



**Laois County Council
Comhairle Chontae Laoise**

SEA STATEMENT OF THE

*Laois County Development Plan
2011-2017*

STRATEGIC ENVIRONMENTAL ASSESSMENT

Adopted 11th October 2011

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1. INTRODUCTION

This Is the SEA Statement of the Laois County Development Plan 2011-2017 Strategic Environmental Assessment.

1.1 Legislative context

The EU Strategic Environmental Assessment (SEA) Directive (2001/42/EC) which was transposed into Irish Law in 2004 states:

(Article 1) 'The objective of this Directive is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development....'

Directive 2001/42/EC of the European Parliament and of the Council of Ministers, of 27 June 2001, on the assessment of the effects of certain plans and programmes on the environment, referred to hereafter as the SEA Directive, introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including land use planning. The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (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.

Appropriate Assessment is a requirement of Article 6(3) and 6(4) of Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, also known as the Habitats Directive. This states:

6(3) Any plan or project not directly connected with or necessary to the management of the site (Natura 2000 sites) but likely to have significant effect thereon, either individually or in combination with other plans or projects, shall be subject to Appropriate Assessment of its implications for the site in view of the sites conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.

6(4) If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted. Where the site concerned hosts a priority natural habitat type and/or a priority species the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.

1.2 Content of the SEA Statement

The SEA Statement is required to include information summarising:

- a) how environmental considerations have been integrated into the Plan,
- b) how
 - the environmental report,
 - submissions and observations made to the planning authority on the proposed Plan and Environmental Report, and
 - any transboundary consultations [this is not relevant to this SEA]have been taken into account during the preparation of the Plan,
- c) the reasons for choosing the Plan, as adopted, in the light of the other reasonable alternatives dealt with, and
- d) the measures decided upon to monitor the significant environmental effects of implementation of the Plan.

1.3 Implications of SEA for the Plan

As a result of the aforementioned legislation, the Laois County Development Plan 2011-2017 was required to undergo SEA. The findings of the SEA were expressed in a Draft Environmental Report which was submitted to the Elected Members alongside the proposed Draft Plan. The purpose of the report was to provide a clear understanding of the likely environmental consequences of decisions regarding the future accommodation of growth in County Laois.

The Environmental Report and the Plan were placed on public display on the 19th November 2010– 11th February 2011.

Addendum I to the Environmental Report (which details responses to the submissions on the Environmental Report which were made during the period of public display of the Plan and the Environmental Report) was included in the Manager's Report circulated to Elected Members. **Addendum I** proposed updates to the Environmental Report and the Plan as a result of submissions, as appropriate.

Having considered the Plan, the Environmental Report and the Manager's Report, the Members of Laois County Council, by resolution, resolved to amend the Draft Development Plan in accordance with the provisions set out in Section 12(6) of the Planning and Development Act 2000-2010 as amended.

The Proposed Amendments are required to be placed on public display for a period of not less than four weeks in accordance with Section 12(7) of the Planning and Development Act 2000-2011. Written submissions or observations with respect to the proposed amendments were taken into consideration by the Members (Councillors) of Laois County Council before the making of the amendments to the Plan.

Proposed Amendments to the Plan were evaluated for their environmental consequences and these were placed on public display alongside the Proposed Amendments on the 13th July 2011 in the form of **Addendum II** to the Environmental Report and to the Appropriate Assessment.

Section 5 of the 3rd Managers Report on the submissions received between 13th July 2011 - 12th August 2011 details responses to the submissions on the amendments to the Plan and Environmental Report. This was circulated to Elected Members on the 2nd September 2011.

On adoption of the Plan, the 2 Addendums and 3rd Managers Report – Section 5 were used in order to update the original Environmental Report into a final Environmental Report that now accompanies the adopted Plan. At each stage of the process the Elected Members took into account the findings of the Environmental Report and/or the Addenda as appropriate.

2. HOW ENVIRONMENTAL CONSIDERATIONS WERE INTEGRATED INTO THE DEVELOPMENT PLAN

2.1 Consultations

On the 31st December 2009, the Scoping Issues Paper was placed on public display along with a 'Strategic Issues Paper' which identified some of the main issues for consideration in the preparation of the Draft Laois County Development Plan. The Scoping Report finalises the Scoping Process; it contains the comments received from the Environmental Authorities¹, Prescribed Bodies², environmental NGOs³, Elected Members or the public which were received during public consultation and it identifies what is to be contained in the Environmental Report which will be prepared with the Draft Development Plan. Written submissions were received from the Department of the Environment, Heritage and Local Government, Environment Protection Agency, Southern Regional Fisheries Board, An Taisce, IPPC, BirdWatch Ireland and Keep Ireland Open.

Consultation for the Development Plan & SEA Processes

The Planning Authority was required to formally consult the designated Environmental Authorities during Scoping. The designated authorities are as follows: -

- **Environmental Protection Agency (EPA)** should be consulted in all cases.
- Consultation should take place with the **Minister for the Environment, Heritage and Local Government (DoEHLG)** where it appears to the Planning Authority that the plan might have significant effects in relation to the architectural or archaeological heritage or to nature conservation; or if consultations are to take place with Northern Ireland.
- Consultation should take place with the **Minister for Communications, Marine and Natural Resources (DCMNR)** where it appears to the competent authority that the plan or modification to a plan might have significant effects on the fisheries or marine environment.

Subsequently the following authorities were also invited to make submissions on the process

- **Environmental Protection Agency (EPA)** should be consulted in all cases.
- **Minister for the Environment, Community and Local Government (DoECLG)**
- **Minister for Communications, Marine and Natural Resources (DCMNR)**
- **Minister for Agriculture, Fisheries and Food (DAFF)**
- **Minister for Arts, Heritage and the Gaeltacht (DAHG)**
- **Adjoining Planning Authorities**

Submissions were made by the Department of the Environment, Heritage and Local Government, EPA, Office of Public Works, Caroline Goucher, Department of Communications, Marine and Natural Resources with respect to the Draft Development plan and the Draft Environmental report. These submissions and the Managers Response to the submission are contained in Addendum I circulated to the members on the 30th May 2011.

Further submissions were received from Environmental Protection Agency (EPA), Minister for Communications, Marine and Natural Resources (DCMNR) and Minister for Arts, Heritage and the Gaeltacht (DAHG) in relation to Addendum 2 of the environmental report and the proposed amendments to the Plan. These are contained in Section 5 of the 3rd Managers Report circulated to members on the 2nd September 2011.

¹ Department of the Environment, Heritage and Local Government, Environmental Protection Agency, Department of Communications, Marine and Natural Resources,

² As listed in the Planning and Development Regulations 2001 (as amended).

³ Non Government Organisations

2.2 Environmental Sensitivities

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.

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) to moderate 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) Nature Reserves and Salmonid Rivers;
- Heritage designations (entries to Records of Protected Structures, entries to the Record of Monuments and Places and entries to the National Inventory of Architectural Heritage);
- Sites of geological importance;
- Sensitive landscape areas, scenic routes and visually vulnerable areas;
- Entries to the Register of Protected Areas;
- Areas at risk of flooding (historic events, benefitting lands and alluvium soils);
- Surface and ground waters with poor or bad WFD status; and,
- Regionally and locally important 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.

