

Strategic Environmental Assessment

Waterford County Development Plan

2011-2017

Scoping Document

March 2009



**Waterford County Council
Comhairle Chontae Phort Láirge**

1. INTRODUCTION

A review of the County Development Plan for Waterford (2004-2010) is being carried out by Waterford County Council. The Planning and Development (Strategic Environmental Assessment) Regulations 2004 require that a Strategic Environmental Assessment is carried out on the Plan and its likely significant impacts on the environment.

Having established that a full SEA is required, the contents of the Environmental Report must be scoped. The Environmental Report is the core of the SEA and will address key environmental impacts, positive and negative, to arise from the implementation of the County Development Plan. The purpose of this Scoping Report is to establish the range of issues and level of detail to be contained in the Environmental Report.

1.1 BACKGROUND TO THE WATERFORD COUNTY DEVELOPMENT PLAN

The aim of the County Development Plan is to provide a framework for the proper planning and development of Waterford County. The plan aims to ensure the implementation of the National Spatial Strategy and Regional Planning Guidelines at a county level. The Plan will promote good planning and sustainable development of the county while protecting the most important elements of the county's heritage and environment. The Plan is being prepared in the context of Section 10 of the Planning and Development Act 2000. The 4 year review of the Plan is required under Section 11 of the Act and the period of the new Plan will be from 2011-2017. The current County Development Plan 2005-2011 and Issues Paper for review of current plan may be viewed at www.waterfordcoco.ie.

2. ENVIRONMENTAL IMPACT OF COUNTY DEVELOPMENT PLAN

Future development in County Waterford has the potential to impact on a range of aspects of the environment. Identification of new areas for residential and commercial development requires the assessment of these areas for flood risk. Identification of development potential brings with it a need for supporting infrastructure, a key issue being water supply and treatment of waste water.

Increased growth in the county could impact on traffic levels where minimal availability of public transport and rail freight promotes continual increase of road transport and car usage and thus associated impacts on carbon emissions, air quality and human health.

The County Development Plan may impact on the built and natural heritage of the county by identifying development opportunities in areas that could impact on the setting and intrinsic value of some sites. Sensitive areas in the County include the network of Natura 2000 sites, catchment areas for protected species such as the Freshwater Pearl Mussel and Killarney Fern, scenic landscapes including upland, coastal and waterway corridor landscapes. Positive impacts may also arise in terms of identification of opportunities to promote access to sites of cultural and natural heritage including archaeological landscapes, built heritage and upland and scenic landscapes. An environmental baseline will be compiled for County Waterford including a description on the current state of the environment and key environmental issues in the county. The range of likely issues is outlined as follows.

2.1 BIODIVERSITY- FLORA & FAUNA

The landscape of the County provides the setting for a range of wildlife habitats and species and many areas are designated or proposed as Natural Heritage Areas, Special Areas of Conservation and Special Protection Areas. Habitats outside these designated areas are also key stepping stone habitats or ecological corridors linking sites of prime conservation value (e.g. waterways, woodlands and hedgerows). It is considered that biodiversity will be a significant issue for consideration in the Environmental Report.

2.1.1 Freshwater Pearl Mussel *Margaritifera margaritifera*

Freshwater Pearl Mussel is an Annex 1 species on the EU Habitats Directive and is also listed on the Red Data List of the International Union for Conservation of Nature and Natural resources as in danger of worldwide extinction. Ireland has approximately 46% of the EU Pearl Mussel population which is recorded from 125 rivers. There has been considerable decline in species distribution and numbers as the mussel is very sensitive to nutrient and silt levels in its habitat and also has high oxygen requirements. FPM is known from three river systems in County Waterford.

Table 1. SACs designated for Freshwater Pearl Mussel in County Waterford

SAC Site Name	River System
Lower River Suir	Clodiagh
Blackwater	Lickey
Blackwater	Blackwater

2.1.2 APPROPRIATE ASSESSMENT

Along with treatment of the general issue of biodiversity, potential impacts of the Draft Development Plan on the Natura 2000 Network will also be appraised through an Appropriate Assessment (Article 6 Habitats Directive Assessment). Policies and objectives will be screened to ensure avoidance of adverse impacts on SACs and SPAs in the county. This assessment will form part of the Environmental Report.

