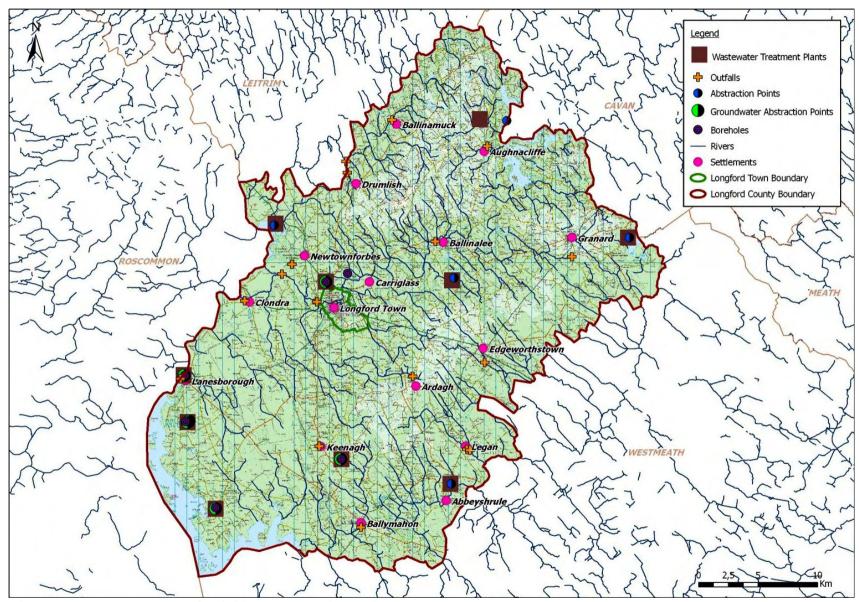


Figure 4.15 Wastewater and Drinking Water Information

Source: EPA (Various)

4.9 Cultural Heritage

4.9.1 Introduction

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

The heritage of County Longford is a unique resource which is fundamental to the cultural identity of the County and the quality of life of its citizens - it is central to how we see ourselves and to our identity as individuals and communities. Historic buildings can define localities and communities within the County and can become a focus of community identity and pride. An historic church or park, for example, can help define a neighbourhood and create a sense of local cohesion.

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

The urban streetscape, estate houses, megalithic tombs, castles, ecclesiastical remains, and vernacular buildings, field fences and gates, are some of the aspects of the built heritage that add to the character of the County. The dry stonewalls that delineate fields are another feature that contribute the County's sense of identity.

4.9.2 Archaeological Heritage

4.9.2.1 Introduction

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

Archaeological sites and monuments vary greatly in form and date; examples include earthworks of different types and periods, (e.g. early historic

ringforts and prehistoric burial mounds), megalithic tombs from the Prehistoric period, medieval buildings, urban archaeological deposits and underwater features such as wrecks.

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

4.9.2.2 Record of Monuments and Places

County Longford's archaeological heritage is protected under the National Monuments Acts (1930-2004), Natural Cultural Institutions Act 1997 and the Planning Acts. The Record of Monuments and Places (RMP) is an inventory, put on a statutory basis by amendment to the National Monuments Act 1994, of sites and areas of archaeological significance, numbered and mapped. The RMP includes all known monuments and sites of archaeological importance dating to before 1700 AD, and some sites which date from after 1700 AD.

Figure 4.16 shows the spatial distribution of entries to the RMP. Over 1700 archaeological sites and monuments are recorded in County Longford under the Record of Monuments and Places.

4.9.3 Architectural heritage

4.9.3.1 Introduction

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

The physical form of the individual structures in the countryside and in the towns and villages of County Longford has evolved through many periods. The built heritage which has developed has attained a character that contributes to varied, locally distinctive areas in the County.

4.9.3.2 Record of Protected Structures

The Record of Protected Structures (RPS) included in the Development Plan is legislated for under Section 12 and Section 51 of the Planning and Development Act 2000.

Protected Structures are defined in the Planning and Development Act (2000) as structures, or parts of structures that are of special interest from an architectural, historical, archaeological, artistic, cultural, scientific, social or technical point of view.

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

- (i) the interior of the structure;
- (ii) the land lying within the curtilage¹⁴ of the structure;
- (iii) any other structures lying within that curtilage and their interiors; and,
- (iv) all fixtures and features which form part of the interior or exterior of any structure or structures referred to in subparagraph (i) or (iii).

Entries to the RPS in County Longford are mapped on Figure 4.17.

4.9.3.3 Architectural Conservation Areas

In addition to these Protected Structures, Ardagh was adopted in the current County Development Plan as an Architectural Conservation Area (ACA).

An ACA is a place, area or group of structures or townscape which is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value, or contributes to the appreciation of protected structures, whose character it is an objective to preserve in a development plan. The ACA designation requires that planning permission must be obtained before significant works can be carried out to the exterior of a structure in the ACA which might alter the character of the structure or the ACA.

ACAs enable the protection of the existing character of areas within the settlements listed above throughout the County. This character is a

¹⁴ Curtilage is normally taken to be the parcel of ground immediately associated with the Protected Structure, or in use for the purposes of the structure. Protection extends to the buildings and land lying within the curtilage. While the curtilage sometimes coincides with the present property boundary, it can originally have included lands, features or even buildings now in separate ownership, e.g. the lodge of a former country house, or the garden features located in land subsequently sold off. Such lands are described as being attendant grounds, and the protection extends to them just as if they were still within the curtilage of the Protected Structure.

combination of the various layers of development from earliest times to the present. Though often not individually very important, vernacular buildings contribute to the acknowledged distinctive character of many of the County's towns. Collectively, if properly used and maintained, they can make a significant impact on the retention and enhancement of that character which is important in maintaining local distinctiveness for both inhabitants and visitors.

Figure 4.17 shows the location of the ACA within the County.

4.9.4 Existing Environmental Problems

Archaeology can be previously unknown but can be damaged through development causing ground disturbance. This is particularly relevant whereby development encroaches onto areas within the Zones of Archaeological Potential of certain monuments.

Developments which involve material alteration or additions to protected structures can detract from the special character of structures and their settings, and have the potential to result in the loss of features of architectural or historic interest and the historic form and structural integrity of structures.

Development on sites adjoining protected monuments, places or structures can also impact upon the setting of these cultural heritage items.

Encouraging and facilitating the accommodation of growth on brownfield sites will contribute to mitigating a number of the adverse impacts associated with greenfield development, however, brownfield development has the potential to significantly adversely impact upon cultural heritage - both archaeological and architectural - if unmitigated against. These impacts are most likely in the oldest settlements within the County.

The cumulative accommodation of large scale development in the County's various settlements has the potential to cumulatively impact upon cultural heritage.

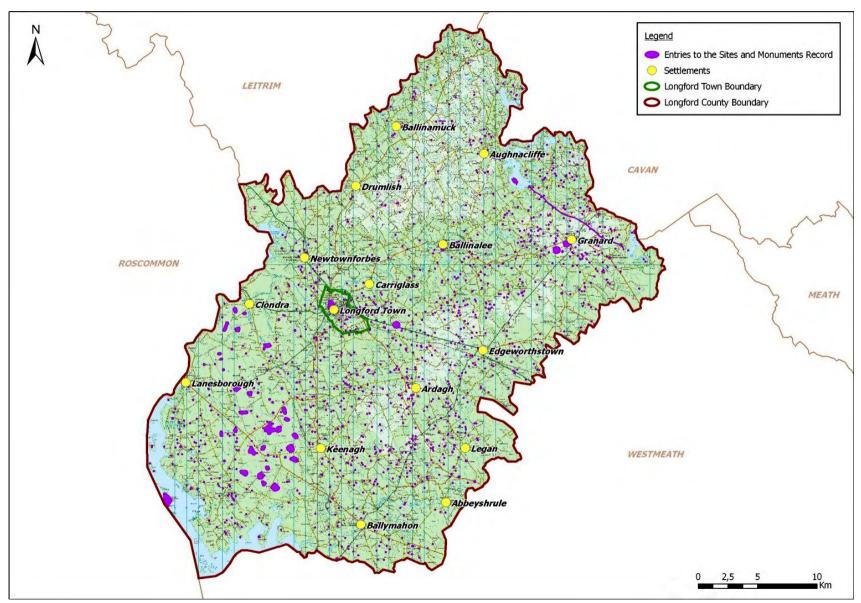


Figure 4.16 Entries to the Record of Sites and Monuments

Source: Longford County Council (Unknown)

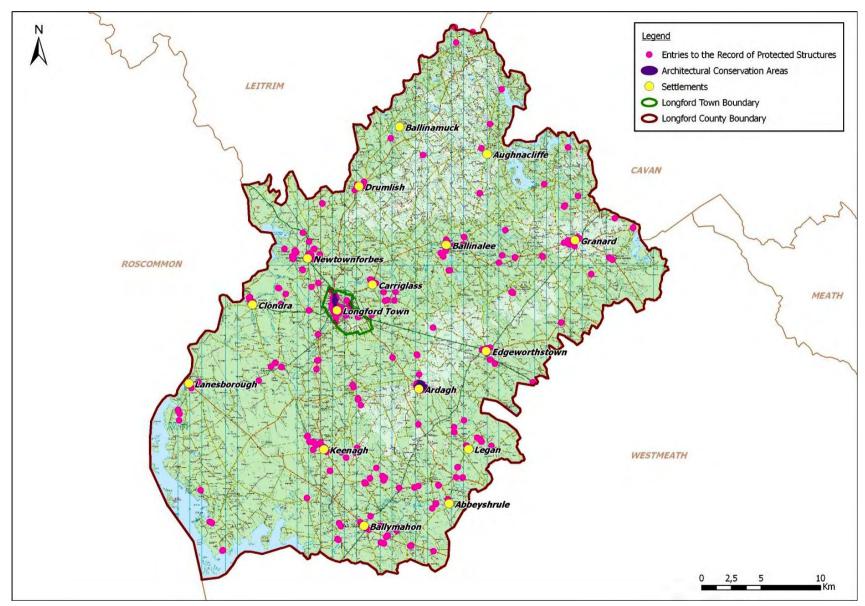


Figure 4.17 Architectural Heritage - Entries to the Record of Protected Structures and Architectural Conservation Areas Source: Longford County Council (Unknown)

4.10 Landscape

4.10.1 Introduction

Landscapes are areas which are perceived by people and are made up of a number of layers: landform, which results from geological and geomorphological history; landcover, which includes vegetation, water, human settlements, and; human values which are a result of historical, cultural, religious and other understandings and interactions with landform and landcover.

Human interaction with the natural heritage has produced a variety of characteristic landscapes and landscape features. The natural diversity of the landscapes of the County coupled with cultural features such as the archaeological monuments, stonewalls, hedgerows, woodlands, field patterns, settlements and buildings has given the County its distinctive character.

County Longford is richly endowed with a variety of landscape types. The general topography of the County may be described as undulating lowland, however, within this classification comes several sub-types such as the extensive commercial peatlands of the southwest, lakeland of the west, south and north-east and agricultural lowland with deciduous forest of the south-east and intermittent pockets of coniferous forest. Ardagh Mountain and the Cornhill area through to Lough Gowna represent the two upland areas.

4.10.2 Legislation

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

The increasing development pressure of recent years has caused changes in the national landscape, which are unprecedented in scale and nature. The DEHLG have set out guidelines¹⁵ for landscape assessment in order to help ensure that landscapes are maintained in a sustainable manner, while at the same time enabling a proactive approach to development.

Longford County Council has prepared a Landscape Character Assessment for the County which classifies the different landscapes of the County in relation to their different characteristics and values and their degree of sensitivity to various kinds of development.

4.10.3 Landscape Character Assessment 16

Character can be defined as a distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another. Landscape character assessments differ from landscape evaluations in that they attempt to classify landscapes on their individuality rather than defining one as better as or worse than another.

Landscape character types (LCT) are defined as landscapes that may occur in many areas throughout the Country and are composed of similar combinations of elements such as topography, geology, drainage and settlement patterns, landcover and use. Landscape character areas (LCA) are sections of the County that are treated as a unit in visual and physical terms, and that may consist of several landscape character types. Landscape Character types in County Longford would include the peatlands/wetlands, Shannon basin and northern uplands. Landscape character areas are the individual representation of a landscape character type, e.g. Begnagh Bog.

In broad terms, there are seven basic landscape character units in Longford which are illustrated on

Figure 4.18 below.

- Unit 1 Northern Drumlin Lakeland.
- Unit 2 Northern Upland.
- Unit 3 Shannon Basin/Lough Ree.
- Unit 4 Central Corridor.
- Unit 5 Inny Basin.
- Unit 6 Peatlands.
- Unit 7 Open Agricultural.

4.10.4 Existing Environmental Problems

Housing development has the potential to threaten valuable and sensitive landscapes throughout the County.

¹⁵ DEHLG (2000) *Landscape and Landscape Assessment Guidelines* Dublin: Government of Ireland

¹⁶ Text in this section is sourced from the Longford Landscape Character Assessment (Longford County Council, 2009)

Individual one-off housing developments often do not have significant adverse impacts, however cumulatively they have the potential to cumulatively and adversely significantly impact upon sensitive landscapes.