Table 1: Overall Vulnerability Classes

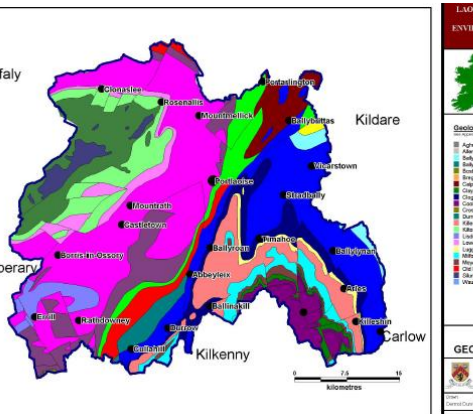
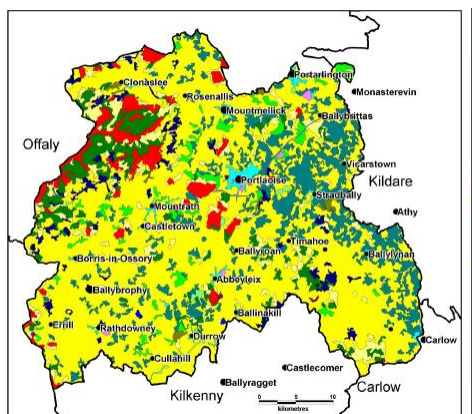
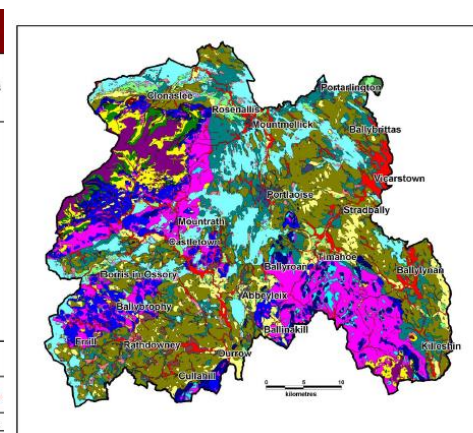
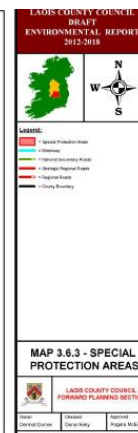
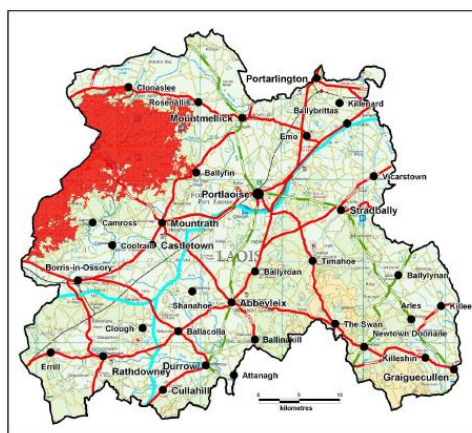
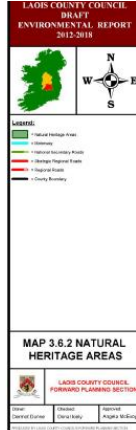
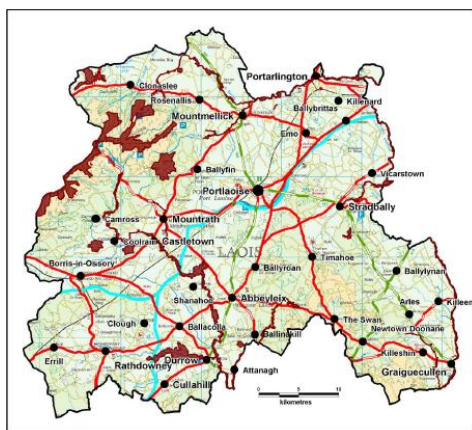
Score	Vulnerability Class
5-15	Low
20-25	Moderate
30-35	Elevated
40-45	High
50-60	Extreme
>60	Acute

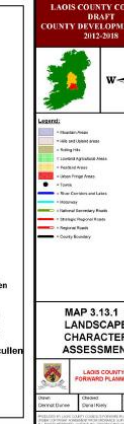
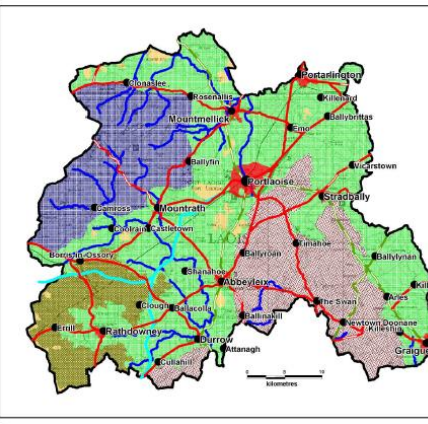
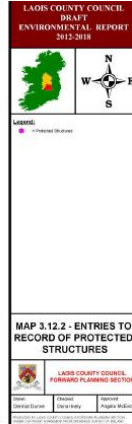
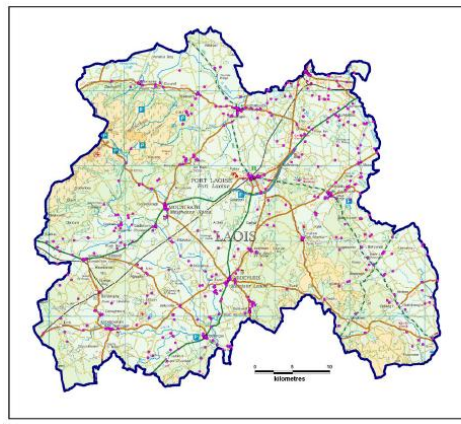
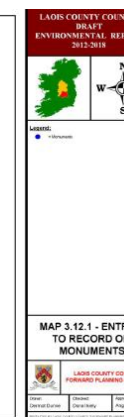
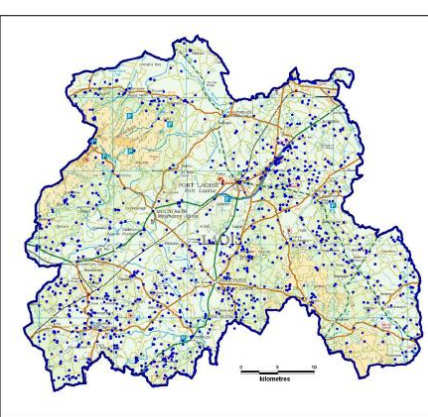
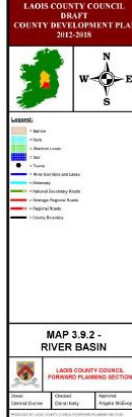
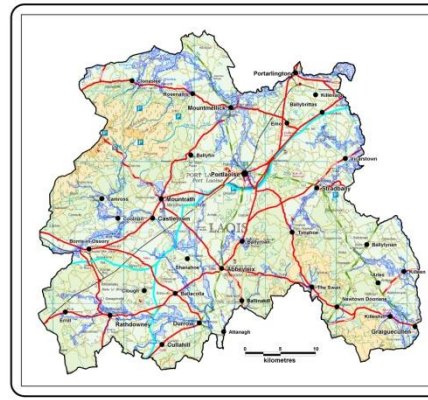
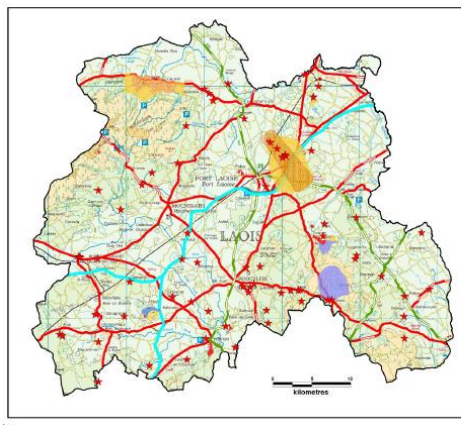
Although there are limitations and elements of subjectivity to the overlaying of sensitivities the overlay mapping was used in order to speedily identify the areas where conflicts between development within the Plan area and environmental sensitivities would be likely to occur if unmitigated.

The main and largest area of acute vulnerability occurs in the Slieve Bloom Mountains to the west of the County. This can be attributed to designated sites, landscape vulnerability and waters listed on the RPA.

Small pockets of land in moderate vulnerability follow the presence of SPA's, SAC'S NHA's throughout the County and waters listed on the RPA for SACs.

The vast majority of the County has low environmental sensitivity.