2.2 POPULATION

County Waterford covers an area of approximately 1,839 km² which is about 2.6 % of the area of the state. The population of the county is 49,213 with a density of 27 people/ km². This accounts for approximately 1.17% of the national population. County Waterford is predominantly rural in character, the main urban centres are Dungarvan, Tramore, Lismore, Portlaw, Kilmacthomas and Dunmore East. With its extensive coastline of sandy beaches the county attracts good numbers of regional tourists. Coastal towns such as Tramore and Dunmore East experience doubling of population numbers in the summer months. Adequate infrastructure in terms of water supply and waste water treatment is required to cater for these demands.

2.3 HUMAN HEALTH

Availability of spatial data on human health on a county basis is limited, however a key area for consideration will be the interrelationships of human health and water quality to include drinking water, waste water treatment, recreational bathing waters, fisheries and shellfish waters. There will also be interrelationships between human health and air quality and climatic factors such as flood risk.

2.3.1 RECREATIONAL WATERS

There are 6 designated bathing waters within the County. Ardmore, Bonmahon, Clonea, and Dunmore East (Main and Counsellors Strand) and Tramore. Two of these beaches (Clonea and Dunmore East Counsellors Strand) were awarded Blue Flag Status in 2008. The county is popular for angling, fishing, and watersports including surfing.

Developing the tourism potential for the County requires supporting infrastructure such as access roads and water treatment so as to ensure continued adequate treatment of waste water and continued supply of good quality drinking water.

2.4 WATER

County Waterford contains several river systems including the Suir, Blackwater, Mahon, Clodiagh, Bride, Colligan, Nire, Lickey and Tay . Many of these are designated as SAC. Future development potential of the County may have implications for surface water and ground water quality and it is considered that the likely significant impact on water is a potential key issue that will be addressed in the Environmental Report. This will include sources and supply of surface and groundwater, existing capacity and level of treatment, septic tanks, predicted future capacity and predicted future requirement. The County has supported the development of Integrated Constructed Wetlands and the Anne Valley in the east of the county has demonstrated the effectiveness of this water treatment process for effluent from surrounding agricultural lands. Water Supply, water quality, water conservation, drinking water, drought management and human health are all factors that need to be analysed in this topic. Activities such as forestry, agriculture, increased population and tourism can all impact on water quality.

2.4.1 FISHERIES AND SHELLFISH WATERS

Commercial aquacultural activities are located at Dungavan Harbour and Waterford Harbour. Shellfish growing areas are found at Dungarvan Bay and Waterford Harbour. While the functions of the Local Authority do not extend beyond the HWM of the foreshore, indirect and cumulative impacts may arise from: wastewater discharges, runoff from agriculture, leachate from landfills, contaminated sites and forestry. Thus indirect and cumulative effects on fisheries and shellfish waters will be addressed in the Environmental Report.

2.5 SOIL

EU proposals have been in train for a Directive that lays down a framework for the protection and sustainable use of soil. It is not generally considered that there shall be a significant impact on soils from implementation of the County Development Plan with the present requirement for Strategic Flood Risk Assessments which should mitigate against run off and siltation in alluvial areas. This issue will also be addressed through site specific flood risk assessments through the development management process. Similarly impacts on soil from developments such as wind energy infrastructure (through peat risk assessments) will be addressed at EIA level. The emerging expansion of bio-fuel crops e.g. miscanthus, willow and oil seed rape and potential impacts on soil is an issue that will be dealt with a higher strategic level within the wider South- East Region.

2.6 AIR AND CLIMATIC FACTORS

2.6.1.1.1

AIR QUALITY

Waterford is in Zone C, one of the four air quality zones in Ireland. Zone C is comprised of 15 specified urban areas with populations greater than 15,000. Air Quality is generally good throughout the county and it is not considered that this will be a significant issue in the Environmental Report.