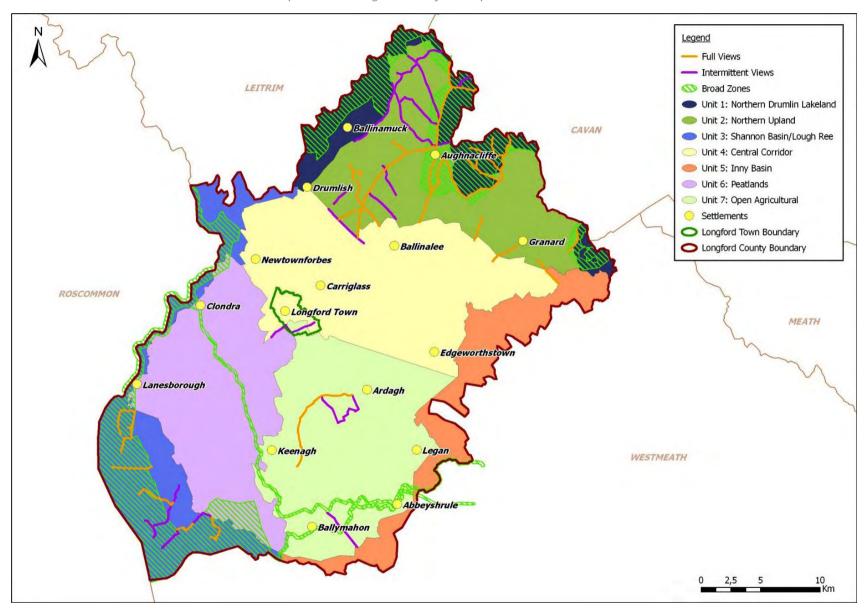


Figure 4.18 Landscape Character Areas Source: Longford County Council (2009)

4.11 Overlay Mapping of Environmental Sensitivities

4.11.1 Introduction and Methodology

In order to identify where most sensitivities within the County occur, a number of the environmental sensitivities described above were weighted and mapped overlapping each other. Figure 4.19 provides an overlay of environmental sensitivities in County Longford. The settlements are also included on this map.

Environmental sensitivities are indicated by colours which range from acute vulnerability (brown) extreme vulnerability (red) to high vulnerability (dark orange) to elevated vulnerability (light orange) moderate to vulnerability (yellow) to low vulnerability (green). Where the mapping shows a concentration of environmental sensitivities there is an increased likelihood that development will conflict with these sensitivities and cause environmental deterioration.

A weighting system applied through Geographical Information System (GIS) software was used in order to calculate the vulnerability of all areas in the County. Equal value is given to all environmental components (landscape, water, biodiversity etc.) with the following environmental sensitivity factors each attributed weighting of 5 points:

- Ecological designations (candidate Special Areas of Conservation, Special Protection Areas, Natural Heritage Areas and proposed Natural Heritage areas);
- Cultural Heritage (Architectural Conservation Areas, entries to Records of Protected Structures and entries to the Entries to the Record of Sites and Monuments);
- High Amenity Areas and Protected Views;
- Geological sites of importance;
- Sensitive Landcover categories (broadleaved forests, peat bogs, natural grassland, inland marshes and water bodies):
- Entries to the Register of Protected Areas for drinking water lakes and groundwater that is used for drinking water;
- Flood extents and risk areas;

- Surface and groundwaters with bad/poor ecological status; and,
- Aquifers which are highly or extremely vulnerable to pollution.

The scale of sensitivity for each area of the County corresponds to the sensitivity factors: 5 points corresponds to one sensitivity factor; 10 points corresponds to two sensitivity factors; 20 points corresponds to four sensitivity factors and so on. The scores for each area are added together in order to determine overall vulnerability as is shown on Table 4.5.

Score	Vulnerability Class
5-15	Low
20-25	Moderate
30-35	Elevated
40-45	High
50-60	Extreme
>60	Acute

Table 4.5 Overall Vulnerability Classes

Although there are limitations and elements of subjectivity to the overlaying of sensitivities the overlay mapping was used in order to speedily identify the areas where conflicts between development within the Plan area and environmental sensitivities would be likely to occur if unmitigated.

4.11.2 Conclusions

The Overlay Mapping on Figure 4.19 shows that environmental sensitivities are not evenly distributed throughout the County. The County's western and south western boundaries are extremely and acutely vulnerable. These levels of sensitivity reflect the sensitive nature of the River Shannon and its Loughs which are protected under the Habitats Directive.

Peatland areas, due to their ecological, hydrological and amenity characteristics, present higher levels of sensitivity than most of the surrounding agricultural areas throughout the County. This is particularly the case at Clooneen Bog, Ballykenny-Fisherstown Bog and Brown Bog.

Likewise, lakes in the area show higher levels of sensitivity in comparison to surrounding areas and in addition to Lough Forbes and Lough Ree on the River Shannon in the west of the County include Lough Kinale and Derragh Lough.

The remainder of the County is generally of low and moderate vulnerability.

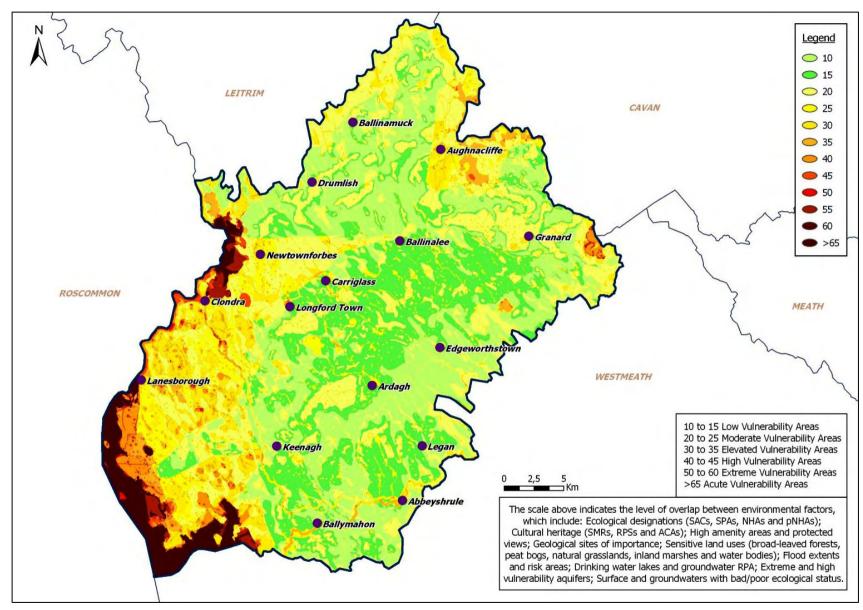


Figure 4.19 Overlay Mapping of Environmental Sensitivities

Source: CAAS (2012)

Section 5 Strategic Environmental Objectives

5.1 Introduction

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

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

SEOs are distinct from the objectives of the Variation and they are not given statutory weight by virtue of their use in Strategic Environmental Assessments.

The SEOs are linked to indicators which can facilitate monitoring the environmental effects of the County Development Plan as varied.

5.2 Biodiversity, Flora and Fauna

5.2.1 International, European and National Strategic Actions

5.2.1.1 Habitats Directive 1992

The European Council Directive on the Conservation of natural habitats and of wild fauna and flora (92/43/EEC), referred to as the Habitats Directive, aims to ensure the conservation of certain natural habitats and species which are at favourable conservation status.

Special Areas of Conservation (SACs) are designated and protected under the Habitats Directive 1992 (92/43/EEC) due to their conservation value for habitats and species of importance in the European Union.

The Habitats Directive establishes Natura 2000, a network of protected areas throughout the EU. SACs together with Special Protection Areas (SPAs) - which are designated under the 1979 Birds Directive - make up the Natura 2000 network of protected sites.

Article 6 of the Habitats Directive provides for the need to undertake Appropriate Assessments of plans or projects which have the potential to impacts upon Natura 2000 sites.

Article 10 of the Habitats Directive recognises the importance of ecological networks as corridors and stepping stones for wildlife, including for migration, dispersal and genetic exchange of species of flora and fauna. The Directive requires that ecological connectivity and areas of ecological value outside the network of designated ecological sites are maintained, and it recognises the need for the management of these areas through land use planning and development policies.

In Ireland, the habitats and species occurring in both SACs and SPAs are protected from effects of development occurring outside their boundaries under Section 18 "Prohibition of works on lands outside a European site" of the European Communities (Natural Habitats) Regulations 1997. The Regulations require that where a development is proposed to be carried out, on any land that is not within a protected site and is liable to have an adverse impact on the protected site in question, including direct, cumulative and indirect impacts, an Appropriate Assessment is required.

The integration of the requirements of Article 6 of the Habitats Directive into the Planning and Development Act 2010 (Amended) and the European Communities (Birds and Natural Habitats) Regulations 2011 puts the requirement for Appropriate Assessment into context for both projects and plans.

5.2.1.2 Birds Directive 1979

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

their habitats; and to regulate the exploitation of these species.

The Directive places great emphasis on the protection of habitats for endangered as well as migratory species, especially through the establishment of a coherent network of Special Protection Areas (SPAs).

SPAs are protected under the Directive and have been designated in Ireland by the Department of Arts, Heritage and the Gaeltacht due to their conservation value for birds of importance in the European Union.

5.2.1.3 European Communities (Birds and Natural Habitats) Regulations 2011

The European Communities (Birds and Natural Habitats) Regulations 2011 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.

The Regulations have been prepared to address several judgments of the Court of Justice of the European Union (CJEU) against Ireland, notably cases C-418/04 and C-183/05, in respect of failure to transpose elements of the Birds Directive and the Habitats Directive into Irish law.

5.2.1.4 UN Convention on Biological Diversity 1992

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

5.2.1.5 National Biodiversity Plan 2011

The preparation and implementation of Ireland's 2nd National Biodiversity Plan 2011¹⁷ 'Actions for Biodiversity 2011 – 2016' complies with an obligation under the UN Convention on Biological Diversity. The Plan has been developed in line with the EU and International Biodiversity strategies and policies.

The measures Ireland will take are presented as 102 actions under a series of 7 Strategic

Objectives. Some of the actions within the plan are continuing elements of existing work and many are requirements under existing EU Directives. The objectives cover the conservation of biodiversity in the wider countryside and in the marine environment, both within and outside protected areas; the mainstreaming of biodiversity across the decision making process in the State; the strengthening of the knowledge base on biodiversity; increasing public awareness and participation; and Ireland's contribution to international biodiversity issues, including North South co-ordination on issues of common interest.

5.2.1.6 Wildlife Act 1976 and Wildlife (Amendment) Act 2000

The basic designation for wildlife is the Natural Heritage Area (NHA). They cover nationally important semi-natural and natural habitats, landforms or geomorphological features, wildlife plant and animal species or a diversity of these natural attributes. Under the Wildlife Amendment Act (2000), NHAs are legally protected from damage from the date they are formally proposed for designation. Proposed NHAs (pNHAs) were published on a non-statutory basis in 1995, but have not since been statutorily proposed or designated - designation will proceed on a phased basis over the coming years.

The Planning and Development Act 2010 defines a 'wildlife site' as:

- (a) an area proposed as a natural heritage area and the subject of a notice made under section 16(1) of the Wildlife (Amendment) Act 2000,
- (b) an area designated as or proposed to be designated as a natural heritage area by a natural heritage area order made under section 18 of the Wildlife (Amendment) Act 2000.
- (c) a nature reserve established or proposed to be established under an establishment order made under section 15 (amended by section 26 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976,
- (d) a nature reserve recognised or proposed to be recognised under a recognition 5 order made under section 16 (amended by section 27 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976, or
- (e) a refuge for fauna or flora designated 10 or proposed to be designated under a

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¹⁷ Department of Arts, Heritage, Gaeltacht and the Islands (2002) *National Biodiversity Plan* Dublin: Government of Ireland

designation order made under section 17 (amended by section 28 of the Wildlife (Amendment) Act 2000) of the Wildlife Act 1976.

5.2.2 SEOs, Indicators and Targets

SEO B1:	To ensure compliance
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Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species¹⁸

with the

эрсою

Indicator B1: Conservation status of habitats

and species as assessed under Article 17 of the Habitats

Directive

Target B1: Maintenance of favourable

conservation status for all habitats and species protected under national and international legislation to be unaffected by implementation of the County Development

Plan as varied19

SEO B2:

To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function act as stepping stones are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species

varied

SEO B3:

To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in Wildlife Sites²⁰ and to ensure compliance with the Wildlife Acts 1976-2010 with regard to the protection of species listed on Schedule 5 of the principal act

Indicator B3i:

Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in Wildlife Sites resulting from development provided for by the County Development Plan as varied

Target B3i:

Avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in Wildlife Sites resulting from development provided for by the County Development Plan as varied

Indicator B3ii:

Number of significant impacts on the protection of species listed on Schedule 5 of the Wildlife Act 1976

Target B3ii:

No significant impacts on the protection of species listed on Schedule 5 of the Wildlife Act 1976

SEO B4:

To sustain existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain

Indicator B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the County Development Plan as varied

Target B2: No significant ecological networks or parts thereof which provide functional connectivity to be lost without remediation resulting from development provided for by the County Development Plan as

 $^{^{18}}$ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

¹⁹ Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

⁽a) no alternative solution available;

⁽b) imperative reasons of overriding public interest for the plan to proceed; and

⁽c) adequate compensatory measures in place.