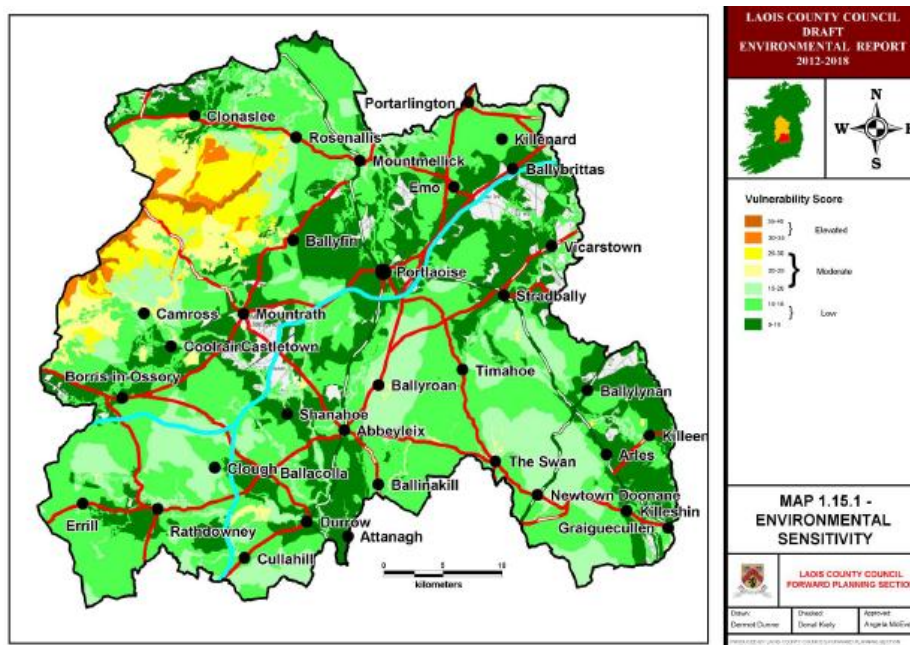


Figure 1 Environmental Sensitivity Map

2.3 Early Identification and Evaluation of Alternatives

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

These alternative development scenarios must be realistic, capable of implementation, and should represent a range of different approaches within statutory and operational requirements of the County Development Plan.

In some cases the preferred scenario will combine elements from the various alternatives considered.

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

The Draft Laois County Development Plan seeks to balance development with environmental protection and conservation resulting in a sustainable approach to development. The matrix shows that Scenario 1 (Market Driven Planning) which seeks to follow a non planned approach, (allows development in all areas dictated to by the market, with little control) will impact on the environment of County Laois. This scenario would not allow for the orderly and sustainable development of the County and is therefore not considered a desirable option for County Laois.

Similarly Scenario No 2 Urban planning is not a desirable option. This scenario would not conform with higher level plans and may result in poor environmental quality and adhoc unsustainable development.

Scenario 3 allows for planned development and represents a sustainable approach to planning in the County. Development will be focused within zoned and serviced areas as indicated in the Midland Regional Planning Guidelines Settlement Strategy. Significant controls will be put in place for development in areas designated for environmental purposes such as Special Areas of Conservation, Special Protection Areas and Natural Heritage Areas as well as areas of archaeological importance or where threats to natural resources prevail such as ground water protection zones and surface water.

In conclusion a planned approach to the further development of the County incorporating the principles of sustainable development is the best option for County Laois for the period 2011-2017.

3.0 MITIGATION

3.1 Introduction

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing the Draft County Development Plan 2011-2017.

Mitigation involves ameliorating significant negative effects. Where there are significant negative effects, consideration is given in the first instance to preventing such effects or, where this is not possible for stated reasons, to lessening or offsetting those effects. Mitigation measures can be roughly divided into those that: avoid effects; reduce the magnitude or extent, probability and/or severity of effects; repair effects after they have occurred, and; compensate for effects, balancing out negative impacts with other positive ones. Additional more detailed mitigation measures to those referenced below would be likely to be required to be integrated into relevant lower-tier plans and programmes.

3.2 Mitigation through Consideration of Alternatives

A range of potential alternative development scenarios for the Draft Laois County Development Plan 2011-2017 were identified at an early stage in the process and evaluated for their likely significant environmental effects (see Sections 15 of the environmental report). The environmental baseline and the Strategic Environmental Objectives (see Sections 3 and 4) were used in order to predict and evaluate the environmental effects of implementing the alternatives. Communication of the findings of this evaluation helped the Forward Planning Team to make an informed choice as to which alternative was to be put before the members of Laois County Council. Communication of this evaluation to the members of the Council through this report will help the members to make an informed choice with regard to the making of the County Development Plan 2011-2017.

3.3 Mitigation Integrated into the County Development Plan (CDP) 2011-2017

The following measures have been integrated into the CDP 2011-2017 which are envisaged to mitigate significant adverse effects on the environment of implementing the Plan. Note that measures relating to flood risk have come from the Strategic Flood Risk Appraisal which is contained in this report and has been fully integrated into the Plan 2011-2017.

Table 2: Mitigation Measures

SEO		INTEGRATED INTO DRAFT PLAN
BIODIVERSITY	B1 - Protect the diversity of habitats, species and wildlife corridors	Chapter 13 - Natural Heritage (Policies NH 13 /P01-P08)
	B2 – Protect designated sites	Chapter 13- Natural Heritage (Policies NH 13 / P09- P12)
	B3 – Protect the aquatic environment	Chapter 13 - Natural Heritage (Policies NH 13 /P22-P24 and also policies in relation to Landscape Character Type 3 – River Corridors and Lakes Policies NH 13/P45 – P58)
POPULATION	P1 – Protect and enhance people’s quality of life based on high quality residential, community, working and recreational environments and on sustainable travel patterns	Chapter 3 – Development Plan Strategy (Policies DPS 3 /P01-15 and also policies in relation to Transport as contained in Chapter 10 (Objectives TT 10/ 004-005 and Policies TT10/P01 P03)
HUMAN HEALTH	H1 – Minimise the risk of polluting emissions including noise and vibrations from commercial and industrial processes, and emissions to	Chapter 7 – Economic Development (Policies EC 7 /O01-O06 and also policies in relation to Environmental Management as contained in Chapter 12 (Objectives ENV 12/ 007-008)

	air/ water/ soil from traffic, industrial processes and extractive industry	Chapter 16 – Design and Development Control Standards – DCS 42 relates.
SOIL	S1 – Maintain the quality of soils	Chapter 12 - Environmental Management (Policies ENV 12/ P09-P12)
	S2 – Give preference to the use of and regeneration of derelict, disused and infill sites, rather than Greenfield sites.	Chapter 7 – Economic Development (Policies EC 7 /P19, P21,P22,P25, P27, P29)
	S3 – Minimise the consumption of non-renewable deposits on site.	
	S4 – Minimise the amount of waste to landfill from the site.	Chapter 12 - Environmental Management (Policies ENV 12/ P20-P27)
WATER	W1 – Achieve the objectives of the South Eastern River Basin District Management Plan 2009 – 2015 and the Shannon International River Basin District Management Plan 2009 – 2015	Chapter 11 – Water Services (Policies WS 11/ P02) Chapter 12 - Environmental Management (Policies ENV 12/ P02- P03- P05)
	W2 – Promote sustainable water use based on a long-term protection of available water resources.	Chapter 11 – Water Services (Policies WS 11/ P07-P08)
	W3 – Reduce the impact of polluting substances to all waters.	Chapter 11 – Water Services (Policies WS 11/ P07 and WS 11 / P18) Chapter 12 - Environmental Management (Policies ENV 12/ P07) Chapter 3 – Development Plan Strategy (DPS3 / P03, P04)
	W4 – Minimise effects of floods and droughts.	Chapter 10 – Transport (Policies TT 10 / P75 – P81)
	W5 - Protect and enhance the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems (quality, level, flow).	Chapter 13 - Natural Heritage (Policies NH 13 /P22-P24 and also policies in relation to Landscape Character Type 3 – River Corridors and Lakes Policies NH 13/P45 – P58)
	W6 - Achieve the objectives of the Freshwater Pearl Mussel- Nore Sub Basin Management Plan	Chapter 13 Natural Heritage Policies NH 13 /P25
	A1– Minimise all forms of air pollution.	Chapter 12 - Environmental Management (Policies ENV 12/ P13-P16)
AIR/ CLIMATE	A2– Minimise emissions of greenhouse gases to contribute to a reduction and avoidance of human-induced global climate change.	Chapter 12 - Environmental Management (Policies ENV 12/ O02 and O07) and Chapter 9 - Energy and Telecommunications (Policies ET 9/O01 and ET 9/ P02, P04)
	A3 – Reduce waste of energy, and maximise use of renewable energy sources.	Chapter 9 - Energy and Telecommunications (Policies ET 9/P01,P03, P05, P06) Chapter 16 – Design and Development Control Standards – DCS 54 relates.
	M1 – Maximise use of the existing built environment including the re-use of vernacular buildings.	Chapter 3 – Development Plan Strategy (Policies DPS 3 /P037 Chapter 7 – Economic Development – EC 7 / P22 and P26 Chapter 14 – Built Heritage (Policies BH 14P09-P11)
MATERIAL ASSETS	M2 – Maximise use of existing lands zoned for development within settlement boundaries.	Chapter 3 – Development Plan Strategy (Policies DPS 3 /P01,P02) Chapter 7 – Economic Development – EC 7 / P15
	M3 Avoid flood risk in selecting sites for development.	Chapter 15 – General Location and Pattern of Development (in relation to areas zoned for development an objective has been included in relation to flood risk.)