2.6.2 CLIMATE CHANGE

Global climate change is now a recognised phenomenon of our times. A report published in 2007 by the Irish Climate Analysis and Research Unit, NUI Maynooth predicts significant climate change impacts occurring in Ireland over the coming decades. A global temperature rise of up to 2°C would result in:

- Increased likelihood and magnitude of river and coastal flooding
- Water shortages in summer in the east
- Negative impacts on water quality
- Changes in the distribution of species
- Effects on fisheries which are sensitive to small changes in temperature

It is now recognised that Developments Plans need to take account of factors caused by climate change in future land use planning. A Climate Change Strategy was published for the county in 2008 by the Waterford Energy Bureau.

2.6.3 FLOOD RISK

An increase in the incidence and severity of flooding is evident in recent years with areas such as Clonmel experiencing the worst impacts and so it is increasingly important to take account of floodrisk in landuse planning. A Strategic Flood Risk Assessment will be a key part of the County Development Plan Review Process. This assessment will form part of the Environmental Report. In fulfilment of requirements under the EU Floods Directive the OPW aim to map areas of potentially significant risk by 2013 and will also publish Flood Risk Management Plans for these areas. Mapping is currently being undertaken on the River Suir and should be available by 2010.

2.6.4 COASTAL EROSION

The Waterford coastline has long been subject to coastal erosion. Coastal defences have been required at Bonmahon, Tramore and Dunmore East to prevent erosion to dune and beach systems which are important recreational amenities for the county. With predicted increased levels of storminess from

climate change potential impacts for coastal erosion and damage to sea defences and infrastructures are high. Impacts on coastal landscapes will be a key issue for the county in future land use planning.

2.7 CULTURAL HERITAGE

People have lived in County Waterford for at least 7,000 years and evidence of megalithic monuments can be found along the coast and along the banks of the River Suir. County Waterford contains sites of significant cultural heritage such as Ardmore Round Tower, Lismore Castle and the Woodstown Viking site. The county contains over 1,800 Recorded Monuments listed in the County Record of Monuments and Places.

The county contains a fine stock of architectural heritage including many large country houses and their associated demesne landscapes, ecclesiastical sites and other sites of industrial and vernacular heritage. Parts of the streetscapes of many of County Waterford's towns contain groups of buildings which make an important contribution to the streetscape.

The county's built heritage provides educational and recreational value and is also of fundamental importance to the county's tourism industry and sense of identity. Development of infrastructure including tourism developments all have the potential to impact on the cultural heritage of the region. It is considered that cultural heritage will form a key issue in the Environmental Report.

2.8 LANDSCAPE AND VISUAL IMPACTS

The county is defined by the Waterway Corridors of the Rivers Blackwater, and Suir and Waterford Estuary and an extensive area of coastline which stretches from Cheekpoint to Ardmore and Whiting Bay. Upland areas in the county include the Comeragh and Monavullagh Mountains, Knockmealdowns and Drum Hills. The diversity of landscapes and natural heritage within the county enables views and prospects of areas of natural beauty from many public roads. Accordingly a number of scenic landscapes and routes, sensitive and visually vulnerable areas are designated throughout the region and listed in the Co. Development Plan. The county's landscape is of key importance to Waterford's tourism industry. Development of infrastructure including energy networks, wind energy and tourism developments all have the potential to impact on the uplands, waterway corridors, demesne and coastal landscapes of the county. It is considered that landscape will form a key issue in the Environmental Report.

2.9 MATERIAL ASSETS

Material assets is taken to include infrastructure and utilities including rail,

road, water supply and wastewater treatment facilities. It also includes economic assets such as quarries, forest estate (15% landcover of Co. Waterford), agricultural lands, coastal and water resources which support fisheries and tourism industry. These resources will be included in the material assets baseline and considered as a key issue in the environmental report.

2.10 INTERRELATIONSHIPS

Environmental Factors cannot be considered in isolation from each other and so the synergistic impacts and interrelationships will be analysed through the SEA process. It is considered that the following interrelationships may be relevant.