²⁰ The Planning and Development Act 2010 defines a 'wildlife site'. See Section 5.2.1.

Indicator B4: Population of the County

involved in land management

Target B4: Sustain the population of the County involved in land

management

5.3 **Population and Human** Health

5.3.1 Population

In order to promote sustainable development and allow for public transport systems to function more effectively - as promoted by higher level land use strategic actions - it is essential to consolidate the physical growth of development of the County.

This can be achieved through the development of underutilised lands, in particular where they are in close proximity to public transport routes.

The DEHLG's Residential Density Guidelines 1999 and the DEHLG's Sustainable Residential Development in Urban Areas Guidelines 2008 recommend planning authorities to promote higher residential densities, particularly in redeveloping 'brownfield' sites and in proximity to public transport corridors.

The impacts of implementing the Variation on both the spatial distribution of population and the nature of development with regard to greenfield and brownfield development relates to SEO S1 which aims to maximise sustainable brownfield development and minimise greenfield development.

5.3.2 Human Health

5.3.2.1 Overview

The impact of implementing the Variation on human health is determined by the impacts which the Variation will have upon environmental vectors. Environmental vectors are environmental components, such as air, water or soil, through which contaminants or pollutants, which have the potential to cause harm, can be transported so that they come into contact with human beings. Impacts would be influenced by the extent to which development is accompanied appropriate infrastructure - this relates to SEOs M1 and M2; Impacts upon the quality of water bodies - these relate to SEOs W1 and W2; and the extent of development provided which would affect flood risk - this relates to SEO W3.

The impact of implementing the Variation on human health will be determined by the impacts which the Variation will have upon environmental vectors.

5.3.2.2 Emission Limits

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

5.3.3 SEO, Indicator and Target

SEO HH1: To protect human health from

exposure incompatible tο

landuses

Indicator HH1: Occurrence (any) of a spatially

deterioration concentrated in human health arising from environmental factors as identified by the Health Service Executive and Environmental

Protection Agency

Target HH1: spatial concentrations of

health problems arising from environmental factors as a result of implementing the County

Development Plan as varied

5.4 Soil

5.4.1 Overview

To date, there is no legislation which is specific to the protection of soil resources and soil protection is addressed indirectly and/or within sectoral policies such as water, waste, and nature protection.

However, there is currently an EU Thematic Strategy on the protection of soil which includes a

proposal for a Soil Framework Directive which proposes common principles for protecting soils across the EU.

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

5.4.2 SEO, Indicator and Target

SEO S1:

Maximise the sustainable reuse of brownfield lands, and maximise the use of the existing built environment rather than developing greenfield lands

Indicator S1:

Area of brownfield lands developed in the County over the lifespan of the Development Plan as varied

Target S1:

Arising from increased levels of brownfield development, a reduced availability of brownfield land in the County (subject to availability on the open market, the demand for such land and the ability for such lands to be sustainably re-used) at the end of the County Development Plan's lifespan

5.5 Water

5.5.1 The Water Framework Directive 2000

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

implement the necessary measures to prevent deterioration of the status of all waters - surface, ground, estuarine and coastal - and protect, enhance and restore all waters with the aim of achieving good status by 2015.

5.5.2 Quality Standards for Surface Waters

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

The Surface Waters Regulations apply to all surface waters - including lakes, rivers, canals, transitional waters, and coastal waters - and provide, inter alia, for:

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

In order to satisfy the overall WFD objective of 'good status', a surface water body must achieve the requirements of the good ecological²¹ and chemical²² status.

Ecological status comprises: biological quality elements, physiochemical conditions and hyrdomorphological quality elements. The overall

5.5.3 Quality Standards and Threshold Values for Ground Water

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

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

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

Groundwater quality standards environmental quality standards expressed as the concentration of a particular pollutant, group of pollutants or indicator of pollution in groundwater, which should not be exceeded in order to protect human health and the environment. Annex I of the Directive sets standards for two pollutants: Nitrates - 50mg/l and; Active substances in pesticides²³, including their relevant metabolites, degradation and reaction products - 0,1 µg/l and $0.5 \mu g/l$ (total²⁴).

ecological status of the water body is determined by the lowest level of status achieved across all quality elements. Irish groundwater threshold values²⁵ are currently in the process of being set by the EPA.

5.5.4 River Basin Management Plans

County Longford is located within the Shannon International River Basin District and the North Western International River Basin District. Each of these districts has a River Basin Management Plan and a Programme of Measures which provide measures to be implemented in order to enable the achievement of the requirements of the WFD.

5.5.5 Flooding

5.5.5.1 EU Floods Directive

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

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

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

5.5.5.2 DEHLG Flood Risk Management Guidelines

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

²⁵ Threshold values are to be established by Member

the conditions for good groundwater chemical status - with regard to the ability of groundwater to support human uses and with regard to waters used for the abstraction of drinking water - are not being met.

CAAS Ltd. for Longford County Council

²² Chemical status assessment is based on compliance with the standards laid down for priority substances by Directive 2008/105/EC on environmental quality standards in the field of water policy (the Surface Waters Regulations give effect to the environmental standards established by this Directive).

²³ 'Pesticides' means plant protection products and biocidal products as defined in Article 2 of Directive 91/414/EEC and in Article 2 of Directive 98/8/EC, respectively.

²⁴ 'Total' means the sum of all individual pesticides detected and quantified in the monitoring procedure, including their relevant metabolites, degradation and reaction products.

States for all pollutants and indicators of pollution which characterise groundwater bodies classified as being at risk of failing to achieve good groundwater chemical status under the WFD. Threshold values are required to be established in a way that, should the monitoring results at a representative monitoring point exceed the thresholds, this will indicate a risk that one or more of

flood risk assessment and management into the planning system.

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

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

5.5.6 SEOs, Indicators and Targets

Note that SEOs W1 and W2 also relate to the quality of soils.

SEO W1:	То	ma	aintain	and	ir	nprove,	
	whe	ere	possib	le, th	ne	quality	
	and	and status of surface waters					

Indicator W1: Classification of Overall Status (comprised of ecological and chemical status) under the

European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009)

Target W1: Not to cause deterioration in the status of any surface

the status of any surface water or affect the ability of any surface water to achieve 'qood status' by 2015

SEO W2: To prevent pollution and contamination of ground water

²⁶ Good status as defined by the WFD equates to approximately the following in the current national schemes of classification as set out by the EPA:

Indicator W2:	Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC
Target W2:	Not to affect the ability of groundwaters to comply with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC

SEO W3:	To comply as appropriate with					
	the provisions of the Planning					
	System and Flood Risk					
	Management: Guidelines for					
	Planning Authorities (DEHLG,					
	2009)					
Indicator W3:	Number of incompatible					
	developments granted permission					
	on lands which pose - or are likely					
	to pose in the future - a					
	significant flood risk					
Target W/2:	Minimise developments granted					
Target W3:						
	permission on lands which pose -					
	or are likely to pose in the future					
	- a significant flood risk in					
	compliance with <i>The Planning</i>					
	System and Flood Risk					
	<i>Management Guidelines</i> for					
	Planning Authorities					

5.6 Material Assets

5.6.1 Water Services Act 2007

The Water Services Act 2007 (SI No. 30 of 2007) incorporates a comprehensive review, update and consolidation of all existing water services²⁷ legislation, and facilitates the establishment of a comprehensive supervisory regime to ensure compliance with specified performance standards.

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

- to protect human health and the environment;
- to facilitate the provision of sufficient water services for domestic and nondomestic requirements in the area to which the plan relates; and

[•] Q4 in the biological classification of *rivers*;

Mesotrophic in the classification of lakes;

Unpolluted status in the Assessment of Trophic Status of Estuaries and Bays in Ireland (ATSEBI).

²⁷ Services, including the provision of water intended for human consumption, which provide storage, treatment or distribution of surface water, groundwater or water supplied by a water services authority, or waste water collection, storage, treatment or disposal.

• to support proper planning and sustainable development, including sustainable use of water resources.

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

WSSPs are required to include information on the following:

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

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

5.6.2 Urban Waste Water Treatment Directive 2001

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

Appropriate treatment is essential in order to meet the requirements of the Water Framework Directive (see Section 5.5.1).

5.6.3 Drinking Water Regulations 2007

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

5.6.4 SEOs, Indicators and Targets

SEO M1: To serve new development with

adequate and appropriate waste

water treatment

Indicator M1i: Number of new developments

granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the County Development Plan as

varied

Target M1i: All new developments granted

permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the County

Development Plan as varied

Indicator M1ii: Preparation of a Water Services

Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council

Target M1ii: For the Council to prepare a

Water Services Strategic Plan in compliance with the Water

Services Act

SEO M2: To serve new development with

adequate drinking water that is both wholesome and clean

Indicator M2i: Number of non-compliances with

the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the County

Development Plan as varied

Target M2i: No non-compliances with the 48

parameters identified in the

European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the County Development Plan as varied

Indicator M2ii²⁸: Preparation of a Water

Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council

Target M2ii: For the Council to prepare a

Water Services Strategic Plan in compliance with the Water

Services Act

5.7 Air and Climatic Factors

5.7.1 Introduction

The impact of implementing the County Development Plan as varied on air quality and climatic factors will be determined by the impacts which the Plan has upon the traffic levels which relate to SEO C1.

Travel is a source of:

- 1. Noise;
- 2. Air emissions; and
- 3. Energy use (38.8% of Total Final Consumption in Ireland in 2010 was taken up by transport, the largest take up of any sector)²⁹.

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

²⁸ Indicator and Target M2ii are the same as Indicator and Target M1ii

5.7.2 Air Quality

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

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

5.7.3 Climatic Factors

In order to reduce greenhouse gas emissions, the internationally agreed Kyoto Protocol established emissions reduction targets for developing countries. Ireland's emission target greenhouse gases is to limit the increase in their combined emissions during the five-year period 2008-2012 to 13% above 1990 levels. Compliance with the Kyoto Protocol limit is achieved by ensuring that Ireland's total greenhouse gas emissions in the period 2008-2012, adjusted for any offsets from approved forest sinks, as well as any surrender of purchased Kyoto Protocol credits, are below this level at the end of the five year period.

5.7.4 Noise

Noise is unwanted sound. Traffic noise alone is harming today the health of almost one third of Europeans³⁰.

The Noise Directive - Directive 2002/49/EC relating to the assessment and management of environmental noise - is part of an EU strategy setting out to reduce the number of people affected by noise in the longer term and to provide a framework for developing existing Community policy on noise reduction from source. The Directive requires competent authorities in Member States to:

 Draw up strategic noise maps for major roads, railways, airports and agglomerations, using harmonised noise

²⁹ Sustainable Energy Ireland (2011) *Energy in Ireland 1990 – 2010*

³⁰ World Health Organization Regional Office for Europe (2003) T*echnical meeting on exposure-response relationships of noise on health 19-21 September 2002* Bonn, Germany Bonn: WHO

indicators³¹ and use these maps to assess the number of people which may be impacted upon as a result of excessive noise levels;

- Draw up action plans to reduce noise where necessary and maintain environmental noise quality where it is good; and
- Inform and consult the public about noise exposure, its effects, and the measures considered to address noise.

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

5.7.5 SEOs, Indicators and Targets

SEO C1:	To reduce		travel	related		
	emis	ssions	to	air	and	to
	encourage mod			dal cha	nge fr	om
	car to more sustainal			ble fo	rms	
	of tr	anspor	t			

Indicator C1: Percentage of population working within the County travelling to work by public transport or non-mechanical means

Target C1: An increase in the percentage of the population travelling to work by public transport or non-mechanical means

5.8 Cultural Heritage

5.8.1 Archaeological Heritage

5.8.1.1 Valletta Convention 1992

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

5.8.1.2 National Heritage Plan for Ireland 2002

The core objective of the National Heritage Plan for Ireland 2002³² is to protect Ireland's heritage. In this regard the polluter pays and the precautionary principle are operable.

5.8.1.3 National Monuments Acts

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

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

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

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

5.8.2 Architectural Heritage

Records of Protected Structures (RPSs) are legislated for under Section 51 of the Planning and Development Acts 2000-2010 and include structures which form part of the architectural heritage and which are of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest.

5.8.3 SEO, Indicators and Targets

SEO CH1:	To protect archaeological heritage					
	including entries to the Record of					
	Monuments and Places and/or					
	their context					

³² Department of Arts, Heritage, Gaeltacht and the Islands (2002) *National Heritage Plan for Ireland* Dublin: Government of Ireland

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

Indicator CH1: Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential (and the context of the above within the surrounding landscape where relevant) protected

Target CH1: Protect entries to the Record of Monuments and Places -

Zones including Archaeological Potential (and their context of the above within the surrounding landscape where relevant)

SEO CH2: To protect as appropriate

architectural heritage including entries to the Record of Protected Structures and their

context

Indicator CH2: Percentage of entries to the

Record of Protected Structures (and/or their context within the surrounding landscape where relevant) protected

Target CH2: Protect entries to the Record

> Protected **Structures** (and/or their context within the surrounding landscape

where relevant)

5.9 Landscape

The SEO for landscape is guided by landscape designations within the County.