Chapter 3 – **Development Plan Strategy** (Policies DPS 3 /P47 in relation to areas that are unzoned)

Chapter 16 – **Design and Development Control Standards** – DCS 67 relates.

M4 – Minimise the use of non-renewable resources (sand, gravel) in favour of re-use of suitable construction and demolition materials.

Chapter 12 – **Environmental Management** – ENV 12 / P20

CULTURAL HERITAGE

C1 – Protect and conserve the cultural heritage including the built environment and settings; archaeological (recorded and recorded monuments, archaeological zone), architectural (Protected Structures, vernacular buildings, materials and urban fabric) and manmade landscape features (e.g. field walls, footpaths, gate piers etc.)

Chapter 14 – **Built Heritage** (Policies BH 14 / O01-O07 and Policies P02 and P06)

C2 – Conserve historic fabric of urban and rural settlements.

Chapter 14 – **Built Heritage** (Policies BH 14/ O01 and policy P30)

C3 – To ensure adequate protection for existing historic, cultural or recreational open spaces.

Chapter 14 – **Built Heritage** (Policies BH 14/ P012)
Chapter 13 – **Natural Heritage** (Policies NH 13 / O01)

LANDSCAPE

L1 – Conserve and enhance valued natural landscapes and features within them including those of geological value.

Chapter 13 – **Natural Heritage** (Policies NH 13 / P10)

L2 – Conserve and protect cultural landscapes including archaeological features.

Chapter 14 – **Built Heritage** (Policies BH 14/ P24,P26)

L3 – To protect and enhance the character and aesthetic value of the landscape

A Landscape Character Assessment (LCA) – Appendix 6 of the Plan- has been prepared identifying 7 landscape types within County Laois , these have been incorporated into Chapter 13 – **Natural Heritage** with policies specific to each landscape type.

4.0 ENVIRONMENTAL REPORT, SUBMISSIONS AND OBSERVATIONS

4.1 Introduction

This section details how both the Environmental Report and submissions and observations made to the planning authority on the Environmental Report and SEA process have been taken into account during the preparation of the Plan.

NATURA Environmental Consultants Ltd. and Loci were commissioned by Laois County Council to prepare an **'Appropriate Assessment'** for the Laois County Development Plan (CDP) 2011-2017. Laois County Council is required by legislation, outlined below, to carry out a staged Appropriate Assessment.

An Appropriate Assessment is an assessment of the potential effects of a proposed plan, on its own or in combination with other plans or projects, on one or more Natura 2000 sites (Special Protection Areas (SPA) for birds, Special Areas of Conservation (SAC) for habitats and species, Ramsar wetland sites). The findings of the Assessment have been taken into account by the competent authority, Laois County Council, in reaching its decision to adopt the County Development 2011-2017.

JBA Consulting was commissioned by Laois County Council in April 2010 to undertake a **'Strategic Flood Risk Assessment'** (SFRA) as part of the Strategic Environmental Assessment being undertaken for the preparation of a new Development Plan for Laois. The SFRA for County Laois has been prepared in accordance with requirements of the DoEHLG and OPW Planning Guidelines, The Planning System and Flood Risk Management.

The *'Planning System and Flood Risk Management'* reinforces the responsibility of Local Authorities to ensure that flood risk is managed effectively and sustainably as an integral part of the planning process, balancing socio-economic needs, existing framework of landscape and infrastructure, and flood risk.

4.2 SEA Scoping Submissions

The EPA, DEHLG and DCENR were all sent SEA scoping notices indicating that submissions or observations in relation to the scope and level of detail of the information to be included in the Environmental Report could be made to the Council.

EPA responded by sending the Council its pack for commencing SEA which includes a checklist for different stages of the process and details sources of information.

The Department of Environment, Heritage and Local Government submitted a formal written response on 29th January 2010 under the following headings: -

- Nature Conservation
- Archaeology
- AA
- SFRA

There was no response from the Department of Communications, Marine and Natural Resources.

4.3 Submissions and Observations

The Department of the Environment, Heritage and Local Government, EPA, Office of Public Works, Caroline Goucher, Department of Communications, Marine and Natural Resources made submissions on the Development Plan and

Environmental Report while they were on public display. The information contained in these submissions were taken into account by the SEA as well as the Habitats Directive Appropriate Assessment which was undertaken for the Plan.

Table 3: Submissions

<i>Submission Made By</i>	Integration of Environmental Considerations into Environmental report
DoEHLG (Submission No 51)	<p>Flood Risk Assessment The flood risk assessment was amended</p> <p>NATURE CONSERVATION Updates to ER, AA or SFRA Arising: The Appropriate Assessment was amended</p>
EPA (Submission No 29)	<p>Updates to ER, AA or SFRA Arising: Update ER to include</p> <ul style="list-style-type: none"> ▪ summary of the SEA recommendations ▪ chapters on both mitigation and monitoring. ▪ Further information on Soil, Biodiversity, Health and Landscape <p>The NTS will be updated to show</p> <ul style="list-style-type: none"> ▪ a table highlighting SEO, targets, mitigation and monitoring. ▪ SEA recommendations integrated into the Plan ▪ data gaps. ▪ table of scenarios assessed against SEO's. ▪ review Scenario 1. ▪ summary of key legislation. ▪ targets for population and human health in line with the MRPG's <p>Include map of river quality in Chapter 1. Insert section on water supply in section on infrastructure in the ER Chapter 1. Amend Chapter 2: Table 3 to include reference to legislation. The following pieces of legislation are included within Chapter 2 - Habitats, WFD, Drinking Water, Landfill, INSPIRE, EIA Directives). Table 8 will be augmented with a textual description to describe the incompatibilities of the environmental objectives Within the ER, the following changes are proposed to be made to the SEO's</p> <p>BIODIVERSITY</p> <ul style="list-style-type: none"> ▪ Amend B1- Protect designated and non designated areas and species ▪ Amend B2 – Protect designated sites including species and ensure appropriate management of Natura 2000 sites ▪ Include B4 – Prohibit invasive species <p>SOIL</p> <ul style="list-style-type: none"> ▪ Amend S1 Maintain the quality of soils through remediation <p>LANDSCAPE</p> <ul style="list-style-type: none"> ▪ Include L4 – Protect views and prospects <p>Include chapter on monitoring in the ER ER to be amended to ensure that all SEO's outlined in Table 12 are consistent throughout the ER. The National Biodiversity Data Centre will be referenced as a source of information. In the ER under Population and Human Health, mitigation measures will be included. Chapter 14 of the ER to be amended to take account of the strategic mineral resources within the County. Water quality maps to be included in the ER Indicators such as number of boil notices will be included in the monitoring system in relation to Water OPW shall be indicated as a source of data ER to be updated to refer to the fact that large scale projects are subject to EIA and that potential environmental impacts can be assessed at that stage. It is proposed to include the following target for M4 - volume of construction material reutilised within the ER. It is proposed to amend the ER to include the following SEO -LANDSCAPE -Include L4 – Protect views and prospects ER to be amended to include the following targets and indicators scenic roads and sensitive landscape features</p>

	<p>(e.g. ridgelines).</p> <p>ER to be amended to state L2 Target to be reworded to state “No unauthorised</p> <p>Table 43 to be reassessed in Chapter 15 of the ER</p> <p>ER to be updated to include the protection of the environmental protection zones such as aquifers, SAC’s/ NHA’s , SPA’s etc as protected under European and national legislation</p> <p>A textual description will be given in relation to the assessment of Scenario 3 against the SEO’s.</p> <p>Scenario 2 to be better explained in Chapter 15 of the ER</p> <p>Appendix 1 of the ER to be updated</p> <p>It is proposed to amend the ER to include a specific chapter pulling together all the mitigation measures.</p> <p>It is proposed to amend the ER to include a specific chapter pulling together all the monitoring measures as indicated in Chapter 6-13 in the ER currently.</p>
OPW (Submission No 71)	<p>Table 4.1 of the SFRA to be updated.</p> <p>Table 11-1 shall be updated in the SFRA</p>
Caroline Goucher (Submission No 73)	Update ER and AA on inclusion of new policy
DCMNR (Submission No 21)	<i>Noted</i>

The EPA made an additional submission on the Proposed Amendments and Addendum II to the Environmental Report while they were on public display.