Table 2. Potential Inter-Relationships between SEA Topics

Biodiversity, Flora, Fauna	√								
Population/ Human Health	√	√							
Soil	√	√	√						
Water	√	√	√	√					
Air	√	√	√	X	√				
Climate	√	√	√	√	√	√			
Material Assets	√	√	√	√	X	√	√		
Cultural Heritage	X	√	X	√	X	X	√	√	
Landscape	√	X	√	√	X	X	√	√	√
	Biodiversity, Flora, Fauna	Population/ Human Health	Soil	Water	Air	Climate	Material Assets	Cultural Heritage	Landscape

√ = Interrelationship Anticipated X = No interrelationship anticipated

3.0 IDENTIFICATIONS OF EXISTING ENVIRONMENTAL PROBLEMS

Based on the existing condition of the environment within the County in terms of the various environmental media and disciplines, as specified in Schedule 2B of the SEA Regulations, existing environmental problems will be

identified in the Environmental Report. Some issues which will be addressed include:-

- Protection of ground and surface water conditions
- Protection of biodiversity, designated sites and habitats
- Protection of landscape
- Floodrisk and climate change
- Protection of coastal areas

4.0 ENVIRONMENTAL OBJECTIVES, INDICATORS AND TARGETS

Environmental Objectives, Indicators and Targets will be considered and put forward as appropriate. The Table below of draft objectives, indicators and targets may be refined or developed further during the SEA process and following the scoping consultation process. Wherever possible, quantitative indicators will be used. Indicators will be selected bearing in mind the availability of data and feasibility of making direct links between any changes in the environment and implementation of the Plan.

Table 3. Draft Environmental Objectives, Indicators and Targets

Biodiversity, Flora and Fauna		
Environmental Objectives	Indicators	Targets
B1: Conserve and enhance the diversity of habitats and species	Changes in areas of habitats or populations of flora and fauna.	No loss of favourable conservation status of habitats and species.
B2: Protect, conserve and enhance habitats, species and areas of national or international importance, including aquatic habitats and species and promote the sustainable management of habitat networks.	Area in ha or proportion of total of NHAs/SACs/ damaged or lost as a result of development within the region.	Maintenance of favourable conservation status for all habitats and species protected under national and international legislation. Compliance with Catchment Plans for Freshwater Pearl Mussel. Compliance with River Basin District Management Plans.
Population and Human Health		
Environmental Objectives	Indicators	Targets
P1: Facilitate a good standard of health for Waterford's population through ensuring high quality residential, recreational and working environments and minimising air and noise pollution.	Provision of employment, services and amenities within the region.	Increase in employment opportunities, services and public amenity within the county
P2: Protect areas from increasing flood risks within the area, upstream and downstream.	River water levels, river flow, flood extent and flood damage during flooding	Improved Flood Risk Management

Water Resources		
Environmental Objectives	Indicators	Targets
<p>W1: Protect the quality of surface and ground waters as sources of drinking water and as valuable assets for amenity and recreation.</p> <p>W2: Achieve and maintain required water quality standards and reduce discharges of pollutants or contamination to waters.</p>	Water quality monitoring results by the EPA.	<p>Improvement or at least no deterioration in levels of compliance with drinking water quality standards.</p> <p>Achieve “good” status i.e. 4+ for water quality by 2015 in line with the Water Framework Directive.</p>
Soils and Material Assets		
Environmental Objectives	Indicators	Targets
S1: Avoid flood risk in selecting sites for development and mitigate the effects of floods.	Instances of flooding which cause damage to property.	No increase in flooding which causes damage to property.
S2: Maintain the quality of and access to assets such as open spaces, water resources and all other physical and social infrastructure.	Access to public amenities and visitor numbers.	Increased usage of open space and public amenity.
Cultural Heritage and Landscape		
Environmental Objectives	Indicators	Targets
C1: Protect and conserve the integrity and setting of features of architectural and archaeological heritage.	<p>Number of structures in the RPS and NIAH County Inventory.</p> <p>Number of Monuments in the RMP and areas of archaeological potential which have been recorded or subject to exploration as a result of development.</p> <p>Number of structures in the RPS or NIAH or Monuments, the fabric or setting of which has been damaged or diminished by developments.</p>	<p>To maintain and increase the number of architectural and archaeological features recorded and protected.</p> <p>No damage occurring to structures or monuments or their character or setting due to development.</p>
C2: Conserve and enhance valued natural and historic landscape features.	Total area of land that is subject to nature or landscape conservation designations	Increase or no change in the area of nature and landscape conservation designations.
C3: Protect and conserve the quality, character and distinctiveness of landscape including demesne landscapes and minimise negative visual impacts from development.	<p>The scale and degree to which visually vulnerable areas or scenic landscapes have been affected by development.</p> <p>The scale and level of development within demesne landscapes.</p>	<p>No negative visual impacts from development on visually vulnerable areas or scenic landscapes.</p> <p>Appropriate Heritage Appraisal and Landscape Capacity Assessment to inform any future development of demesne landscapes.</p>
Air and Climatic Factors		
Environmental Objectives	Indicators	Targets
A1: Minimise emission of greenhouse gases to contribute to a reduction and avoidance of human induced global climate change.	Increased use of renewable energy sources and public transport.	Attain targets in National and County Waterford Climate Change Strategies.