5.9.1 SEO, Indicator and **Target**

SEO L1: To avoid significant adverse

> impacts on the landscape, especially with regard to protected views and prospects and broad zones including lakes, rivers, canals and

deciduous woodlands

Indicator L1: Number of complaints received

> statutory consultees regarding avoidable impacts on the landscape - especially with regard to protected views and prospects and broad zones including lakes, rivers,

canals and deciduous woodlands which is granted permission under the County Development Plan as varied

Target L1: No developments permitted which result in avoidable impacts on the

landscape - especially with regard to protected views and prospects and broad zones including lakes, rivers, canals and deciduous woodlands resulting from development which is granted permission under the County Development Plan as varied

Section 6 Alternative Scenarios

6.1 Introduction

Longford County Council in preparing the County Development Plan 2009-2015 undertook Strategic Environmental Assessment which examined 3 alternative scenarios. The findings of this assessment are in Chapter 6 of the Environmental Report (March 2009) which accompanied the County Development Plan 2009-2015 and reproduced in the sections below.

The Variation is consistent with the alternative which was selected for the County Development Plan ('Option 3 Strong Inclusive') and the assessment of alternatives provided in the original SEA Environmental Report and reproduced below does not need to change. This alternative was chosen for the Plan having regard to both:

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

The Variation does not provide for any significant increases in land zoned for development however it does provide for the phasing of already zoned lands, with the application of both Strategic Industrial and Residential Reserve objectives. Decisions relating to the phasing of zoned lands took into account of a number of considerations - economic, technical, social and environmental. The environmental factors were those specifically and exhaustively assessed as the basis for the previous plan and SEA already referred to.

The phasing of land provided for by the Variation - in addition to the existing zoning applied previously - had particular regard to both the capacity of the settlements to contribute towards achieving the objectives of the new Core Strategy - these objectives are consistent with the objectives of the existing Spatial Planning Strategy - as well as opportunities for public or sustainable travel and the availability of existing and planned critical water and waste water infrastructure. Phasing also took into account environmental

sensitivities including biodiversity and flora and fauna and flood risk.

Potential adverse effects of implementing the County Development Plan as varied will be mitigated by, inter alia, individual measures which have been integrated into the current Plan and additional/amended measures recommended to be integrated into the Plan by this SEA of the Variation. These measures are identified in Section 8.

6.2 Option 1 - 'Weak' (Worst Case)

The weak approach to the future development of County Longford can be viewed as the 'worstcase' scenario. In order to develop under this scenario, the Planning Authority would allow for development to proceed in an ad hoc manner at any location within its functional area. The scenario envisages potentially inappropriate lands around settlements zoned for development without truly assessing the overall need for, or scale of development. As a result development pressure both on the fringes of towns and villages as well as in the open countryside would result with significant levels of ribbon development between settlements. Consequently development would occur in unserviced or insufficiently serviced areas. This policy would not require careful consideration of the environmental impacts of such development, either individually or cumulatively. There would be few or no restrictions on development.

The planning consequences would be severe and while this alternative would allow for development and would provide some short term economic benefits to the county, it is not sustainable and therefore not a viable or acceptable alternative in practice. It would lead to deterioration in the settlement structures of the county, with a significant shift towards rural rather than urban development. Ultimately it would lead to a loss of population base within key centres consequently a loss of critical mass for the development of key services and facilities within those centres. Furthermore urban generated housing within the transport corridors would have long term implications for future and would compromise development alignments, or road geometry with adverse risks to road users. Such development is uncontrolled and essentially developer-led but without the key

infrastructure in place. This option would result in the development of the county through market forces in an unsustainable manner. This scenario takes a short term view of developing the county with no consideration of the long term negative environmental consequences.

The environmental consequences potentially are severe. Aspects of the environment such as surface water and groundwater quality, ecology, cultural heritage and landscape would be negatively affected. The dispersal of rural housing and other non-agriculture related development in the countryside would lead to a deterioration in ground water quality through the proliferation of septic tanks; surface water would affected quality be through contaminated ground water and it implications on river base flows; habitats and areas of natural interest would be lost or fragmented; archaeology would be impacted through and insensitive design location development; and finally a deterioration in landscape quality would inevitably ensue.

In summary this weak planning approach would have the following results:

- A deterioration in the rural landscape and natural environment;
- No clearly definable settlement strategy;
- Promoting development at any location throughout the county;
- Serious traffic congestion and disruption to existing residents throughout the county;
- Inadequate environmental measures, leading to a sub-standard environmental quality;
- Impact negatively on the visual amenity and potential of the County area; and
- Domination of market forces resulting in piecemeal development and a weak socio-economic county structure.

6.3 Option 2 - 'Mixed'

The 'Mixed' approach sets forth a development strategy tor the County with mixed emphasis on the location of development. This scenario would provide for a dispersed settlement pattern throughout the countryside while development will be curtailed outside the immediate area of the county's settlements.

The implications would be similar to that of the 'Weak' approach; settlement structure would remain weak because of poor targeting of development in key centres. Similarly the environmental consequences would be significant, with similar implications for ground and surface water quality, ecology, cultural heritage and landscape and visual amenity.

While this option is approaching a more desirable vision for the development of the County over the plan period, its negative results in terms of planning and environmental protection render it inappropriate for the Plan.

While development in broad terms will be directed to certain areas, a significant level of flexibility will be employed when considering development in other areas, particularly in sensitive parts of the county. In much the same way as the weak approach, the future development of the county would be haphazard and somewhat uncontrolled, allowing others to dictate the location and scale of development.

In summary this mixed planning approach would have the following results:

- Reasonable quantity of development within the county, in line with predictions;
- Poor control on development;
- Lack of long term focus;
- Poor environmental protection;
- A deterioration in the rural landscape and natural environment;
- No dearly definable settlement strategy;
- Inadequate environmental measures, leading to a substandard environmental quality; and
- Impact negatively on the visual amenity and potential of the County area.

6.4 Option 3 - 'Strong' - Inclusive

A planned approach to the approval of acceptable development within the county will enable development to be targeted to key areas in a sustainable and managed way. This approach that the predicted growth accommodated in a planned and orderly manner. The plan recognizes the role of existing settlements within the county, while also addresses the rural settlement pattern. Ultimately the core issue of sustainability is addressed and significantly a balance between development and environmental protection is enshrined in the plan. This approach offers a full spectrum of planned options, thus, this approach offers a long term vision for the County.

The environmental impacts on key environmental receptors such as ground and surface water quality, ecology, landscape and visual amenity and cultural heritage will be minimized. Severely restrictive policies towards development in highly defined sensitive areas such as those listed as NHA, SPA, SAC or indeed those areas highlighted as being sensitive in terms of ground water resource protection or visually sensitive will apply. Under this scenario the following results are envisaged:

- Implementation of Settlement Strategy and promotion of key settlements;
- Key areas for growth will be identified and promoted;
- Strategic or key routes and linkages will be identified and preserved;
- There will be a high level of environmental protection;
- Valuable natural resources such as water quality are protected.

6.5 Conclusion

The County Development Plan seeks to balance development with environmental protection and conservation. The matrix shows that Option 1, adopting a Weak approach, allowing development of all areas with little control exerted, will present significant environmental problems and will be contrary to the principles of sustainable development. This option would not allow for the orderly and sustainable development of the county and is therefore not considered as a desirable option for County Longford.

Similarly Option 2, the Mixed approach, is not a desirable option. While restrictions will apply in the immediate hinterland of the County's settlements, rural development elsewhere would lead to deterioration in environmental quality throughout the County. Furthermore the settlement structure would weaken as a result. This option would not realise the long term vision for the County but instead result in poor environmental protection and ad hoc, unsustainable development.

Option 3 allows for planned development and represents a sustainable approach to planning in the County. Development will be focused within zoned and serviced areas. Significant restrictions will be put in place to development

in areas designated for environmental purposes such as NHA, SAC and SPA as well as areas of archaeological importance or where threats to natural resources prevail such as ground and surface waters.

In conclusion a planned approach to the further development of the county incorporating the principles of sustainable development is the option best suited to County Longford.

Section 7 Evaluation of Variation Provisions

7.1 Methodology

This section evaluates the provisions of the Variation. The description of the environmental baseline together with the maps provided in Section 4 of this report are used for this purpose. Strategic Environmental Objectives (SEOs), identified overleaf, are also used.

The provisions of the Variation are evaluated using compatibility criteria (see Table 7.1 below) in order to determine how they would be likely to affect the status of the SEOs. The SEOs and the provisions of the Variation are arrayed against each other to identify which interactions - if any - would cause effects on specific components of the environment.

Where the appraisal identifies a likely conflict with the status of an SEO the relevant SEO code is entered into the conflict column - e.g. B1 which stands for SEO likely to be affected - in this instance 'to ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species³³.

The interactions identified are reflective of likely significant environmental effects³⁴;

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

Table 7.1 Criteria for appraising the effect of Alternatives & Variation provisions on SEOs

Likely to Improve status of	Probable Conflict with	Potential Conflict with	No Likely interaction with
SEOs	status of SEOs- unlikely to be	status of SEOs- likely to be	status of SEOs
	mitigated	mitigated	

Mitigation measures to prevent or reduce significant adverse effects posed by the County Development Plan as varied are identified in Section 8 of this Report - these have been integrated into the Variation.

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³³ 'Annexed habitats and species' refers to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Birds Directive.

³⁴ These effects include secondary, cumulative, synergistic, short, medium and long-term permanent and temporary, positive and negative effects.

Table 7.2 Strategic Environmental Objectives³⁷

SEO	SEO
Code	
B1	To ensure compliance with the Habitats and Birds Directives with regard to the protection of Natura 2000 Sites and Annexed habitats and species ³⁵
B2	To ensure compliance with Article 10 of the Habitats Directive with regard to the management of features of the landscape which - by virtue of their linear and continuous structure or their function act as stepping stones - are of major importance for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species
В3	To avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in Wildlife Sites ³⁶ and to ensure compliance with the Wildlife Acts 1976-2010 with regard to the protection of species listed on Schedule 5 of the principal act
B4	To sustain existing sustainable rural management practices - and the communities who support them - to ensure the continuation of long established managed landscapes and the flora and fauna that they contain
HH1	To protect human health from exposure to incompatible landuses
S1	Maximise the sustainable re-use of brownfield lands, and maximise the use of the existing built environment rather than developing greenfield lands
W1	To maintain and improve, where possible, the quality and status of surface waters
W2	To prevent pollution and contamination of ground water
W3	To comply as appropriate with the provisions of the Planning System and Flood Risk Management: Guidelines for Planning Authorities (DEHLG, 2009)
M1	To serve new development with adequate and appropriate waste water treatment
M2	To serve new development with adequate drinking water that is both wholesome and clean
C1	To reduce travel related emissions to air and to encourage modal change from car to more sustainable forms of transport
CH1	To protect archaeological heritage including entries to the Record of Monuments and Places and/or their context
CH2	To protect as appropriate architectural heritage including entries to the Record of Protected Structures and their context
L1	To avoid significant adverse impacts on the landscape, especially with regard to protected views and prospects and broad zones including lakes, rivers, canals and deciduous woodlands

7.2 Determination of Potential Impacts

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

Avoidance of conflict with SEOs and the environment is dependent upon compliance with the mitigation measures which have emerged through the AA, SEA and FRA processes and which have been integrated into the Variation.

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³⁵ 'Annexed habitats and species' refer to those listed under Annex I, II & IV of the EU Habitats Directive and Annex I of the EU Rirds Directive

of the EU Birds Directive.

36 The Planning and Development Act 2010 defines a 'wildlife site'. See Section 5.2.1.

³⁷ See Section 5.1 for a description of Strategic Environmental Objectives.

7.3 Interrelationship between Environmental Components

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

Likely significant effects on environmental components which are identified include those which are interrelated however implementation of the Variation will not affect the interrelationships between these components. The presence of significant interrelationships between environmental components is identified on Table 7.3. Interactions between the environmental components are intended to be only identified once on Table 7.3.

7.4 Appropriate Assessment and Flood Risk Assessment

The AA Screening process that was undertaken alongside the preparation of the Variation concluded that no Natura 2000 Sites are deemed to be at risk of likely significant effects of implementing the Variation.

A flood risk assessment of the Variation was also undertaken which integrated flood considerations into the Variation thereby further contributing towards the Council's compliance with the DEHLG Flood Guidelines.

The preparation of the Variation, SEA, AA and FRA has taken place concurrently and the findings of the AA and FRA have informed both the Variation and the SEA.

Table 7.3 Presence of Interrelationships between Environmental Components

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

Note: Content of the Variation which does not specific provisions - e.g. aims, policies or objectives - is not within the scope of the SEA and therefore is not evaluated in this report. Where supporting text, referred to in specific provisions is being amended and where such amendments would have environmental effects not considered as part of the evaluation of provisions either in this or the Environmental Report for the existing County Development Plan, then such amendments are considered.