Modifications were made on foot of the EPA’s submission to the proposed amendments and these were taken into account by the SEA / AA/ SFRA with the Environmental Report updated as appropriate.

4.4 Environmental Report

The findings of the SEA were expressed in a Draft Environmental Report which was submitted to the Elected Members alongside the proposed Draft Plan. The purpose of the report was to provide a clear understanding of the likely environmental consequences of decisions regarding the future accommodation of growth in County Laois.

A NATURA IMPACT STATEMENT is contained within the Environmental Report which concludes that once the mitigation set out above is fully implemented, there is unlikely to be a significant adverse effect upon the integrity of any Natura 2000 sites within or adjacent to the County Development Plan area. The proposed amendments to the Laois CDP as detailed in the *Environmental Report: Addendum II Environmental Consequences of Proposed Amendments to the Draft Laois County Development Plan 2011 – 2017*, July 2011 were reviewed with respect to Stage 2 of the Appropriate Assessment process. None of the proposed amendments result in a change to the conclusion of the Appropriate Assessment for the Laois County development Plan 2011-2017.

Changes made to the proposed Draft Plan were evaluated for their environmental consequences and the Draft Environmental Report was updated to become the Environmental Report.

The Draft Environmental report went on display with the Draft Laois County Development Plan 2011-2017 from the 19th November 2010 – 11th February 2011. Submissions specifically in relation to the Draft Environmental Report in terms of issues to deal with, quality and structure, etc were reviewed, and the Draft Environmental Report was amended as a result.

Addendum I to the Environmental Report (which details responses to the submissions on the Environmental Report which were made during the period of public display of the Plan and the Environmental Report) was included in the Manager's Report circulated to Elected Members on the 30th May 2011. Addendum I proposed updates to the Environmental Report as a result of submissions, as appropriate.

Proposed Amendments to the Plan were evaluated for their environmental consequences and these were placed on public display with the Proposed Amendments on the 13th July 2011 in the form of Addendum II to the Environmental Report and to the Appropriate Assessment⁵.

Section 5 of the 3rd Managers Report on the submissions received between 13th July 2011 - 12th August 2011 details responses to the submissions on the amendments to the Plan and Environmental Report. This was circulated to Elected Members on the 2nd September 2011.

The Appropriate Assessment (AA) also considers amendments made to the Laois County Development plan 2011-2017 as set out in the *Environmental Report: Addendum II Environmental Consequences of Proposed Amendments to the Draft Laois County Development Plan 2012 – 2018*, July 2011. Where these amendments resulted in changes to objectives and/or policies in the draft County Development Plan or where changes to the text could potentially have an impact on a Natura 2000 site(s), the amended text is included, highlighted in red, in the table in Appendix I.

On adoption of the Plan, the 2 Addendums and 3rd Managers Report – Section 5 were used in order to update the original Environmental Report into a final Environmental Report that now accompanies the adopted Plan. At each stage of the process the Elected Members took into account the findings of the Environmental Report and/or the Addenda as appropriate.

5.0 ALTERNATIVES AND THE PLAN

5.1 Introduction

This section describes the alternative scenarios for the Development Plan, summarises the evaluation for likely environmental effects which is provided in the Environmental Report and identifies the reasons for choosing the Plan, as adopted, in the light of the other reasonable alternatives dealt with.

5.2 Description of the Alternative Scenarios

At the outset of the County Development Plan review process a number of development scenarios were highlighted based on the current and predicted needs for the future development of the County. In broad terms the scenarios were grouped into three planning strategies. Each scenario had a different outcome and is further discussed further on. The alternatives considered are broadly described as follows

SCENARIO 1: MARKET DRIVEN PLANNING

In this scenario development is dominated by residential development as has been historically witnessed up to now. In this scenario there is little strategic focus as to where housing should occur. Housing Development would continue to develop in the north, northeast and east of the County at growth rates as previously experienced. Towns such as Portlaoise, Portlaoise, Killenard, Ballybrittas, Vicarstown, Kileens, Ballylynan, Carlow, Killeslin and Portlaoise would experience high levels of urbanisation, some at elevated densities.

Little emphasis is placed on economic development as the driver of building critical mass within the principal town of Portlaoise. This scenario allows for sporadic economic development in both rural and urban locations, placing uneconomic pressures on public services such as roads, water and wastewater.

Extensive areas of rural housing would occur along the strategic and regional routes throughout the County. There are weak measures to protect the environment.

The following are the key elements of this development strategy:

- No adherence to a settlement strategy based on NSS, Draft Plan 2011-2017, Town Plans, LAPs, etc.;
- No creation of critical mass at strategic locations within the County;
- Uncontrolled development of existing rural settlements and rural housing, particularly in the north and east of the County;
- Dispersed development in the rural settlements and rural countryside; and,
- Natural Resource enterprises (extractive industries, forestry and wind energy) are developed on an individual basis throughout the County.

SCENARIO 2: URBAN DRIVEN PLANNING

This scenario envisages controlled growth of all urban centres in the County with heavy emphasis on appropriate housing densities and environmental protection measures.

Growth is distributed between the 4 local area plan towns – Portlaoise, Portlaoise, Mountmellick and Graiguecullen and some of the other scheduled towns in the County.

This scenario places emphasis on strengthening the rural areas in the west and south of the County (west and south of the N8) and controlling rural development in the eastern and northern sections of the County where pressure for urban generated residential development is channelled into the designated settlements.

Environmental protection zones such as aquifers, SAC/NHAs, SPA's are protected.

SCENARIO 3: STRATEGIC PLANNING

The development plan strategy is based on the division of County Laois into two areas as per the Midland Regional Planning Guidelines 2010

- ***Southern Development Area (SDA)***

The Southern Development Area (SDA) borders the South East Region and the Mid-West Region and encompasses County Laois (aside from Portarlington, which is included in the EDA). The SDA accounts for approximately 24% of the Midland Region's population (CSO, 2006). The SDA retains strong links with GDA and is serviced by national road and rail routes. The sphere of influence of the GDA impacts on the commuting and employment patterns in this Development Area. The SDA has a well-defined hierarchical settlement structure, with Portlaoise, as the Principal Town, acting as the predominant urban structure and the driver of growth within this zone. Service employment in numerous state, semi-state and local government organisations is significant, particularly in Portlaoise.

- ***Eastern Development Area (EDA)***

The Eastern Development Area (EDA) is located on the border with the GDA and has experienced significant growth over the last census period and accounts for approximately 10% of the overall Midland Region's population (CSO, 2006). Patterns of development and growth within this Development Area in the inter census period between 2002 and 2006 have been heavily influenced by pressures from the GDA, primarily due to the shortage of affordable housing in the GDA. This resulted in rapid growth of a wide range of smaller towns and villages located on or near the main radial road and rail routes connecting Dublin to the regions with resultant severe pressure on social and physical infrastructure. More recently, and mainly due to the recent economic downturn (2009), and in contrast to the remaining Development Areas, it is considered that the EDA may experience greater socio-economic challenges in the future. The exceptional growth experienced in the EDA has led to people living in the area but not working, or participating in the social and economic development of this Development Area. There is potential for growth in employment generation because of a readily available workforce within this area. One of the key priorities should be to resist any further development of large-scale residential development and to avoid over-development of towns and settlements. The provision of necessary social and community infrastructure to serve resident populations should be a priority.

Within the EDA, five County Laois EDS and the Key service town of Portarlington are the focus for consolidated development.

A further break down of these development areas into the electoral areas of County Laois produces a strategy that allows for areas to develop on the back of their strengths and opportunities within the County whilst contributing to the overall sustainable development of the County. The policies and objectives of this plan will follow from this preferred strategy and the main goals. However such actions may be constrained by economic circumstances and lack of Local Authority financial resources throughout the plan period.

The results envisaged from this approach defines a settlement strategy which complies with the Midland Regional Planning Guidelines 2010 and also identifies areas for future growth. Furthermore the linkages between key development areas and strategic transport corridors to other regions outside of the County will be preserved. This will ultimately promote the long term viability of the electoral areas within the County.