5.0 MITIGATION MEASURES

The full range of likely environmental impacts from the Plan will be addressed to include secondary, cumulative, synergistic, medium and long term, permanent and temporary, positive and negative.

Where significant adverse impacts are identified during the SEA process, relevant and appropriate mitigation measures will be provided in the Environmental Report. In order to ensure implementation of the recommended measures, monitoring arrangements will be detailed including the frequency of monitoring and analysis and reporting on monitoring. As part of the monitoring programme, relevant and appropriate thresholds will be included to determine when remedial action is required for the particular aspect of the environment being monitored. The Environmental Report shall look at appropriate mitigation measures such as sustainable urban drainage systems (SUDS), water treatment, habitat buffering and flood risk assessment.

6. RELATED PLANS

The SEA will take into account as appropriate the environmental policies and objectives set out in the following documents within the Planning Hierarchy:-

- National Spatial Strategy
- National Development Plan 2007-2013
- Regional Planning Guidelines
- Atlantic Corridor Document
- Regional Economic Strategy

Other relevant plans and reports , which will be considered include:

- River Basin District Management Plan for South East and South West River Basins
- EPA State of the Environment Report 2008
- The Planning System and Flood Risk Management
- Draft Freshwater Pearl Mussel Regulations
- South-East Region Bio-Energy Implementation Plan
- Climate Change Strategy for Co. Waterford
- NPWS Conservation Status Report, Conservation Management Plans and Survey Reports
- Urban Wastewater Regulations
- Drinking Water Regulations
- Regional Waste Management Plan

7. CONSULTATION

The SEA Regulations provide for extensive public consultation in relation to the preparation of a Plan/Policy in respect of which an Environmental Report has been prepared. This consultation will ensure that individuals and organisations that wish to participate have an opportunity to do so.

Public Consultation will be undertaken at the preliminary stages of the process in the form of public consultation on the Co. Development Plan Issues Paper between March 23rd and May 18th 2009.

During the preparation of the Environmental Report, two periods of consultation are relevant:

Preliminary consultation with environmental authorities with invitation of submissions on scoping until May 18th 2009.

Consultation on the Draft Development Plan and the Environmental Report (as part of the Strategic Environmental Assessment process), to manage input into the final County Development Plan.

8. CONSIDERATION OF OPTIONS AND ALTERNATIVES

This analysis will take the form of a matrix which allows for a transparent comparison of the options/alternatives within the Draft Development Plan Guidelines. The ‘*do nothing*’ option will also be considered. This matrix will identify the preferred option having considered all environmental indicators.

9. LAYOUT OF ENVIRONMENTAL REPORT

Table 4A in the “*Guidelines for Regional Authorities and Planning Authorities on the Assessment of the Effects of Certain Plans and Programmes on the Environment*”, prepared by the DoEHLG, contains a checklist of information to be included in the Environmental Report. The following Chapter Headings are proposed for inclusion in the Environmental Report.

1. Non-Technical Summary

2. Introduction

(e.g. Brief Description of the Plan, the Purpose of the Strategic Environmental Assessment, Relationship of the Plan with other relevant Plans and Programmes.)