7.5 Core Strategy

	Likely to Improve status of SEOs	Probable Conflict with status of SEOs - unlikely to be mitigated	Potential Conflict with status of SEOs-likely to be mitigated	No Likely interaction with status of SEOs
New Core Strategy Strategic Aims Aim 1 To demonstrate that the Longford County Development Plan 2009-2015 is consistent, as far as practicable, with national and regional development objectives set out in the National Spatial Strategy and Regional Planning Guidelines for the Midland Region and other national guidelines and policies.				B1 B2 B3 B4 HH1 S1 W1 W2 W3 M1 M2 C1 CH1 CH2 L1
Aim 2 To facilitate the closer alliance of County and sub-county level plans with regional policy.			B1 B2 B3 B4 HH1 S1 W1 W2 W3 M1 M2 C1 CH1 CH2 L1	
Aim 3 To identify the appropriate quantum, location and phasing of development considered necessary to provide for future population growth over the plan period in accordance with the National Spatial Strategy and Midland Regional Planning Guidelines.	B1 B2 B3 B4 HH1 S1 W1 W2 W3 M1 M2 C1 CH1 CH2 L1		B1 B2 B3 B4 HH1 S1 W1 W2 W3 M1 M2 C1 CH1 CH2 L1	
Aim 4 Develop this quantum of land in a manner that supports public transport and existing services.	C1 B4			B1 B2 B3 HH1 S1 W1 W2 W3 M1 M2 CH1 CH2 L1
Aim 5 Provide a framework supported by evidence based settlement strategy, for deciding on the scale, phasing and location of new development, having regard to existing services and planned investment over the coming years.	B1 B2 B3 B4 HH1 W1 W2 M1 M2 C1		B1 B2 B3 B4 HH1 S1 W1 W2 W3 M1 M2 C1 CH1 CH2 L1	
Aim 6 To provide a framework within which the provision of sustainable infrastructure, amenities, economic investment and development can take place to maximize the use of resources in the plan area.	B1 B2 B3 B4 HH1 W1 W2 M1 M2 C1		B1 B2 B3 B4 HH1 S1 W1 W2 W3 M1 M2 C1 CH1 CH2 L1	

- Aim 1: Demonstration of consistency will not interact with SEOs.
- Aim 2: Future regional policy is uncertain therefore; potential conflicts with the status of SEOs may arise.
- Aim 3: The Variation does not provide for any significant increases in land zoned for development however it does provide for the phasing of already zoned lands, with the application of both Strategic Industrial and Residential Reserve objectives.

The phasing of land provided for by this Variation - in addition to existing the zoning applied previously - had particular regard to both the capacity of the settlements to contribute towards achieving the objectives of the new Core Strategy - these objectives are consistent with the objectives of the existing Spatial Planning Strategy - as well as opportunities for public or sustainable travel and the availability of existing and planned critical water and waste water infrastructure. Phasing also took into account environmental sensitivities including biodiversity and flora and fauna and flood risk.

By potentially delaying the development of lands within environmentally sensitive and flood risk areas, phasing could potentially improve the protection of ecology and water status and the minimisation of flood risk. This protection is already contributed towards by the various provisions of the existing development plan.

By potentially delaying the development of lands further away from the town centre, phasing could potentially further improve the provision of sustainable mobility patterns which are contributed towards by the Plan and further facilitate the accompaniment of water services infrastructure with new development.

Potential conflicts still remain between future development and environmental components however these conflicts are likely to be mitigated by measures contained in the existing County Development Plan and measures proposed by this SEA and accompanying AA and FRA.

- Aim 4: Supporting public transport and existing services will improve sustainable mobility and contribute towards the sustenance of rural management practices.
- Aim 5: By having regard to existing services and planned investment this framework would facilitate the provision of appropriate water services and related beneficial environmental effects as well as improving sustainable mobility and contributing towards the sustenance of rural management practices. The framework will facilitate development and therefore may result in potential conflicts however these conflicts are likely to be mitigated by measures contained in the existing County Development Plan and measures proposed by this SEA and accompanying AA and FRA.
- Aim 6: By providing for sustainable infrastructure this framework would facilitate the provision of appropriate water services and related beneficial environmental effects as well as improving sustainable mobility and contributing towards the sustenance of rural management practices. The framework will facilitate development and therefore may result in potential conflicts however these conflicts are likely to be mitigated by measures contained in the existing County Development Plan and measures proposed by this SEA and accompanying AA and FRA.

New Core Strategy Policies	.		
CS 1: Key Service Town, Service Town, Local Service Towns	B1 B2 B3 B4	B1 B2 B3 B4	
Proposals for residential development in the settlements defined above and as shown on the maps	HH1 S1 W1	HH1 S1 W1	
contained at Appendix 16, 17 & 18 will be determined in accordance with the requirements of the	W2 W3 M1 M2	W2 W3 M1 M2	
settlement hierarchy defined, the Core Strategy Table with regard to population return, the ability of	C1 CH1 CH2	C1 CH1 CH2 L1	
the proposal to enhance the character of the settlement, the demand/need for the proposed level	L1		
and type of residential development in the settlement and compliance with technical, legislative,			
environmental, design policy and/or criteria contained within the development plan or any other			
relevant plan, the functional area of which the settlement forms part.			
CS 2: Serviced Settlements	B1 B2 B3 B4	B1 B2 B3 B4	
	HH1 S1 W1	HH1 S1 W1	
Serviced Settlements have been defined in accordance with the fact that infrastructure provision	W2 W3 M1 M2	W2 W3 M1 M2	
exists within these settlements and represents a tier of the settlement hierarchy that has most	C1 CH1 CH2	C1 CH1 CH2 L1	
diversity amongst the settlements contained within it.	L1		
Having regard to the above, proposals for residential development in service settlements, as shown			
on maps contained at Appendix 19, will be determined in accordance with the population allocations			
of the Core Strategy, the character and nature of the existing settlement and the ability of the			
proposal to enhance this, the ability of the settlements to absorb further development, the			
demand/need for the proposed level and type of residential development in the settlement and			
compliance with technical, legislative, environmental, design policy and/or criteria contained within			
the development plan or any other relevant plan, the functional area of which the settlement forms			
part.			
Residential Development will also be considered on lands identified as Site Resolution Objective in			
accordance with the relevant zoning provision standards. Any residential development in these			
settlements will also be determined in accordance with the population allocations of the Core			
Strategy, the character and nature of the existing settlement and compliance with technical,			
legislative, environmental, design policy and/or criteria contained within the development plan or any			
other relevant plan, the functional area of which the settlement forms part. CS 3: Rural Service Settlements	B1 B2 B3 B4	B1 B2 B3 B4	
Co o. Rurai pervice pettiernents	HH1 S1 W1	HH1 S1 W1	
Proposals for residential development in settlements defined as 'Rural Service Settlements' and as	W2 W3 M1 M2	W2 W3 M1 M2	
shown on the maps contained in Appendix 3 will be determined in accordance with the requirements	C1 CH1 CH2	C1 CH1 CH2 L1	
of the Core Strategy Table with regard to population return, the sequential test, the creation and	L1	CT CHT CH2 LT	
maintenance of a sense of identity, recognition of the local character, the availability of appropriate	LI		
infrastructure and sustainable community services and compliance with technical, legislative,			
environmental, design policy and/or criteria contained within the development plan or any other			
relevant plan, the functional area of which the settlement forms part.			
relevant plan, the functional area of which the settlement forms part.			
Proposals for one-off dwellings may also be considered on these lands and proposals in this regard			
will be determined in accordance with rural policy contained at 2.3.7.5.			

Policies CS 1 to CS3: The settlement hierarchy and Core Strategy provide for new development within the county which is likely to result in potential conflicts. These conflicts are likely to be mitigated by measures contained in the existing County Development Plan and measures proposed by this SEA and accompanying AA and FRA. Policies relating to environmental protection etc. which are referenced in these policies will contribute towards the protection of the environment and the improvement of environmental components.

Amended provisions of current Settlement Strategy

SET 6: (Forms part of current CDP, amended only to reflect terminology change)

It is an objective of the Development Plan that village policy statements may be prepared and may contain zonings and will also contain policy statements which will provide a basic framework for the development of each village settlement.

SET 7: (Forms part of current CDP, italics used to indicate amendment in order to comply with requirements of Core Strategy)

Applications for development in Rural Service Settlements will be subject to assessment in terms of the size of development considered appropriate to the location, their visual impact and other normal planning criteria, including their ability to consolidate and enhance existing village character, and create or strengthen a sense of identity and distinctiveness for the settlement.

Small scale residential clusters and limited local level services such as post offices, neighbourhood shops, schools etc. only will be considered in these settlements.

Commentary:

These amendments would not be likely to have significant environmental consequences and would not change the assessment of these policies contained in the SEA Environmental Report for the existing County Development Plan.

New Implementation and Monitoring

IMP-CS 1: The Planning Authority shall promote and facilitate the development of the County in accordance with the provisions of the Core Strategy, including directing development in line with the settlement hierarchy and promoting development at an appropriate scale that is reflective of the terms of the	B1 B2 B3 B4 HH1 S1 W1 W2 W3 M1 M2 C1 CH1 CH2 L1	B1 B2 B3 B4 HH1 S1 W1 W2 W3 M1 M2 C1 CH1 CH2 L1
Core Strategy Table and zoning maps.		
IMP-CS 2: a) It is an objective of the Council to review the following Local Area Plans on adoption of this variation, in order to ensure that the population targets, future housing land requirement, zoning maps and policies contained as part of this Core Strategy can effectively be realised;	B1 B2 B3 B4 HH1 S1 W1 W2 W3 M1 M2 C1 CH1 CH2 L1	B1 B2 B3 B4 HH1 S1 W1 W2 W3 M1 M2 C1 CH1 CH2 L1
 Ballymahon Carriglass Lanesboro Newtownforbes Drumlish 		

B1 B2 B3 B4 HH1 S1 W1 W2 W3 M1

M2 C1 CH1

B1 B2 B3 B4

HH1 S1 W1 W2 W3 M1

M2 C1 CH1

CH2 L1

CH2 L1

• Kenagh			
• Ardagh			
• Granard			
Ballinalee			
• Edgeworthstown			
b) The Northern and Southern Environs LAPs shall be reviewed, on adoption of this Core Strategy			
variation, and following the completion of the Longford Town Development plan Core Strategy, to			
ensure consistency with the provisions of the Core Strategies.			
c) Having regard to points a) and b) and where any ambiguity arises between the content of any			
existing Land Use plan and this variation, the Core Strategy will take precedence during any			
transitional period.			
	D1 D2 D2 D4		
IMP-CS 3:	B1 B2 B3 B4		
	HH1 S1 W1		
The Planning Authority shall monitor and maintain a record of residential development permitted in	W2 W3 M1 M2		
settlements designated under the Settlement Hierarchy in order to ensure compliance with the	C1 CH1 CH2		
population allocations defined by the Core Strategy Table.	L1		
IMP-CS 4:	B1 B2 B3 B4	B1 B2 B3 B	4
	HH1 S1 W1	HH1 S1 W	1
The Planning Authority shall apply the Settlement Hierarchy to determine the scale, rate and location	W2 W3 M1 M2	W2 W3 M1 M	
of proposed developments and apply appropriate development management measures to ensure	C1 CH1 CH2	C1 CH1 CH2 L	
compliance with the Settlement Hierarchy and Strategy, including the population targets for the	L1	CT CITI CITE	
	LI		
County as prescribed in the Core Strategy Table.			_
IMP-CS 5:	B1 B2 B3 B4	B1 B2 B3 B	
	HH1 S1 W1	HH1 S1 W	
It is policy of the council that all activated and committed planning permissions, including those	W2 W3 M1 M2	W2 W3 M1 M	2
located on lands identified as 'Strategic Land Reserve', will be prioritised where it is determined that	C1 CH1 CH2	C1 CH1 CH2 L	1
they support the completion of an unfinished housing estate.	L1		
IMP-CS 6:	B1 B2 B3 B4	B1 B2 B3 B	4
	HH1 S1 W1	HH1 S1 W	
It is policy of the council that all activated and committed planning permissions, including those	W2 W3 M1 M2	W2 W3 M1 M	
located on lands identified as 'Strategic Land Reserve' shall be assessed in accordance with the	C1 CH1 CH2	C1 CH1 CH2 L	
		CICHICHZE	
requirements of Section 42 of the Planning and Development Act 2000-2011. In assessing	L1		
applications for the extension of duration of planning permissions, in Strategic Land Reserve areas			
the Planning Authority shall consider the compatibility of the proposal in accordance with the			
settlement hierarchy and the role and function of the settlement within same.			
IMP-CS 7:			
The Planning Authority shall monitor and maintain a record of the quantum of residential			
development permitted by way of extension of duration on lands zoned 'Strategic Land Reserve' in			
order to ensure general compliance with the terms of the Core Strategy.			
order to order general compliance with the terms of the core strategy.			

IMP-CS 1 and IMP-CS-2: The Variation does not provide for any significant increases in land zoned for development however it does provide for the phasing of already zoned lands, with the application of both Strategic Industrial and Residential Reserve objectives.

The phasing of land provided for by this Variation - in addition to existing the zoning applied previously - had particular regard to both the capacity of the settlements to contribute towards achieving the objectives of the new Core Strategy - these objectives are consistent with the objectives of the existing Spatial Planning Strategy - as well as opportunities for public or sustainable travel and the availability of existing and planned critical water and waste water infrastructure. Phasing also took into account environmental sensitivities including biodiversity and flora and fauna and flood risk.

By potentially delaying the development of lands within environmentally sensitive and flood risk areas, phasing could potentially improve the protection of ecology and water status and the minimisation of flood risk. This protection is already contributed towards by the various provisions of the existing development plan.