Several restrictive policies in relation to highly sensitive environmental areas such as SAC/ SPA / NHA / groundwater protection zones will apply.

5.3 Evaluation of the Alternative Scenarios

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

Scenarios are evaluated in a succinct and focused way for environmental effects against both the existing environment which is described and mapped in this environmental report and the Strategic Environmental Objectives (SEOs) which are identified in Section 4. The alternatives are evaluated using compatibility criteria in order to determine how they are likely to affect the status of these SEOs.

5.4 Strategic Environmental Objectives (SEOs)

The primary objective of the SEA process is to provide for a high level of environmental protection and to contribute to the integration of environmental considerations into the preparation and adoption of the County Development Plan.

Strategic Environmental Objectives (SEOs) are methodological measures which are developed from international and national policies which generally govern environmental protection objectives and against which the environmental effects of the Draft Laois County Development Plan 2011-2017 can be tested. The SEOs are used as standards against which the development strategies, policies and objectives of the Draft Laois County Development Plan can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, if unmitigated against.

SEOs are distinct from the objectives of the Draft Laois County Development Plan 2011-2017 - although they may overlap - and are developed from international and national policies which generally govern environmental protection objectives. Such policy includes that of various European Directives which have been transposed into Irish law and relevant other Irish environmental legislation.

The SEA Directive requires that the evaluation of plans be focused upon the relevant aspects of the environmental characteristics of areas likely to be significantly affected. In compliance with this requirement, SEOs will be developed for the relevant environmental components of this SEA.

A primary source that has been used in formulating the SEOs is Table 4B of the SEA Guidelines (DEHLG, 2004). The use of SEOs, although not a statutory requirement, will fulfil obligations set out in Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004).

The table below sets out draft SEOs for the SEA of the Laois Draft County Development Plan 2011-2017.

Table 4: Strategic Environmental Objectives

ENVIRONMENTAL OBJECTIVES
<p>Biodiversity</p> <p>B1 - Protect the diversity of designated and non designated habitats, species and wildlife corridors</p> <p>B2 – Protect designated sites and species and to the appropriate management of Natura 2000 sites</p> <p>B3 – Protect aquatic and terrestrial habitats from invasive species</p> <p>B4 – Meet the requirements of the River Basin Management Plans</p> <p>B5 – Provide riparian zones for developments close to water bodies</p>
<p>Population</p> <p>P1 – Protect and enhance people’s quality of life based on high quality residential, community, working and recreational environments and on sustainable travel patterns</p>
<p>Human Health</p> <p>H1 – Minimise the risk of polluting emissions including noise and vibrations from commercial and industrial processes, and emissions to air/ water/ soil from traffic, industrial processes and extractive industry</p>
<p>Soil (including minerals)</p> <p>S1 – Maintain the quality of soils through addressing contamination issues and remediation</p> <p>S2 – Give preference to the use of and regeneration of derelict, disused and infill sites, rather than Greenfield sites.</p> <p>S3 – Minimise the consumption of non-renewable deposits on site.</p> <p>S4 – Minimise the amount of waste to landfill from the site.</p>
<p>Water</p> <p>W1 – Achieve the objectives of the South Eastern River Basin District Management Plan 2009 – 2015 and the Shannon International River Basin District Management Plan 2009 – 2015</p> <p>W2 – Promote sustainable water use based on a long-term protection of available water resources.</p> <p>W3 – Reduce the impact of polluting substances to all waters.</p> <p>W4 – Minimise effects of floods and droughts.</p> <p>W5 – Protect and enhance the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystems (quality, level, flow).</p> <p>W6 - to achieve the objectives of the Freshwater Pearl Mussel - Nore Sub Basin Management Plan</p>
<p>Air/ Climate</p> <p>A1 – Minimise all forms of air pollution.</p> <p>A2 – Minimise emissions of greenhouse gases to contribute to a reduction and avoidance of human-induced global climate change.</p> <p>A3 – Reduce waste of energy, and maximise use of renewable energy sources.</p>
<p>Material Assets</p> <p>M1 – Maximise use of the existing built environment including the re-use of vernacular buildings.</p> <p>M2 – Maximise use of existing lands zoned for development within settlement boundaries.</p> <p>M3 - Avoid flood risk in selecting sites for development.</p> <p>M4 – Minimise the use of non-renewable resources (sand, gravel) in favour of re-use of suitable construction and demolition materials.</p>
<p>Cultural Heritage</p> <p>C1 – Protect and conserve the cultural heritage including the built environment and settings; archaeological (recorded monuments and archaeological zone), architectural (Protected Structures, vernacular buildings, materials and urban fabric) and manmade landscape features (e.g. field walls, footpaths, gate piers etc.)</p> <p>C2 – Conserve historic fabric of urban and rural settlements.</p> <p>C3 – To ensure adequate protection for existing historic, cultural or recreational open spaces.</p>
<p>Landscape</p> <p>L1 – Conserve and enhance valued natural landscapes and features within them including those of geological value.</p> <p>L2 – Conserve and protect cultural landscapes including archaeological features.</p> <p>L3 – To protect and enhance the character and aesthetic value of the landscape</p> <p>L4- To protect views and prospects</p>

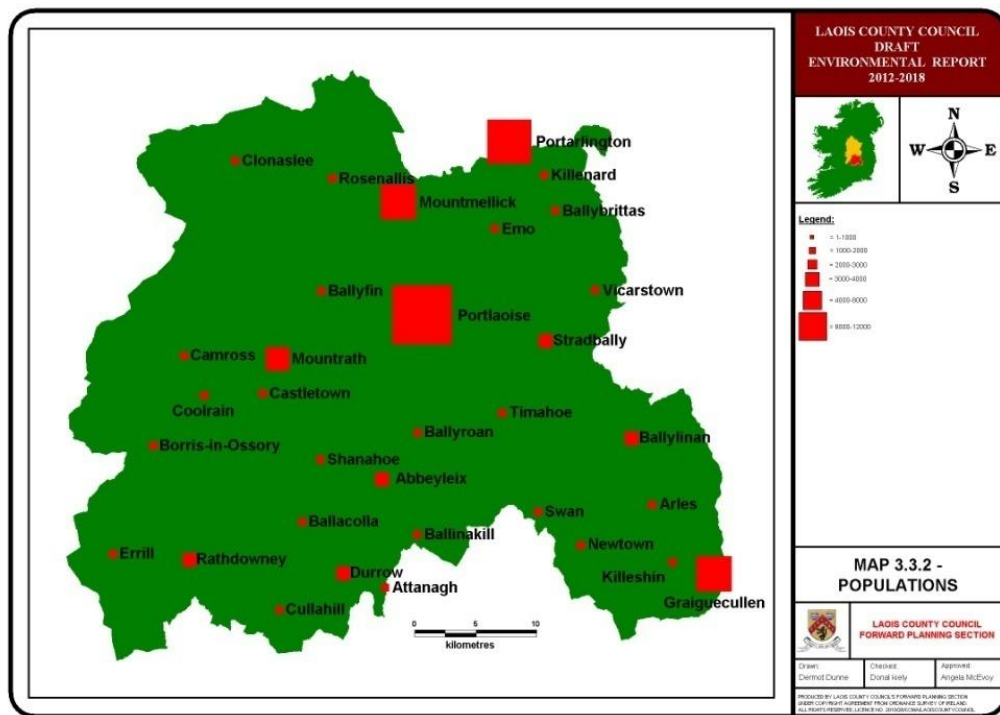
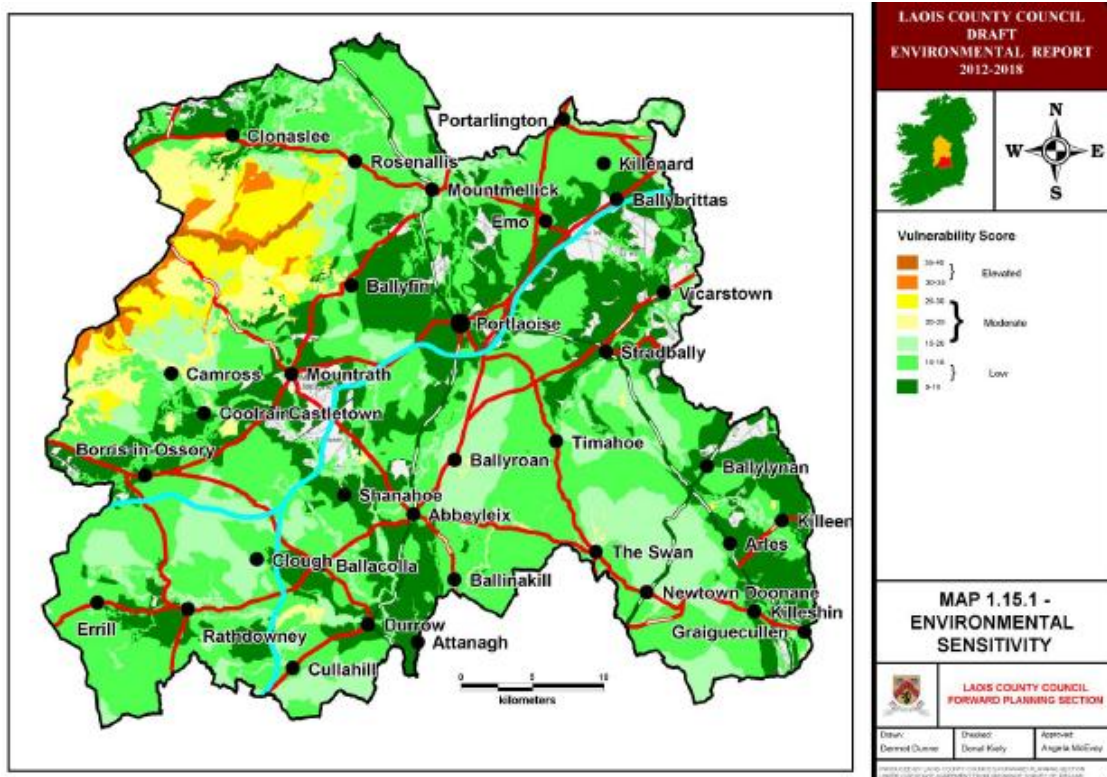