3. Methodology

(e.g. Steps in the process, Environmental Authorities and Others Consulted, How Objectives have been taken into Account, Difficulties Encountered, etc.)

4. Current State of the Environment

(Environmental Baseline, trends and the “Do-Nothing Scenario”, Significant Environmental issues, Consideration of Alternatives)

5. Environmental Protection Objectives relevant to Plan

6. SEA of Draft Development Plan

(Methodology for assessment and determination of significant effects, summary of likely significant effects and measures proposed to prevent, reduce or offset, targets and indicators)

7. Habitats Directive Assessment of Draft Development Plan

8. Monitoring

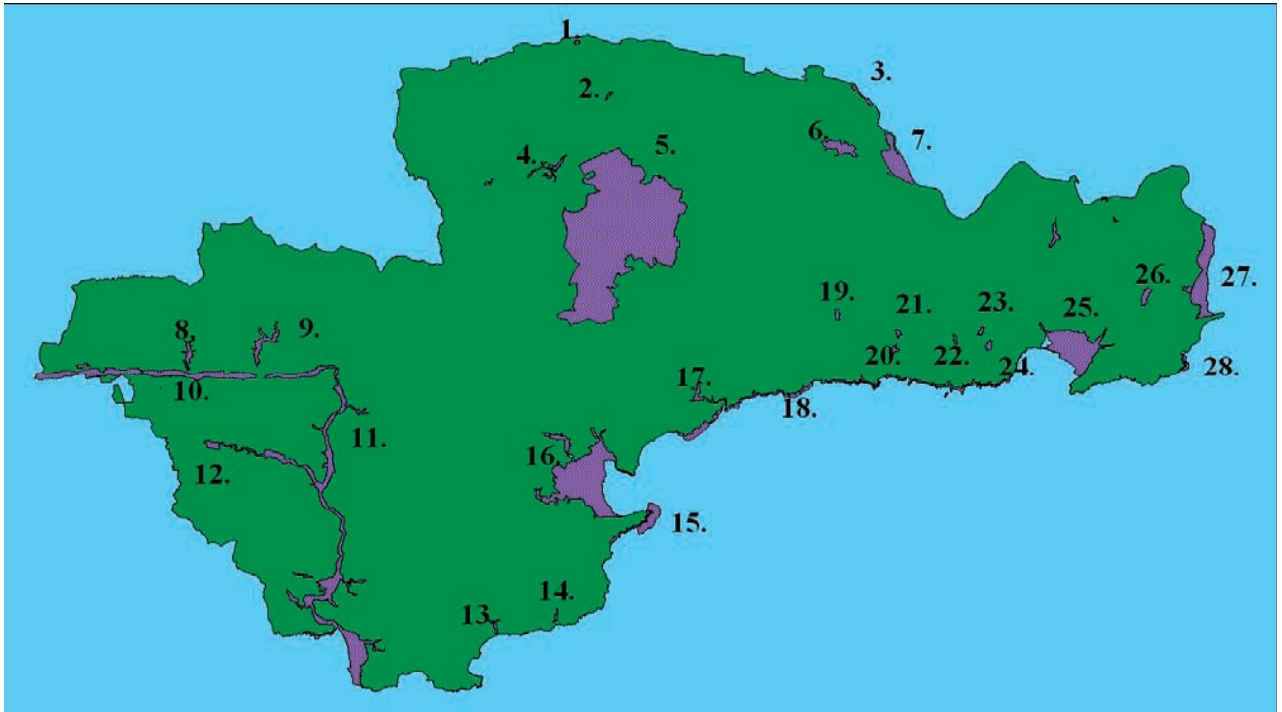
10.0 CONTACT DETAILS

Submissions should be received by Monday 18th May 2009 and sent to:

Director of Planning & Environment,
Planning Department,
Waterford Co. Council,
Civic Offices,
Dungarvan,
Co. Waterford

Or emailed to: developmentplan@waterfordcoco.ie

Map 1. Proposed Natural Heritage Areas in County Waterford



Map 2. Natura 2000 (SACs and SPAs) in County Waterford