By potentially delaying the development of lands further away from the town centre, phasing could potentially further improve the provision of sustainable mobility patterns which are contributed towards by the Plan and further facilitate the accompaniment of water services infrastructure with new development.

Potential conflicts still remain between future development and environmental components however these conflicts are likely to be mitigated by measures contained in the existing County Development Plan and measures proposed by this SEA and accompanying AA and FRA.

IMP-CS 3: This measure will help to control development in line with the provisions of the Core Strategy thereby contributing towards environmental protection from uncontrolled development and increases in population.

IMP-CS 4: This measure facilitates development and will potentially conflict with environmental components however these conflicts are likely to be mitigated by measures contained in the existing County Development Plan and measures proposed by this SEA and accompanying AA and FRA. By ensuring compliance with the Settlement Hierarchy and Strategy, including the population targets for the County, this measure will help to control development in line with the provisions of the Core Strategy thereby contributing towards environmental protection from uncontrolled development and increases in population.

IMP-CS 5 and IMP-CS 6: The environmental effects of this measure are dependent upon the permitted development and the location and servicing of the unfinished housing estate. Potential conflicts could arise, for example, where there is a lack of water services or where the estate is not conducive to sustainable mobility while benefits could arise where development would prevent greenfield development elsewhere or where the estate is conducive to sustainable mobility.

IMP-CS 7: This measure will help to control development in line with the provisions of the Core Strategy thereby contributing towards environmental protection from uncontrolled development and increases in population.

Note that key aims of the Settlement Strategy and provision SET 8 from the current County Development Plan are not amended as part of the Variation and are only included in the Variation for contextual purposes.

Changes to the Main Document of the Plan as a result of incorporating the Core Strategy 7.6

Note (for this section):

- Deletions from the County Development Plan are either marked using a strikethrough i.e. strikethrough, or where an entire section is to be deleted this is stated.
- Proposed additions to the County Development Plan are indicated using italics, or where an entire section is to be added this is stated. Proposed additions to policy arising from the SEA process are indicated using blue italics.

	Likely Improve of SEOs	to status	Probable Conflict with status of SEOs - unlikely to be mitigated	Potential Conflict with status of SEOs-likely to be mitigated	No Likely interaction with status of SEOs
Changes to Section 3 - Housing			, g	,garea	
Policy HOU DS 3 is amended as follows; f) Individual sites will be required to provide minimum back garden lengths of 11 metres. These standards will apply unless otherwise specified in individual Local Area Plans/Village Policy Statements, in policy contained as part of this Development Plan with regard to the settlement, or where residential density guidelines are applied with alternative requirements particularly in relation to the quality of the completed development and/or specific use criteria (e.g sheltered housing provision).					B1 B2 B3 B4 HH1 S1 W1 W2 W3 M1 M2 C1 CH1 CH2 L1
Policy HOU DS 6 is amended as follows; b) Generally density should reflect the existing and traditional character of the settlement and be in keeping with the requirements of policy contained in the Core Strategy section of this plan. In line with the "Sustainable Residential Development in Urban Areas: Guidelines for Planning Authorities" (DoEHLG, 2008) or any subsequent update, higher densities shall be permitted in urban and town centres, particularly in areas with close proximity to rail lines and other modes of public transport. In all other cases, the density of developments will be assessed on a site by site basis. In this regard pre-planning discussions are actively encouraged. Commentary:					B1 B2 B3 B4 HH1 S1 W1 W2 W3 M1 M2 C1 CH1 CH2 L1

Commentary:

These amendments would not be likely to have significant environmental consequences and would not change the assessment of these policies contained in the SEA Environmental Report for the existing County Development Plan.

Changes to Section 4 - Economic Development	
ECON 1 is amended as follows; The Planning Authority will encourage the development of industrial, commercial and business development at appropriate scales having regard to the settlement strategy of the County. Generally where the proposed development is considered to be a large scale employer or considered intensive in nature, such developments shall preferably locate within Longford Town or Local Area Plan, settlements as defined in the settlement strategy hierarchy or on lands identified and zoned for these purposes, as part of this plan.	B1 B2 B3 B HH1 S1 W W2 W3 M M2 C1 CH CH2 L1
(NB; Footnote no. 20 as per the current CDP still applies.)	
ECON 5 is amended as follows; Where an area of land is outside a settlement (i.e. an area not covered or proposed to be covered by a Local Area Plan or Village Policy Statement, as listed in this document), and is not otherwise zoned as part of this Development Plan, Local Area Plan or other statutory document, the use of such land shall be deemed to be primarily agricultural. This provides for agricultural and ancillary uses including associated residential. Other uses may be permitted subject to assessment on a site-by-site basis against relevant development management standards and technical criteria, including the other policies and objectives contained within this plan	B1 B2 B3 B HH1 S1 W W2 W3 M M2 C1 CH CH2 L1
AGR 1 is amended as follows; Where an area of land is outside a settlement (i.e. an area not covered or proposed to be covered by a Local Area Plan or Village Policy Statement, as listed in this document), and is not otherwise zoned as part of this Development Plan or, Longford Town Development Plan or other statutory document, the use of such land shall be deemed to be primarily agricultural. Primarily agricultural zoning provides for agricultural use of the land and any ancillary uses, including associated residential. Other uses may be permitted, subject to assessment on a site-by-site basis and compliance with the development control standards and other policies and objectives contained within this plan. The Establishment of suitably small-scale industrial/commercial developments in rural areas on family owned land and developments which would promote rural diversification, subject to relevant planning criteria, will also be encouraged.	B1 B2 B3 B HH1 S1 W W2 W3 M M2 C1 CH CH2 L1
TOU 5 is amended to remove reference to the Regional Fisheries Board and replace this with <i>Inland Fisheries Ireland</i> .	B1 B2 B3 B HH1 S1 W W2 W3 M M2 C1 CH CH2 L1
The final paragraph of policy TOU 9 is amended to remove the reference to Section 2.3. and replace this with Section 2.3.	B1 B2 B3 B HH1 S1 W W2 W3 M M2 C1 CH CH2 L1

The Third paragraph of TOU 11 is amended to remove reference to the Regional Fisheries Board and replace this with <i>Inland Fisheries Ireland</i> .			B1 B2 B3 B4 HH1 S1 W1 W2 W3 M1 M2 C1 CH1 CH2 L1
Commentary: These amendments would not be likely to have significant environmental consequences and wo Environmental Report for the existing County Development Plan.	uld not change the assessr	nent of these policies conta	ained in the SEA
Changes to Section 5 Infrastructure			
New Policy WS is inserted as follows; Where required, public wastewater collection and treatment infrastructure - which fully complies with requirements of the Urban Waste Water Treatment Directive (Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment) (amended by Directive 98/15/EEC) including the need to provide secondary treatment and other treatment as required - shall be operational and with	B1 B2 B3 B4 HH1 W1 W2 W3 M1 M2	B1 B2 B3 HH1 W1 W2 W3 M2 CH1 CH2 L1	C1 S1
adequate capacity to accommodate waste water arising from development, prior to developments being occupied. Discharges arising from this collection and treatment shall also comply with the requirements of the Directive. WS(a)			
It is the policy of Longford County Council to investigate the preparation a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council. Such a Plan may be prepared jointly with other Water Services Authorities.			
WS2 is amended as follows; It is the policy of Longford County Council to investigate the feasibility of establishing additional projects in terms of improving existing water supply, establishing new supplies, sewerage mains provision (including the connection of unsewered, areas including individual properties/ premises, serviced by septic tanks to the existing and planned sewer network) and improvement of existing treatment plants in the medium and long-term and for their extension to include adjoining residential dwellings.	B1 B2 B3 B4 HH1 W1 W2 W3 M1 M2	B1 B2 B3 HH1 W1 W2 W3 M2 CH1 CH2 L1	C1 S1
WS15 is amended as follows; The Council shall consult implement the relevant recommendations set out in the EPA publication "Urban Wastewater Discharges in Ireland for Population Equivalents Greater than 500 persons – a Report for the Years 2004-5" (and any subsequent update) Focus on Urban Waste Water Discharges in Ireland (EPA Office of Environment Enforcement, 2012) in the provision, maintenance and expansion of water treatment systems in the County.			B1 B2 B3 B4 HH1 S1 W ² W2 W3 M ² M2 C1 CH ² CH2 L1

Policy FLO 3 is amended as follows; The Council shall have regard to the provisions of the guidelines issued by the DoEHLG regarding flooding implement the recommendations and provisions of the DEHLG's 2009 Guidelines for Planning Authorities entitled The Planning System and Flood Risk Management (and any subsequent update) in the operation of its duties.	W3 HH1	B1 B2 B3 B4 S1 W1 W2 M1 M2 C1 CH1 CH2 L1
New Policy FLO 4 is inserted as follows; Where the probability of flooding from rivers is low (less than 0.1%, flood zone C) the developer should satisfy him or herself that the probability of flooding is appropriate to the development being proposed. Among other things, mapping including the OPW's Pluvial and Groundwater Preliminary Flood Risk Assessment mapping should be considered for this purpose.		
Parragrapf (c) of HS 1 is amended to remove reference to the Regional Fisheries Board and replace this with <i>Inland Fisheries Ireland</i> .		B1 B2 B3 B4 HH1 S1 W1 W2 W3 M1 M2 C1 CH1 CH2 L1

New Policy WS and amended policy WS2 would contribute towards the provision of adequate and appropriate water services and would have related beneficial effects with regard to the protection of environmental sensitivities. The development of water services infrastructure could result in impacts upon environmental components however these would be mitigated at project level.

New policy FLO 4 and amended policy FLO 3 contribute towards compliance with the DEHLG Flood Guidelines and protection of human health.

Other amendments in Section 5 would not be likely to have significant environmental consequences and would not change the assessment of these policies contained in the SEA Environmental Report for the existing County Development Plan.

Changes to Section 6: Environment, Heritage and Amenities		
ENV 7 is amended as follows;	B1 B2 B3 B4 HH1 W1 W2	S1 C1 CH1 CH2 L1
It is the policy of Longford County Council to encourage and promote compliance with the recommendations contained in the Shannon <i>International</i> and North South Share Western International River Basin Management Plans.		
ENV 9 is amended as follows; The Council shall incorporate implement the relevant recommendations contained within any future	B1 B2 B3 B4 HH1 W1 W2 W3 M1 M2	S1 C1 CH1 CH2 L1
the River Basin District/River Basin Management Plans for the Shannon International River Basin District and the North Western <i>International</i> River Basin District, in order to facilitate the implementation of the Water Framework Directive.	_	

		W2 W3 M1 M2 S1 C1 CH1 CH2 L1
B2	B4	B3 HH1 W1
		W2 W3 M1 M2 S1 C1 CH1 CH2 L1
B2 B4		B3 HH1 W1 W2 W3 M1 M2 S1 C1 CH1 CH2 L1
		32 B4

CHAR 3 is amended as follows; The Council shall aim to identify and protect the character and quality of urban areas through the establishment and implementation of its Local Area Plan and Village Policy Statement schedule as outlined in Section 2.3 policy contained as part of this plan with regard to the settlements defined at section 2.3 and through the establishment and implementation of relevant Local Area Plans and village policy statements.	W2 W3 M2 C1 CH2 L1	M1 M1 CH1
AM 5 is amended as follows; It is the policy of the Council, through its schedule of Local Area Plans and Village Policy Statements, to assess the existing public open spaces in the settlements in the County. Any deficiencies in public open space and areas where this deficiency may be addressed, will be identified at the plan stage and provision facilitated through the zoning and development management process.	W2 W3	M1 M1 CH1
SC 4 is amended as follows; To identify appropriate locations within settlements for childcare facilities. Areas zoned Residential, Educational, Institutional and/or Commercial under the Local Area Plans as part of this plan or other relevant statutory document will generally be considered suitable for the establishment of childcare facilities, subject to usual planning considerations (as outlined below).	B1 B2 B3 HH1 S1 W2 W3 M2 C1 CH2 L1	3 B4 W1 M1 CH1

Amendments to ENV 7 and ENV 9 would contribute to the implementation of the Water Framework Directive and associated beneficial effects.

Amendments to NHB 6 and NHB 20 would contribute towards compliance with the Habitats Directive although this compliance could in certain circumstances conflict with existing sustainable rural management practices.

New policy NHB 22 would contribute towards compliance with the Habitats Directive and sustaining rural management practices.

Other amendments in Section 6 would not be likely to have significant environmental consequences and would not change the assessment of these policies provided in the SEA Environmental Report for the current County Development Plan.