Figure 2 Environmental Sensitivity mapping compared to locations of Main Settlement Centres

The sections below summarise where each development scenario is likely to give rise to concentrations of settlement. Such settlement will also give rise to associated economic activity that is likely to give rise to additional environmental pressures.

In general, the County is environmentally robust over much of its area – particularly in the areas where the majority of settlement and agricultural activity occur – except for receiving waters – see below.

SCENARIO 1 MARKET DRIVEN PLANNING

- No adherence to a settlement strategy based on NSS, Draft Plan 2011-2017, Town Plans, LAPs, etc.;
- No creation of critical mass at strategic locations within the County;
- Uncontrolled development of existing rural settlements and rural housing, particularly in the north and east of the County;
- Dispersed development in the rural settlements and rural countryside; and,
- Natural Resource enterprises (extractive industries, forestry and wind energy) are developed on an individual basis throughout the County.

Likely environmental effects include –

Flora & Fauna

Significant effects on water quality, together with habitat fragmentation and disturbance will continue to threaten rural habitats

Water

Dispersed rural settlement and adhoc natural resource enterprise developed on an individual basis will continue to threaten groundwater and surface water quality.

Landscape

Widespread rural housing and adhoc natural resource enterprise especially in special areas of amenity designations will give rise to a change to the character from being classified as agricultural to settled and developed

Air

Highly dispersed settlement patterns will lead to very high levels of vehicular movement with associated effects on air, noise and air emissions and climate change effects

SCENARIO NO 2 URBAN PLANNING

- controlled growth of all urban centres in the County with heavy emphasis on appropriate housing densities and environmental protection measures.
- Growth is distributed between the 4 local area plan towns – Portlaoise, Portarlington, Mountmellick and Graiguecullen and some of the other scheduled towns in the County.
- strengthening the rural areas in the west and south of the County (west and south of the N8) and
- controlling rural development in the eastern and northern sections of the County where pressure for urban generated residential development is channelled into the designated settlements.
- Environmental protection zones such as aquifers, SAC/NHAs, SPA's are protected.

Likely environmental effects include –

Flora & Fauna

Some habitat fragmentation and disturbance – mostly in the vicinity of main settlement centres with little potential to affect designated sites

Water

Dispersed rural settlement could potentially threaten groundwater and surface water quality notwithstanding environmental protection zones for aquifers, SAC/NHA's etc .

Landscape

Little effect on landscape conditions except in the locality of settlement centres. However the existence of several restrictive policies in relation to highly sensitive environmental areas such as SAC/ SPA / NHA / groundwater protection zones will mean no potential to affect such landscapes.

Air

Concentrated settlement patterns in the main towns/ urban centres and continued rural housing in certain parts of the county will lead to continued need for private vehicle movements. This has the potential to impact on air, noise and climate change.

SCENARIO 3 STRATEGIC PLANNING

The development plan strategy is based on the

- division of County Laois into two areas as per the Midland Regional Planning Guidelines 2010
 - ***Southern Development Area (SDA)***
 - ***Eastern Development Area (EDA)***
 - Key service town of Portarlinton is the focus for consolidated development.
- defines a settlement strategy which complies with the Midland Regional Planning Guidelines 2010 and also identifies areas for future growth.
- Furthermore the linkages between key development areas and strategic transport corridors to other regions outside of the County will be preserved.
- promote the long term viability of the electoral areas within the County.
- Several restrictive policies in relation to highly sensitive environmental areas such as SAC/ SPA / NHA / groundwater protection zones will apply.

Likely environmental effects include –

Flora & Fauna

Some habitat fragmentation and disturbance – mostly in the vicinity of main settlement centres with little potential to affect designated sites

Water

Future threats to water quality of rivers serving principle towns in the absence of infrastructure being in place prior to development occurring.

Landscape

Little effect on landscape conditions except in the locality of settlement centres. However the existence of several restrictive policies in relation to highly sensitive environmental areas such as SAC/ SPA / NHA / groundwater protection zones will mean no potential to affect such landscapes.

Air

Concentrated settlement patterns in line with the regional settlement strategy will lead to lower levels of private vehicle movements with associated minimised effects on air, noise and climate change.

5.5 Qualitative Summary of Relative Likely Environmental Effects

The table below provides a qualitative summary of the relative environmental effects of implementing each of the alternative scenarios for the Development Plan.

Table 5: Qualitative Summary of the Relative Environmental Effects of each of the Alternative Development Plan Scenarios

Scenario	Main environmental effects			
	Flora & Fauna	Water	Landscape	Air
Scenario 1 Market Driven Planning	Some Localised / Significant	Significant	Significant	Significant
Scenario No 2 Urban planning	Some Localised / Significant	Some Localised / Significant	Some localised	Some localised
Scenario 3 Strategic Planning	None / Slight , Localised	Some localised	None and slight	None

5.6 Evaluation against SEOs

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

	Direct Positive Effect on the SEO	Indirect Positive Effect on the SEO	Uncertain interaction with SEOs	Neutral Interaction with SEO's	Direct Negative Effects on SEO	Indirect Negative Effects on SEO
Scenario 1 Market Driven Planning				C1,C2,C3,	W1,W2,W3,W4, W5,W6, A1,A2,A3, B1,B2,B3	P1,H1
Scenario No 2 Urban planning	P1	B1,B2,B3, L1,L2, L3, H1	A1,A2,A3,		W1,W2,W3,W4, W5,W6,	
Scenario 3 Strategic Planning	P1,H1	B1,B2,B3, L1,L2, L3, H1	A1,A2,A3,			W1,W2,W3,W4, W5,W6,

5.7 Reasons for choosing the plan in light of the other reasonable alternatives dealt with

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

In conclusion a planned approach to the further development of the County incorporating the principles of sustainable development is the best option for County Laois for the period 2011-2017.

The Draft Laois County Development Plan seeks to balance development with environmental protection and conservation resulting in a sustainable approach to development. The matrix shows that Scenario 1 (Market Driven Planning) which seeks to follow a non planned approach, allows development in all areas dictated to by the market, with little control will impact on the environment of County Laois. This scenario would not allow for the orderly and sustainable development of the County and is therefore not considered a desirable option for County Laois.

Similarly Scenario No 2 Urban planning is not a desirable option. This scenario would not conform with higher level plans and may result in poor environmental quality and adhoc unsustainable development.