7.7 Changes to Appendices of the Plan as a result of incorporating the Core Strategy

	Likely to Improve status of	Probable	Potential Conflict with status of	No Likely
	SEOs	Conflict with	SEOs- likely to be mitigated	interaction with
	3203	status of SEOs	SEOS likely to be mitigated	status of SEOs
		- unlikely to be		status of SEOs
		mitigated		
Appendix 1	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Lands bounding Longford Environs - Zoning Definitions and Mapping	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	
Appendix 16	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Key Service Town, Granard, Zoning and Policy	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	
Appendix 17	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Service Town, Edgeworthstown, Zonings and Policy	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	
Appendix 18	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Local Service Towns, Zonings and Policy Ballymahon	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	
Appendix 18	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Local Service Towns, Zonings and Policy Lanesboro	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	
Appendix 19	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Serviced Settlements, Zonings and Policy Abbeyshrule	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	
Appendix 19	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Serviced Settlements, Zonings and Policy Ardagh	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	
Appendix 19	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Serviced Settlements, Zonings and Policy Aughnacliffe	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	
Appendix 19	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Serviced Settlements, Zonings and Policy Ballinalee	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	
Appendix 19	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Serviced Settlements, Zonings and Policy Ballinamuck	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	
Appendix 19	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Serviced Settlements, Zonings and Policy Carriglass	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	
Appendix 19	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Serviced Settlements, Zonings and Policy Clondra	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	
Appendix 19	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Serviced Settlements, Zonings and Policy Drumlish	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	
Appendix 19	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Serviced Settlements, Zonings and Policy Keenagh	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	
Appendix 19	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Serviced Settlements, Zonings and Policy Legan	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	
Appendix 19	B1 B2 B3 B4 HH1 S1 W1 W2		B1 B2 B3 B4 HH1 S1 W1 W2	
Serviced Settlements, Zonings and Policy Newtownforbes	W3 M1 M2 C1 CH1 CH2 L1		W3 M1 M2 C1 CH1 CH2 L1	

Appendices 1 and 16 to 19 do not provide for any significant increases in land zoned for development and provide for the phasing of already zoned lands, with the application of both Strategic Industrial and Residential Reserve objectives³⁸.

The phasing of land provided - in addition to existing the zoning applied previously - had particular regard to both the capacity of the settlements to contribute towards achieving the objectives of the new Core Strategy - these objectives are consistent with the objectives of the existing Spatial Planning Strategy - as well as opportunities for public or sustainable travel and the availability of existing and planned critical water and waste water infrastructure. Phasing also took into account environmental sensitivities including biodiversity and flora and fauna and flood risk.

By potentially delaying the development of lands within environmentally sensitive and flood risk areas, phasing could potentially improve the protection of ecology and water status and the minimisation of flood risk. This protection is already contributed towards by the various provisions of the existing development plan.

By potentially delaying the development of lands further away from the town centre, phasing could potentially further improve the provision of sustainable mobility patterns which are contributed towards by the Plan and further facilitate the accompaniment of water services infrastructure with new development and associated impacts.

In addition, by providing for development within these settlements, and not in sensitive locations elsewhere, the Plan as varied will contribute towards the protection of environmental components outside of the settlement boundaries.

Potential conflicts still remain between future development and environmental components - e.g. potential conflict between biodiversity and the status of waters as a result of various land use zoning objectives such as 'Tourism/mixed use with provision of marina' in Clondra - and however these conflicts are likely to be mitigated by measures contained in the existing County Development Plan and measures proposed by this SEA and accompanying AA and FRA.

CAAS Ltd. for Longford County Council

Residential Reserve); Newtownforbes (Strategic Residential Reserve).

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Lands bounding Longford Environs (Strategic Residential Reserve); Granard (Strategic Residential Reserve and Strategic Industrial Reserve); Edgeworthstown (Strategic Residential Reserve); Ballymahon (Strategic Residential Reserve and Strategic Industrial Reserve); Lanesboro (Strategic Residential Reserve); Abbeyshrule (Strategic Residential Reserve); Ardagh (Strategic Residential Reserve); Ballinalee (Strategic Residential Reserve); Ballinalee (Strategic Residential Reserve); Lanesboro (Strategic Residential Reserve); Ballinalee (Strategic Residential Reserve); Ballinalee (Strategic Residential Reserve); Lanesboro (Strategic Residential Reserve); Lanesboro (Strategic Residential Reserve); Ballinalee (Strategic Residential Reserve); Lanesboro (

Section 8 Mitigation Measures

8.1 Introduction

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

Likely significant beneficial effects of implementing the Development Plan to which the Variation relates have been and will be maximised and potential adverse effects have been and will be avoided, reduced or offset through:

- The consideration of alternatives for the current County Development Plan as part of the SEA for this plan (as provided in the SEA Environmental Report, March 2009);
- Mitigation through Communication of Environmental Considerations throughout both the SEA/Plan preparation process for the current Longford County Development Plan 2009-2015 and the SEA/Variation preparation process for the Variation to which this report relates;
- Adherence to individual measures which have been integrated into the current Plan and adherence to additional/amended measures recommended to be integrated into the Plan by this SEA - and accompanying AA and FRA - of the Variation.

8.2 Mitigation through Consideration of Alternatives

A range of potential alternative scenarios for the Development Plan were identified at an early stage in the process and evaluated for their likely significant environmental effects [Section 6, Environmental Report of the Longford County Development Plan 2009-2015, March 2009].

The environmental baseline and Strategic Environmental Objectives were used in order to predict and evaluate the environmental effects of implementing the alternatives.

Communication of the findings of this evaluation helped the Plan-making team to make an informed choice as to which alternative was to be put before the Elected Members as the proposed draft Plan.

Communication of this evaluation to the Elected Members through this report helped them to make an informed choice with regard to the making of the Plan.

8.3 Mitigation through Communication and Integration of Environmental Considerations throughout the Process

Environmental considerations were communicated to the Elected Members throughout the SEA/Plan preparation process for the current Longford County Development Plan 2009-2015 including through the Environmental Report and through presentations. consequences of Proposed environmental Amendments were communicated to the Elected Members thereby enabling mitigation by avoidance.

The Variation does not provide for any significant increases in land zoned development however it does provide for the phasing of already zoned lands. The phasing of land provided for by this Variation - in addition to existing the zoning applied previously - had particular regard to both the capacity of the settlements to contribute towards achieving the objectives of the new Core Strategy - these objectives are consistent with the objectives of the existing Spatial Planning Strategy - as well as opportunities for public or sustainable travel and the availability of existing and planned critical water and waste water infrastructure. Phasing also took into account environmental sensitivities including biodiversity and flora and fauna and flood risk.

By potentially delaying the development of lands within environmentally sensitive and flood risk areas, phasing could potentially improve the protection of ecology and water status and the minimisation of flood risk. This protection is already contributed towards by the various provisions of the existing development plan.

By potentially delaying the development of lands further away from the town centre, phasing could potentially further improve the provision of sustainable mobility patterns which are contributed towards by the Plan and further facilitate the accompaniment of water services infrastructure with new development.

8.4 Individual Mitigation Measures integrated into the Plan

Individual measures were integrated into the current County Development Plan 2009-2015 in order to mitigate likely significant effects arising from implementation of the Plan. These measures will also mitigate likely significant effects arising from implementation of the plan as varied. These measures are linked to likely significant effects of implementing the County Development Plan as varied (if unmitigated) on Table 8.1.

In addition to these measures, this SEA - and accompanying AA and FRA - of the Variation recommends a number of additional/amended measures which have been integrated into the Variation and detailed below. These measures are also linked to likely significant effects (if unmitigated) on Table 8.1.

New Policy WS is inserted as follows:

Where required, public wastewater collection and treatment infrastructure which fully complies with requirements of the Urban Waste Water Treatment Directive (Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment) (amended by Directive 98/15/EEC) including the need to provide secondary treatment and other treatment as required - shall be operational and with adequate capacity to accommodate waste water arising development, prior developments being occupied. Discharges arising from this collection and treatment shall also comply with the requirements of the Directive.

WS(a)

It is the policy of Longford County Council to investigate the preparation a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council. Such a Plan may be prepared jointly with other Water Services Authorities.

Amend Policy WS 2 as follows:

It is the policy of Longford County Council to investigate the feasibility of establishing additional projects in terms of improving existing water supply, establishing new supplies, sewerage provision mains (including connection of unsewered. areas includina individual properties/ premises, serviced by septic tanks to the existing and planned sewer network) and improvement of existing treatment plants in the medium and long-term and for their extension to include adjoining residential dwellings.

Amend Policy WS 15 as follows:

The Council shall consult implement the relevant recommendations set out in the EPA publication (and any subsequent update) "Urban Wastewater Discharges in Ireland for Population Equivalents Greater than 500 persons – a Report for the Years 2004-5" Focus on Urban Waste Water Discharges in Ireland (EPA Office of Environment Enforcement, 2012) in the provision, maintenance and expansion of water treatment systems in the County.

Amend Policy FLO 3 as follows:

The Council shall have regard to the provisions of the guidelines issued by the DoEHLG regarding flooding implement the recommendations and provisions of the DEHLG's 2009 Guidelines for Planning Authorities entitled *The Planning System and Flood Risk Management* (and any subsequent update) in the operation of its duties.

Insert new Policy FLO4 as follows:

Where the probability of flooding from rivers is low (less than 0.1%, flood zone C) the developer should satisfy him or herself that the probability of flooding is appropriate to the development being proposed. Among other things, mapping including the OPW's Pluvial and Groundwater Preliminary Flood Risk Assessment mapping should be considered for this purpose.

Amend Policy ENV 7 as follows:

It is the policy of Longford County Council to encourage and promote compliance with the recommendations contained in the Shannon International and North South Western Share International River Basin Management Plans.

Amend Policy ENV 9 as follows:

The Council shall incorporate implement the relevant recommendations contained within any future the River Basin District/River Basin Management Plans for the Shannon International River Basin District and the North Western International River Basin District, in order to facilitate the implementation of the Water Framework Directive.

Amend Policy NHB 6 as follows:

It is the policy of the Council to protect sites designated in National and European legislation, and in other relevant International Conventions, Agreements and Processes. This includes sites proposed to be designated or designated as:

- Special Areas of Conservation under the Habitats Directive1 (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora).
- Special Protection Areas under the Birds Directive (Council Directive 79/409/EEC on the conservation of wild birds).

Both the Birds and Habitats Directives have been transposed in Irish law by Ministerial Regulation. The European Communities (Natural Habitats) Regulations, 1997 are the most important of these because they provide for the protection measures and management regime that apply to SPAs and SACs.

No projects giving rise to significant cumulative, direct, indirect or secondary impacts on Natura 2000 sites arising from their size or scale, land take, proximity, resource requirements, emissions (disposal to land, water or air), transportation requirements, duration of construction, operation, decommissioning or from any other effects shall be permitted on the basis of this Plan (either individually or in

combination with other plans or projects)^[1].

Amend Policy NHB 20 as follows:

Proposed large-scale developments, particularly on greenfield sites and in environmentally sensitive areas, shall be assessed in terms of their impact on the biodiversity of the area. All projects and plans arising from this plan will be, and, where appropriate, screened for the need to undertake appropriate assessment under Article 6 of the Habitats Directive in consultation with the National Parks and Wildlife Service.

Insert new Policy NHB 22 as follows:

The National Parks and Wildlife Service will be invited to prioritise the preparation of Management Plans for Natura 2000 Sites which are located in the vicinity of the County. This is in order to examine how the Conservation Objectives of the sites can be achieved in the context of the proper planning and sustainable development of the Plan area.

Amend Policies TOU 5, TOU 11 and HS 1 to replace reference to Regional Fisheries Board with Inland Fisheries Ireland

Additional changes as a result of the Flood Risk Assessment are detailed under Appendix II.

Additional changes as a result of the Appropriate Assessment are detailed in the Appropriate Assessment document.

^[1] Except as provided for in Section 6(4) of the Habitats Directive, viz.There must be:

⁽a) no alternative solution available,

⁽b) imperative reasons of overriding public interest for the plan to proceed; and

⁽c) adequate compensatory measures in place.

Table 8.1 Individual Mitigation Measures

Likely Significant Effect, if unmitigated	Mitigation Measures, including:
Loss of biodiversity with regard to Natura 2000 Sites	Current County Development Plan: NHB 6, NHB 20 Variation: Amendment to NHB 6, Amendment to NHB 20, New Policy NHB 22
Loss of biodiversity with regard to ecological connectivity	Current County Development Plan: NHB 1, NHB 2, NHB 8, NHB 9, NHB 18
Loss of biodiversity with regard to Wildlife Sites and species listed on Schedule 5 of the Wildlife Act 1976	Current County Development Plan: NHB 4, NHB 6, NHB 7
Loss of population involved in land management	Current County Development Plan: Various provisions of Section 3 Housing, 4 Economic Development, 5 Infrastructure and 6 Environment, Heritage and Amenities. Variation: New Policy NHB 22
Spatially concentrated deterioration in human health	Current County Development Plan: ENV 2, ENV 4, ACA 2, ENV 12 Also see measures related to water quality, flooding, waste water treatment and drinking water supply and quality.
Failure to maximise urban consolidation	Current County Development Plan: General Policy 4, CHAR 1, RPS 6
Adverse impacts upon the status of water bodies	Current County Development Plan: ENV 6, ENV 7, ENV 8, ENV 9, ENV 10, WS 9, WS 10, WS 11, SW2
	Variation: Amendment to ENV 7, Amendment to Policy ENV 9
Increase in the risk of flooding	Current County Development Plan: FLO 1, FLO 2, FLO 3, SW2 Variation: Insertion of new policy FLO4, Amendment to FLO 3
Failure to provide adequate and appropriate waste water treatment	Current County Development Plan: WS 1, WS 2, WS 3, WS 4, WS 5, WS 13, WS 15
	Variation: Insertion of new policy WS, Amendment to WS 2, Amendment to WS 15
Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and	Current County Development Plan: WS 1, WS 2, WS 3, WS 4, WS 5, WS 8, WS 9, WS 10, WS 11, WS 14 Variation: Insertion of new policy WS
clean	variation. Insertion of now pointy we
Failure to contribute towards sustainable transport and associated impacts	Current County Development Plan: ROADS 2, PED 1, PED 2, PED 3, PED 4, PED 5, PT 1, PT 2, RL 1, RL 2, RL 3, RL 4, RL 5, RL 6, RL 7, RL 8, BUS 1, BUS 2, BUS 3
Effects on entries to the Record of Monuments and Places and other archaeological heritage	Current County Development Plan: HER 1, HER 5, ARC 1, ARC 2, ARC 5, ARC 6, ARC 9, ARC 10, ARC 11, ARC 12
Effects on entries to the Records of Protected Structures and other	Current County Development Plan: HER 5, ARCH 6, RPS 1, RPS 2, RPS 3, RPS 4, RPS 5, RPS 6, ACA 1, ACA 2
architectural heritage	Current County Development Plan: HER 2, LCA 1, LCA 2, LCA 3

Section 9 Monitoring Measures

9.1 Introduction

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This section details the measures which will be used in order to monitor the likely significant effects of implementing the Development Plan as varied.

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

9.2 Indicators and Targets

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

Table 9.1 overleaf shows the indicators and targets which have been selected for monitoring the likely significant environmental effects of implementing the County Development Plan as varied, if unmitigated.

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

9.3 Sources

Measurements for indicators generally come from existing monitoring sources. Existing monitoring sources exist for each of the indicators and include those maintained by the Council and the relevant authorities e.g. the Environmental Protection Agency, the National

Parks and Wildlife Service and the Central Statistics Office.

The *Development Management Process* in the Council will provide passive monitoring of various indicators and targets on an application by application basis. Where significant adverse effects - including positive, negative, cumulative and indirect - have the potential to occur upon, for example, entries to the RMP, entries to the RPS or ecological networks as a result of the undertaking of individual projects or multiple individual projects such instances should be identified and recorded and should feed into the monitoring evaluation.

9.4 Reporting

A monitoring evaluation report on the effects of implementing the Development Plan is to be prepared in advance of the beginning of the review of the Plan. This report should address the indicators set out below.

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

9.5 Thresholds

Thresholds at which corrective action will be considered include:

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

Table 9.1 Selected Indicators, Targets and Monitoring Sources

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source	Monitoring Frequency
Biodiversity, Flora and Fauna	B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive	B1: Maintenance of favourable conservation status for all habitats and species protected under national and international legislation to be unaffected by implementation of the County Development Plan as varied ³⁹	a) Department of Arts, Heritage and the Gaeltacht report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive b) Consultations with the NPWS.	a) Every 6 years b) At monitoring evaluation - see Section 9.4
	B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the County Development Plan as varied	B2: No significant ecological networks or parts thereof which provide functional connectivity to be lost without remediation resulting from development provided for by the County Development Plan as varied	a) CORINE mapping resurvey b) Development Management Process in the Council	a) Unknown b) Per granted permission; compile at monitoring evaluation - see Section 9.4
	B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in Wildlife Sites resulting from development provided for by the County Development Plan as varied	B3i: Avoid significant impacts on relevant habitats, species, environmental features or other sustaining resources in Wildlife Sites resulting from development provided for by the County Development Plan as varied	a) CORINE mapping resurvey b) Development Management Process in the Council c) Consultations with the NPWS.	a) Unknown b) Per granted permission; compile at monitoring evaluation - see Section 9.4 c) At monitoring evaluation - see Section 9.4
	B3ii: Number of significant impacts on the protection of species listed on Schedule 5 of the Wildlife Act 1976	B3ii: No significant impacts on the protection of species listed on Schedule 5 of the Wildlife Act 1976	a) CORINE mapping resurvey b) Development Management Process in the Council c) Consultations with the NPWS.	a) Unknown b) Per granted permission; compile at monitoring evaluation - see Section 9.4 c) At monitoring evaluation - see Section 9.4

 $^{^{39}}$ Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

⁽a) no alternative solution available;(b) imperative reasons of overriding public interest for the plan to proceed; and

⁽c) adequate compensatory measures in place.

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source	Monitoring Frequency
Biodiversity, Flora and Fauna (continued)	B4: Population of the County involved in land management	B4: Sustain the population of the County involved in land management	Central Statistics Office	Next Census
Population and Human Health	HH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors as identified by the Health Service Executive and Environmental Protection Agency	HH1: No spatial concentrations of health problems arising from environmental factors as a result of implementing the County Development Plan as varied	Consultations with EPA and Health Service Executive	At monitoring evaluation - see Section 9.4
Soil	S1: Area of brownfield lands developed in the County over the lifespan of the Development Plan as varied	S1: Arising from increased levels of brownfield development, a reduced availability of brownfield land in the County (subject to availability on the open market, the demand for such land and the ability for such lands to be sustainably reused) at the end of the County Development Plan's lifespan	Development Management Process in the Council	Per granted permission; compile at monitoring evaluation - see Section 9.4
Water	W1: Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009)	W1: Not to cause deterioration in the status of any surface water or affect the ability of any surface water to achieve 'good status' by 2015	Data issued under the Water Framework Directive Monitoring Programme for Ireland (EPA, 2006)	Unknown

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 $^{^{40}}$ Good status as defined by the WFD equates to approximately the following in the current national schemes of classification as set out by the EPA:

Q4 in the biological classification of rivers;

Mesotrophic in the classification of lakes; and

[•] Unpolluted status in the Assessment of Trophic Status of Estuaries and Bays in Ireland (ATSEBI).

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source	Monitoring Frequency
Water (continued)	W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	W2: Not to affect the ability of groundwaters to comply with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC	Data issued under the Water Framework Directive Monitoring Programme for Ireland (EPA, 2006)	Unknown
	W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk	W3: Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk in compliance with The Planning System and Flood Risk Management Guidelines for Planning Authorities	Development Management Process in the Council	Per granted permission; compile at preliminary monitoring evaluation - see Section 9.4
Material Assets	M1i: Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the County Development Plan as varied	M1i: All new developments granted permission to be connected to and adequately and appropriately served by waste water treatment over the lifetime of the County Development Plan as varied	Development Management Process in the Council	Per granted permission; compile at monitoring evaluation - see Section 9.4
	M1ii: Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council	M1ii: For the Council to prepare a Water Services Strategic Plan in compliance with the Water Services Act	Longford County Council	Detail status of Plan preparation at next monitoring evaluation - see Section 9.4
	M2i: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the County Development Plan as varied	M2i: No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the County Development Plan as varied	a) EPA The Provision and Quality of Drinking Water in Ireland reports (EPA); b) EPA Remedial Action List; and, c) Longford County Council	a) Annual/biannual; b) Annual/biannual; c) Council's Water and Waste Services Department to confirm - as appropriate - status of supplies listed on Remedial Action List.

Environmental Component	Selected Indicator(s)	Selected Target(s)	Source	Monitoring Frequency
Material Assets (continued)	M2ii ⁴¹ : Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council	M2ii: For the Council to prepare a Water Services Strategic Plan in compliance with the Water Services Act	Longford County Council	Detail status of Plan preparation at next monitoring evaluation - see Section 9.4
Air and Climatic Factors	C1: Percentage of population working within the County travelling to work by public transport or non-mechanical means	C1: An increase in the percentage of the population travelling to work by public transport or non-mechanical means	Central Statistics Office	Next Census
Cultural Heritage	CH1: Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential (and the context of the above within the surrounding landscape where relevant) - protected	CH1: Protect entries to the Record of Monuments and Places - including Zones of Archaeological Potential (and their context of the above within the surrounding landscape where relevant)	a) Development Management/ Enforcement Processes in the Council; and b) Consultation with Department of Arts, Heritage and the Gaeltacht.	a) Per granted permission/ enforcement action; compile at monitoring evaluation - see Section 9.4 b) Compile at monitoring evaluation - see Section 9.4
	CH2: Percentage of entries to the Record of Protected Structures (and/or their context within the surrounding landscape where relevant) protected	CH2: Protect entries to the Record of Protected Structures (and/or their context within the surrounding landscape where relevant)	a) Development Management/ Enforcement Processes in the Council; and b) Consultation with Department of Arts, Heritage and the Gaeltacht.	a) Per granted permission/ enforcement action; compile at monitoring evaluation - see Section 9.4 b) Compile at monitoring evaluation - see Section 9.4

 $^{^{\}rm 41}$ Indicator and Target M2ii are the same as Indicator and Target M1ii

Section 10 SEA Summary Table

Below is a summary table outlining how likely significant effects (if unmitigated) are linked to relevant mitigation measure(s) - which have been integrated into the County Development Plan as varied - and indicator(s) which will be used for monitoring.

Table 10.1 SEA Summary Table: Likely Significant Effects, Mitigation Measures and Indicators for Monitoring

Likely Significant Effect, if unmitigated	Mitigation Measures, including:	Primary Indicator(s) for Monitoring
Loss of biodiversity with regard to Natura 2000 Sites	Current County Development Plan: NHB 6, NHB 20 Variation: Amendment to NHB 6, Amendment to NHB 20, New Policy NHB 22	B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive
Loss of biodiversity with regard to ecological connectivity	Current County Development Plan: NHB 1, NHB 2, NHB 8, NHB 9, NHB 18	B2: Percentage loss of functional connectivity without remediation resulting from development provided for by the County Development Plan as varied
Loss of biodiversity with regard to Wildlife Sites and species listed on Schedule 5 of the Wildlife Act 1976	Current County Development Plan: NHB 4, NHB 6, NHB 7	B3i: Number of significant impacts on relevant habitats, species, environmental features or other sustaining resources in Wildlife Sites resulting from development provided for by the County Development Plan as varied B3ii: Number of significant impacts on the protection of species listed on Schedule 5 of the Wildlife Act 1976
Loss of population involved in land management	Current County Development Plan: Various provisions of Section 3 Housing, 4 Economic Development, 5 Infrastructure and 6 Environment, Heritage and Amenities. Variation: New Policy NHB 22	B4: Population of the County involved in land management
Spatially concentrated deterioration in human health	Current County Development Plan: ENV 2, ENV 4, ACA 2, ENV 12 Also see measures related to water quality, flooding, waste water treatment and drinking water supply and quality.	HH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors as identified by the Health Service Executive and Environmental Protection Agency
Failure to maximise urban consolidation	Current County Development Plan: General Policy 4, CHAR 1, RPS 6	S1: Area of brownfield lands developed in the County over the lifespan of the Development Plan as varied
Adverse impacts upon the status of water bodies	Current County Development Plan: ENV 6, ENV 7, ENV 8, ENV 9, ENV 10, WS 9, WS 10, WS 11, SW2 Variation: Amendment to ENV 7, Amendment to Policy ENV 9	W1: Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009) W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC

Likely Significant Effect, if unmitigated	Mitigation Measures, including:	Primary Indicator(s) for Monitoring
Increase in the risk of flooding	Current County Development Plan: FLO 1, FLO 2, FLO 3, SW2 Variation: Insertion of new policy FLO4, Amendment to FLO 3	W3: Number of incompatible developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk
Failure to provide adequate and appropriate waste water treatment	Current County Development Plan: WS 1, WS 2, WS 3, WS 4, WS 5, WS 13, WS 15 Variation: Insertion of new policy WS, Amendment to WS 2, Amendment to WS 15	M1i: Number of new developments granted permission which can be adequately and appropriately served with waste water treatment over the lifetime of the County Development Plan as varied M1ii: Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council
Failure to comply with drinking water regulations and serve new development with adequate drinking water that is both wholesome and clean	Current County Development Plan: WS 1, WS 2, WS 3, WS 4, WS 5, WS 8, WS 9, WS 10, WS 11, WS 14 Variation: Insertion of new policy WS	M2i: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the County Development Plan as varied M2ii: Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council
Failure to contribute towards sustainable transport and associated impacts	Current County Development Plan: ROADS 2, PED 1, PED 2, PED 3, PED 4, PED 5, PT 1, PT 2, RL 1, RL 2, RL 3, RL 4, RL 5, RL 6, RL 7, RL 8, BUS 1, BUS 2, BUS 3	C1: Percentage of population working within the County travelling to work by public transport or non-mechanical means
Effects on entries to the Record of Monuments and Places and other archaeological heritage	Current County Development Plan: HER 1, HER 5, ARC 1, ARC 2, ARC 5, ARC 6, ARC 9, ARC 10, ARC 11, ARC 12	CH1: Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential (and the context of the above within the surrounding landscape where relevant) - protected
Effects on entries to the Records of Protected Structures and other architectural heritage	Current County Development Plan: HER 5, ARCH 6, RPS 1, RPS 2, RPS 3, RPS 4, RPS 5, RPS 6, ACA 1, ACA 2	CH2: Percentage of entries to the Record of Protected Structures (and/or their context within the surrounding landscape where relevant) protected
Occurrence of adverse visual impacts	Current County Development Plan: HER 2, LCA 1, LCA 2, LCA 3	Number of complaints received from statutory consultees regarding avoidable impacts on the landscape - especially with regard to protected views and prospects and broad zones including lakes, rivers, canals and deciduous woodlands - which is granted permission under the County Development Plan as varied