Scenario 3 allows for planned development and represents a sustainable approach to planning in the County. Development will be focused within zoned and serviced areas as indicated in the Midland Regional Planning Guidelines Settlement Strategy. Significant controls will be put in place for development in areas designated for environmental purposes such as Special Areas of Conservation, Special Protection Areas and Natural Heritage Areas as well as areas of archaeological importance or where threats to natural resources prevail such as ground water protection zones and surface water.

6.0 MONITORING MEASURES

6.1 Introduction

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. This Environmental Report puts forward proposals for monitoring the likely significant effects of implementing the Plan 2011-2017.

Monitoring enables, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action. In addition to this, monitoring can also play an important role in assessing whether the Plan 2011-2017 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.

6.2 Indicators and Targets

Monitoring is based around the indicators which were chosen earlier in the process. These indicators allow quantitative measures of trends and progress over time relating to the Strategic Environmental Objectives used in the evaluation. Focus is given to indicators which are relevant to the likely significant environmental effects of implementing the Plan 2011-2017 and existing monitoring arrangements will be used in order to monitor the selected indicators. Each indicator to be monitored is accompanied by the target(s) which were identified with regard to the relevant legislation (see Section 4).

The Table below shows the indicators and targets which have been selected for monitoring the likely significant environmental effects of implementing the Plan 2011-2017.

6.3 Sources

Measurements for indicators should come from existing monitoring sources and no new monitoring should be required to take place. Existing monitoring sources exist for each of the indicators and include those conducted by Laois County Council and other relevant authorities e.g. the Environmental Protection Agency, the National Parks and Wildlife Service and the Central Statistics Office.

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

6.4 Excluded Indicators and Targets

Monitoring data on Groundwater Quality Standards may not be available for the preliminary monitoring evaluation as the groundwater threshold values to which this indicator relates have not yet been identified by the EPA.

6.5 Reporting

A monitoring evaluation report on the significant environmental effects of implementing the Plan 2011-2017 will be prepared in advance of the review of the Plan 2017-2023.

In addition to drawing on the indicators specified in this section, information already published in Environmental Impact Assessments carried out in relation to individual projects within the County may be drawn upon.

6.6 Responsibility

Laois County Council is responsible for collating existing relevant monitored data, the preparation of preliminary and final monitoring evaluation reports, the publication of these reports and, if necessary, the carrying out of corrective action.

A Steering Committee will be established within Laois County Council to oversee the monitoring process.

6.7 Thresholds

Thresholds at which corrective action will be considered are as follows:

- boil notices on drinking water;
- fish kills;
- the failing of Mandatory Standards under Directive 76/160/EEC or the failure to achieve a classification of Sufficient under Directive 2006/7/EC by bathing waters.
- court cases taken by the DoEHLG regarding impacts upon archaeological heritage including entries to the
- Record of Monuments and Places; and,
- complaints received from government departments and other regulatory agencies that monitor the state of the

Table 6: Selected Indicators, Targets and Monitoring Sources

ENVIRONMENTAL COMPONENT	SELECTED INDICATORS	SELECTED TARGETS	SOURCES
BIODIVERSITY	<p>Designation of additional areas due to biodiversity or geological value</p> <p>Percentage of unique habitats and species lost in designated sites through trending of annual/biannual surveys</p> <p>Designation of additional areas due to biodiversity or geological value</p>	<p>No loss of protected species</p> <p>Additional areas identified and protected for geological value</p>	<p>DoEHLG report on the implementation of the measures contained in the Habitats Directive – as required by Article 17 of the Directive.</p> <p>NATIONAL BIODIVERSITY DATA CENTRE</p> <p>Corine Mapping and consultation with the NPWS</p> <p>LCC / GSI</p>
POPULATION	<p>Occurrence of any decline in human health around a particular area of the County</p> <p>Increase in the number of green spaces and amenities available to the public</p> <p>Employment rates over the lifetime of the plan</p>	<p>Occurrence of spatially concentrated deterioration in human health arising from environmental factors as identified by the Health Service Executive(HSE) and Environmental Protection Agency(EPA)</p> <p>Increase in the number of green spaces and amenities available to the public</p> <p>Increased Employment rates</p>	<p>Laois County Council / HSE / EPA</p> <p>Laois County Council</p>

		over the lifetime of the plan	CSO / Live Register
HUMAN HEALTH	No remedial action list (RAL) from EPA Notices	Drinking water quality and number of RAL's and boil notices	LCC / EPA
	Maintain or improve the levels of SO ₂ , NO _x and particulate matter as conducted by the EPA monitoring	Maintaining or improving air quality in the study area	EPA
	Increase public amenities		
	Provision and upgrade to provide adequate wastewater infrastructure based on existing and forecasted population demands	Availability of public transport Completion of WWTP upgrades	WATER SERVICES SECTION (LCC)
SOIL	Preparation of a report on contaminated / unregulated sites throughout the county	No of sites identified and remediated	ENVIRONMENT SECTION (LCC)
	Specified % of new applications granted on brown field sites		
	Specified % of C&D Waste Management Plans Submitted	% of developments on brownfield sites	
		% of C&D waste management plans submitted	
WATER	Changes in the groundwater quality as identified in the monitoring programmes conducted by LCC and the EPA under the Shannon RBMP and South East RBMP and the Nore Freshwater Pearl Mussel Sub Basin Management Plan 2009.	To achieve "good status" in all bodies of surface waters by 2015 and not to knowingly allow deterioration in the status of surface waters	EPA
	Frequency of water shortage notices	Number of water shortage notices issued	Water Services Section
	Number and type of developments in Flood Zone A and Flood Zone B	Number of boil notices issued	Environmental Section (LCC)
	Provision of SUDS compliant drainage plans for proposed developments in the County	Number RALS from EPA	EPA / EPA Remedial Action List and Laois Council
	Changes in groundwater quality as identified in the EPA monitoring programmes conducted by LCC and the EPA under the RBMP objectives	Decrease in the number of properties flooded	
		100% compliance with SUDS drainage plans as submitted through the development management process	
AIR / CLIMATE	Number of people using public transport	Increased use of public transport	National Transport Authority
	Length of cycle lanes and walking routes provided	Increased numbers of cycle	Roads Section (LCC)

	<p>Number of renewable energy projects operational</p> <p>Number of energy audits conducted</p>	<p>lanes and walking routes</p> <p>Increased number of permissions granted for renewable energy projects</p>	<p>Laois County Council</p> <p>Midland Energy Agency</p>
MATERIAL ASSETS	<p>% of applications for reuse of existing building</p> <p>% of applicants granted on zoned lands vs. % of applications granted on unzoned land</p> <p>Number of flood risk assessments requested</p> <p>% refusal of planning applications for flood reasons</p>	<p>Increased reuse of buildings</p> <p>Increased use of land within towns and villages</p> <p>Reduced amount of development within flood plains</p> <p>Encourage the use of renewable construction materials and methods</p> <p>Number of private cars on road as a % of AADT</p> <p>Quantity of household waste being sent to landfill</p> <p>Quantity of household waste for recycling</p> <p>The number of bring banks provided in the county</p> <p>Number and type of renewable energy technologies being employed in new developments</p>	<p>Planning Section (LCC)</p> <p>Environment Section (LCC)</p> <p>Environment Section (LCC)</p> <p>Environment Section (LCC)</p> <p>Planning Section (Building Control)</p>
CULTURAL HERITAGE	<p>Number of unauthorised developments permitted over the lifetime of the plan which resulted in the loss or partial loss of protected structures or sites of archaeological importance status</p> <p>Number of Unauthorised development in protected structures sites and complexes</p>	<p>Minimal loss of protected structures and archaeological sites</p> <p>Reversal of unauthorised works to protected structures</p> <p>Additions to the RPS</p>	<p>Development Management and Enforcement Section of Planning Section (LCC)</p> <p>Complaints from statutory consultees.</p> <p>Forward Planning Section (LCC)</p>
LANDSCAPE	<p>Number of developments located within the designated views and prospects</p> <p>Number of unauthorised developments permitted which could result in the loss of archaeological features</p>	<p>Number significant disruption of designated views and prospects</p> <p>Number of unauthorised development within the lifetime of the plan which result in damage to archaeological features</p>	<p>Forward Planning Section (LCC)</p>

